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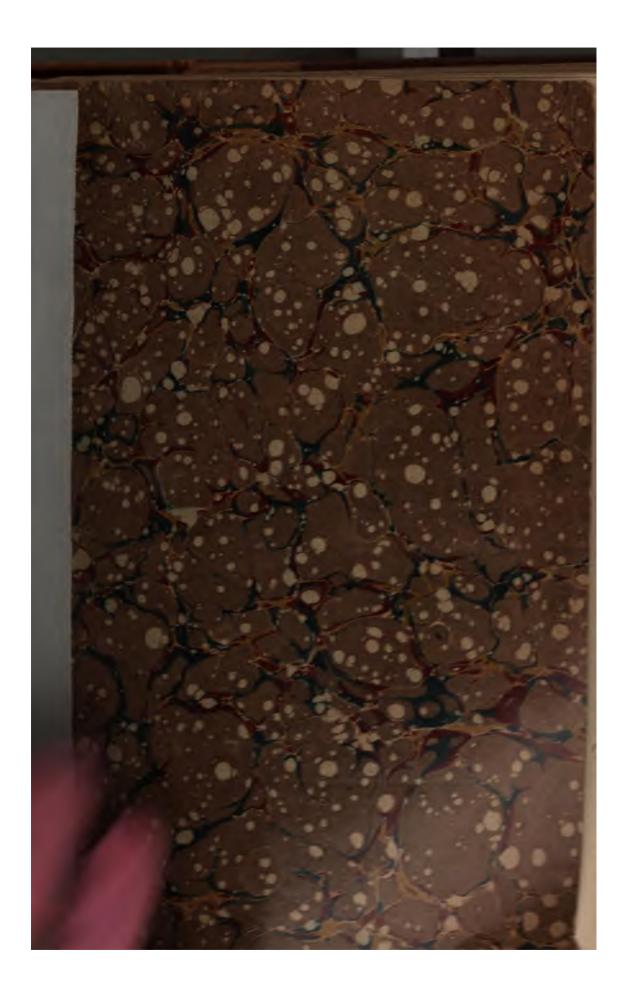
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IE WORLD'S WORK

VOLUME XXIII

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November, 1911, to April, 1912

A HISTORY OF OUR TIME



GARDEN CITY NEW YORK DOUBLEDAY, PAGE & COMPANY 1912

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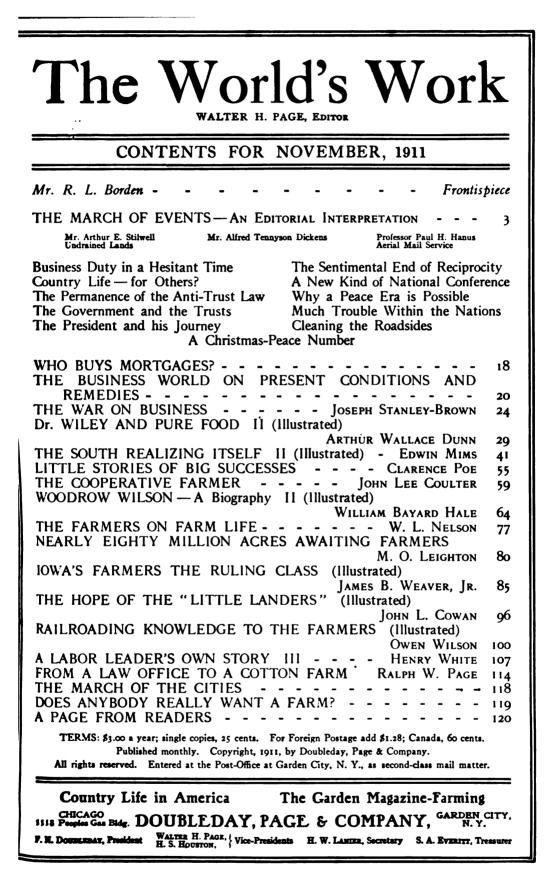
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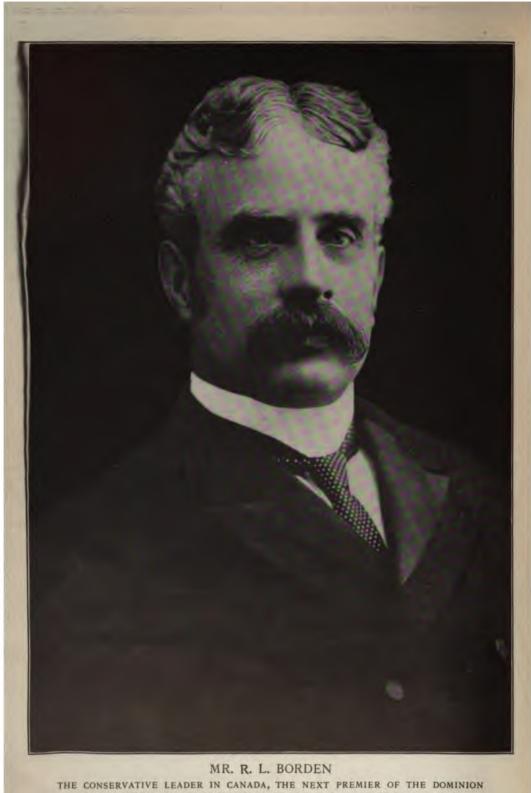
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THE CONSERVATIVE LEADER IN CANADA, THE NEXT PREMIER OF THE DOMINION GOVERNMENT, WHOSE PARTY CAME INTO POWER ON AN ANTI-RECIPROCITY AND A STRONG IMPERIALISTIC PLATFORM

THE WORLD'S WORK

NOVEMBER, 1911

VOLUME XXIII



NUMBER I

THE MARCH OF EVENTS

W

HAT should a good business man do in a time of financial depression and hesitation — in such a time as

this, for example?

Here are a few directions: See to it that your obligations cannot cause you trouble. It is a good time to have a very frank understanding with all creditors.

This done, pursue your business, whatever it be, with all your energy; do not harbor silly fears; and keep silly fears, as far as you can, out of the minds of those with whom you have to do.

Do not speculate.

If you are a part of a corporation that does an interstate business and if you have the least reason to suspect that you have been violating the anti-trust act, call in your lawyer and immediately adjust both the form and the activity of your concern to the law.

If you are a member of a board of trade or of any similar organization, or of the board of directors of any corporation, or of a bank, the foregoing suggestions apply to you in a double sense, as a personal and as a corporate or public duty.

Get business men to come together in

such a spirit and in such a plan of action. The right kind of sincere coöperation by enough men will at any time go far to allay business fears. It isn't the Government's prosecution

It isn't the Government's prosecution of the trusts or the fear of such prosecution, it isn't what Congress or the Administration has done or may do that is the whole cause of the trouble. These may add fuel to the fear. But there is a deeper cause than these — an economic cause. A bad currency and banking system probably has much to do with it. Do not imagine, then, that complaints against the Government will help matters.

Moreover, you know that this Administration will continue to enforce the antitrust law, and that tariff-revision will probably fail next winter because of the disagreement about the method of doing it between the President and the Democratic House. But there is sure to be a long and heated discussion of it. This will make the especially protected industries timid.

But do your own business on a safe basis and with all possible energy, charity, and cheerfulness; and presently you will have forgotten that there was a business depression.

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PRESIDENT OF THE FIRST AMERICAN LAND AND IRRIGATION EXPOSITION TO BE HELD IN NEW YORK, NOVEMBER 3D TO 12TH, AN EXPOSITION, BACKED BY MANY STATE GOVERNMENTS AND BY MOST OF THE GREAT RAILROADS, TO ENCOURAGE MEN TO SETTLE ON THE SOIL



THE VAST WEALTH OF OUR UNDRAINED LANDS THE UPPER PICTURE OF ONE OF THE LARGEST TRUCK FARMS IN THE WORLD, IN CALI-FORNIA, SHOWS A KIND OF LAND DRAINED AT SMALL EXPENSE (FROM \$6 TO \$9 AN ACRE) WHICH YIELDS \$50 OR MORE PER ACRE A YEAR. THE LOWER PICTURE SHOWS A MIS-SOURI SWAMP, PART OF THE 74,500,000 ACRES OF THE RICHEST LAND IN THE UNITED STATES THAT IS NOW ONLY A BREEDING PLACE FOR MOSQUITOES



MR. ALFRED TENNYSON DICKENS SON OF CHARLES DICKENS, WHO IS LECTURING IN THE UNITED STATES AND CANADA ON THE LIFE AND WORKS OF HIS FATHER



HEAD OF THE DEPARTMENT OF EDUCATION IN HARVARD UNIVERSITY, WHO HAS BEEN ENGAGED BY THE BOARD OF APPORTIONMENT OF NEW YORK CITY TO INVESTI-GATE ITS VAST SCHOOL SYSTEM, AND WHO, WITH A CORPS OF OTHER EXPERTS IN EDUCATION, IS PEPARING HIS REPORT



AERIAL MAIL SERVICE AT THE LONG ISLAND AVIATION MEET THE UPPER PICTURE SHOWS POSTMASTER-GENERAL HITCHCOCK WITH CAPTAIN BECK, STARTING FROM NASSAU BOULEVARD ON HIS FAMOUS FLIGHT, SEPTEMBER 26, TO DELIVER MAIL IN PERSON, AT MINEOLA. BELOW, HE IS GIVING THE BAG TO EARLE OVINGTON WHO IS THE FIRST AVIATOR TO CARRY UNITED STATES MAIL, AND WHO IS NOW PLANNING TO BECOME A TRANS-CONTINENTAL AERIAL POSTMAN

COUNTRY LIFE - FOR OTHERS?

HIS number of THE WORLD'S WORK has much to say about life on the land — not dissertations nor exhortations, you will observe, but the experience of men of brains who have won success and independence.

The old trouble with country life is that farming has been too ill done. But the time is now come to apply ability and skill to the business. Land is fast becoming too valuable and too profitable to be left to the unskillful; and presently it will be true that *capable* men who have small chances for independence in town will be foolish not to go to farming. We have come to an era of distinctly better opportunities.

It is more emphatically true to-day than it ever was before, that the life of a man on the soil is better worth living than the life of a man of a corresponding success in the city. Every genuine nature feels this. In the first place it is a productive life: it is economically sound. A farmer isn't a parasite or a dependent. He is a pillar in our structure of wealth. He has, too, to a degree that his predecessors never dreamed of, the shaping of his life and the making of his fortune in his own hands. Wireless telegraphy and flying machines indicate no greater pro-gress than has been made in the last twenty years in the equipment and the comfort of rural work and living. If you know how, you can do almost anything with a farm and live as you like. Just as there is nothing less successful or less hopeful or less cheerful than a common, ignorant fellow on a farm, (except the common, ignorant woman who bears the brunt of it,) so there is nothing pleasanter or more -ncouraging than the successful, intelligent farmer of to-day, who, in most parts of the United States is not only winning for himself and his family, a life of independence from the land, but is beginning to put himself in the way of enjoying plenty of social and intellectual pleasures as well.

This number of THE WORLD'S WORK gives much space to descriptions of farmsuccesses for another reason — to show, if possible, how genuine and widespread is the interest in the subject. Everybody has been crying "Back to the land." Do people know these opportunities and really wish to work them out, or do they only wish to exhort others to do so? The comment and correspondence that this Country-Life number of the magazine will provoke may help to answer this question in a subsequent number. For example, have you a farm, or would you like to have one, for a home? Or are you an apostle of rural life who still prefer the town and a salary and the struggle to live on it by standards that richer people set?

At all events, it is well to keep in mind the fact that the number of unused acres in the country, though enormous, is nevertheless limited.

THE PERMANENCE OF THE ANTI-TRUST LAW

PRESIDENT TAFT has made it perfectly clear — especially did he do so in his speech at Waterloo, la., on September 28 — that he believes the Sherman anti-trust law beneficent and necessary as a safeguard, against what he calls "state socialism"; that, even if he did not so believe, he has no discretion about enforcing it; and that "mourning over a condition which is inevitable is useless." He thinks that the business community is fast coming to recognize these facts, and he expects "a revolution of feeling" on the part of business men toward this law and its enforcement.

On the other hand a large part of the business world, especially the world of "big business," wishes the law repealed and thinks that its repeal is necessary for business stability and progress. You can build an argument for its repeal (as Mr. Stanley-Brown very clearly builds one in this magazine) to statisfy men who, consciously or unconsciously, regard business prosperity as of greater value than individual liberty and opportunity. But you will deceive yourself pathetically if you think that this law, defective as it is, is going to be repealed. It may be amended. But the power that it gives the Government to pass judgment on great corporations, and to restrain them from lessening individual opportunity the people are not going to permit this power to be taken from the Government.

This is the matter at issue. The matter at issue is not immediate business prosperity, nor the market stability of stocks and bonds. It is whether the trusts shall abridge individual opportunity, as the Supreme Court has declared, in effect, that the Standard Oil Co. and the American Tobacco Co. did.

The dissolution of those companies immediately gave independent companies and persons a chance to do business that they say had before been denied them. This freedom counts larger in the public mind than the falling of the price of securities in the market; and, if this freedom be real, it ought to count larger. To reckon on or to hope for or to agitate for the repeal of the anti-trust act is, therefore, a loss of breath and time and energy. The conscience of the people approves the principle of it. This principle is in keeping with the spirit of our institutions and a fundamental part of American ideals. The business world had as well adjust itself to the principle of the law. For it does not prevent consolidations nor the proper use and growth of great corporations as a necessary part of the machinery of modern life.

Nor is anything to be gained by suspicion or abuse of men in public life, whether it be the President or the Attorney-General or members of Congress. You can easily prove that there are too many demagogues in office. We have them; we have always had them; and we are likely always to have them. And many public men who are not demagogues lack business knowledge and experience and are misled by theories. This also is unfortunately true; it has always been true; and it is likely to be true in the future. It is one of the incidents of a democracy that there seems no sure help for.

Yet it does not follow that the people of the United States are going again soon to put captains of industry into political power. Captains of industry and their close friends were in power during the long period when the anti-trust law was a dead letter and the interstate commerce law was inactive and when Privilege stalked in the garb of Government. The cry, therefore, for business men in office is not convincing in any company of citizens outside the neighborhoods of "big business."

The way to keep unfit men from Congress is to take an active part in local politics and to see that fit men are elected. There is no other remedy. When you hear a complaint of demagogues in Congress, find out whether the complainant takes enough time from his business to do his duty as a citizen and a voter. Then you will be likely to get at one root of the trouble.

There is no perfect law. There is no ideal public service. Nor will there ever be. But there is an American ideal, and it is that individual rights and opportunities shall not be abridged for the upbuilding or for the success of other individuals. If the re-establishment of this principle in business causes temporary losses, that is unfortunate. But this misfortune can be mitigated and soon ended by the sincere coöperation of every class of men with every other class in the spirit of acquiescence in the law and in the principle that it more or less bunglingly sets forth.

There is one greater danger than the falling in the value of securities — the danger, namely, of a bitter class division. If either the world of "big business," on the one hand, or the political world on the other so behaves that the world of "little business" become a mob with demagogues or ignorant men to lead it, that will be a very much more serious matter. And there is some danger of this. The wise man, therefore, at such a time is the man who shows some modesty of opinion and tries to see the opposing honest man's plight and point of view.

THE GOVERNMENT AND THE TRUSTS

RESIDENT TAFT has again outlined very clearly the attitude of the Government to industrial consolidations. His Detroit speech was followed by a terrific decline in the stocks

of the United States Steel Corporation, and it started a general wave of uncertainty which reached the stockholders of practically all the industrial consolidations of the country. It is well, therefore, to quote a paragraph or two: On Monday, September 18th, at Detroit, the President repeated a passage from a special message to Congress of January, 1910, as follows:

It is the duty and the purpose of the Executive to direct an investigation by the Department of Justice, through the Grand Jury or otherwise, into the history, organization and purposes of all the industrial companies with respect to which there is any reasonable grounds for suspicion that they have been organized for a purpose, and are conducting business on a plan, which is in violation of the anti-trust law.

Then he said:

I wish to repeat this now, and to say further that the Attorney-General has instituted investigations into all the industrial companies above described, and that these are in various stages of completion.

In the text of his speech, as it went to the newspapers, there was an additional statement which was not published at that time. It was cut out by Mr. Taft himself, presumably because he feared its effect on the financial market. This paragraph read as follows:

I am glad to be able to add that, if Congress shall continue needed appropriations, every trust of any size that violates the statute before the end of this Administration in 1913, will be brought into court and acquiesce in a degree of disintegration by which competition between its parts shall be restored and preserved under the persuasive and restrictive influence of a permanent and continuing injunction.

As it happened, the very next day the news came out that, in the Federal Court in New York City, the United States District-Attorney had begun suit to dissolve the Standard Wood Company and other concerns loosely known as the "Kindling Wood Trust"; and that in Boston the Federal Grand Jury had brought in an indictment against some of the officials of the United Shoe Machinery Company. Both suits are for violation of the anti-trust act.

In the same speech the President broadly intimated that all combinations in restraint of trade, which come within the interpretation of the Sherman law given in the Tobacco and Standard Oil decisions, should voluntarily dissolve and put themselves outside the reach of the Sherman law.

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So much for the flat declaration of the Government policy with respect to combinations. In only one respect does it lack completeness. It does not name the companies at which it is aimed; and it leaves, therefore, every combination of any sort with a sword hanging over its head. It does not matter how big or how small the industrial combination may be nor how long it has been in operation nor what the nature of its business may be. Every manager of an industrial company, reading that declaration of policy, feels that he is in danger.

The first and most obvious result was a scramble to sell stocks of the industrial combinations in the market place. The attack centred, of course, on the Steel Corporation, but it extended over practically the whole industrial list. The best of our industrial stocks which had, in the course of years of successful operation, begun to assume the appearance of investment issues, fell back immediately into the speculative class; and thousands of people all over the country, who had held them as comfortable investments, recognized that, by this statement of the Government, they had again become speculative. Thus doubt spread throughout the whole industrial world and the country began what is usually the most active period of the business year under a cloud of uncertainty.

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The most significant phrase in the President's speech was contained in the paragraph which he omitted: "A degree of disintegration by which competition between its parts shall be restored and preserved." This phrase indicates that it is the intention of the Government to

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try to force competition between disintegrated parts of the trusts.

It is not the understanding of the business world that any of the companies broken up by Government suits are to be forced into competition with themselves. The Government has made little effort, for instance, to force the growth of competition between the Great Northern and the Northern Pacific railroads, nor is there understood to be any intention to put on the Standard Oil or the American Tobacco officials the necessity of attempting to compete in the old-fashioned way between the various companies which are sundered under those decisions. The antitrust law has till now been, in effect, negative rather than positive; and it is yet impossible to see just how the Government can force the component parts of the present combinations to compete with one another in the markets.

Let us glance for a moment at the actual effect of the Standard Oil dissolution. On September 1, the Standard Oil Company of New Jersey officially ceased to exist as a holding company, and the various subsidiary concerns, numbering more than three dozen, became again independent entities. Yet there is no thought in the mind of any one that these companies will compete amongst themselves. The President's phrase would seem to indicate that they *must* so compete, but one wonders how in the world this competition can be made to grow.

The single positive effect of the Standard Oil decision seems to be a sort of guarantee to independent men that they may enter into the business field, once so largely occupied by the Standard Oil Company, and do business in that field without fear of being exposed to vicious competition. Very soon after the dissolution, a stockexchange firm, which a few months ago would hardly have dared to lend its name to such an undertaking, sold securities of a new oil refining company for the purpose of manufacturing California crude oil for the trade on the Pacific Ocean. Its board of directors is a representative board of strong business men, mostly in New York. Its business is exactly that of the Standard Oil Company and it has started in the business with the hope and expectation of carrying on that business without danger of undue interference or wicked competition from the Standard Oil Company or any other American company.

On the positive side the first effect of the Tobacco Trust dissolution was very similar. In the retail market men who, a few months ago, would hardly have dared to establish any small independent business in direct competition with the United Cigar Stores, were encouraged to plunge into the profitable retail business in the big cities. In New York, a dealer who alleges that he was driven out of business by undue competition, has ventured to seek redress in the courts and hopes that, under the protection of the Supreme Court decision, he will be able to carry on his business without undue competition.

These are undoubtedly the most hopeful results so far obtained by these dissolutions. So far, so good; but it is too early, of course, to judge how far this new declaration of independence will carry us. It is hoped that it will insure the public's right to life, liberty, and the pursuit of happiness in the industrial world; and this, it is hoped also, can be gained without a campaign of destruction. If this be true, there will be no destruction of real values after the period of readjustment is passed.

THE PRESIDENT AND HIS JOURNEY

RESIDENT TAFT'S long journey among the people gave him and them many pleasant experiences. With few graces of oratory, he has a pleasing presence and a winning personality. And, along with failures and deferred purposes with which he is somewhat burdened, he has one large policy that most people of every sect and party applaud; and this is the arbitration treaties.

Few men have very clear convictions about the technical difficulties on which the Senate stands in its opposition. But it has fast come into the popular mind that these treaties make for peace, that opinion here and in Europe is very fast changing about the necessity of fighting, that our Government has an increasing influence in the world, and that we may exert it and ought to exert it with some effect against the barbarism of war. This is an irresistible appeal to American character; and the President has made it with credit and effect.

And it is true that governments as well as individuals do look at war differently from the way they looked at it even a few years ago. The futility of it has become more and more apparent. The closer relations of the nations, their financial inter-obligations, their trade alliances and entanglements, the interlocking economic conditions of all modern life — these forces are new in their present intensity. It has become possible to stand for peace without becoming a mollycoddle; and this world-wide movement is becoming very real since it has become less sentimental. Your economist is a peace-man now and your financier as well as your reformer. And every judge in particular is by temperament and practice an arbitrator.

The more experience the country has of Mr. Taft the plainer it becomes that he is a judge rather than a man of action. In this movement to make war more difficult, he has probably hit upon the one big policy that his administration will be remembered by. His temperament and his training fit him for this; and about this he has a genuine conviction.

П

The President's defence of his woolbill veto and of his tariff record in general is far less convincing. His attitude does not wholly please even the "standpat" element of his party, and it pleases still less every other section of public opinion. His speeches and explanations have left him where he was before, if not in worse plight.

Especially did the overwhelming defeat of the reciprocity idea in Canada deal him a heavy blow. It is true that this unexpected result was in no way his fault. He proceeded on the supposition that the Laurier Government could and would ratify the pact; and they also acted in good faith. The unexpected events to both parties to it were, first, the successful filibuster against the agreement in the Canadian Parliament and then the disastrous campaign for it.

But, as nothing succeeds like success, so nothing fails like failure, however good an explanation may be possible. Reciprocity with Canada was the one definite policy that Mr. Taft had put through; he had pushed this through Congress. It was so far the only clear-cut, definite accomplishment to his credit. The repudiation of the whole idea by the Canadian people leaves the President, by all practical measurements, just where he was before he began his reciprocity campaign.

It has now been three years since he was elected; and, although he promptly took up the tariff with the hope of eradicating its most offensive features, it is more offensive and less just than it was before he came into office. His own party is worse divided than ever; and his efforts at reciprocity made the breach still wider, and its failure will not heal them. As for the Democrats who gave him aid in his reciprocity policy, they have received his dependence on his tariff-board as an insult. As a political leader, therefore, Mr. Taft has not shown sagacity or brought about results.

Ш

As for the prosecution of trusts, his Administration has received both praise and blame that it hardly deserves. The dissolution of the two great trusts -The Standard Oil Company and the American Tobacco Company — was the result of suits brought before his term of office began. The prosecution of others is in line with this policy. The success of these later prosecutions, and the effect on business conditions - for these his Administration is responsible. Mr. Wickersham's unhappy experience in the Pinchot-Ballinger matter, in the case of Dr. Wiley, and some of his speeches and interviews had — there is no escaping the conclusion — weakened public confidence in his judgment. The Administration had frightened the "big-business" world without winning the full confidence of the masses of the people in the execution of the anti-trust act. But the President's emphatic declaration on his journey of

his determination to enforce the law reassured those who had any doubt.

The Wiley episode in the Agricultural Department, unfortunately, emphasized the somewhat unlucky sides of the President's Cabinet and spread the feeling that Mr. Taft has not the strong personal grip on all departments of the Government that the President is supposed to have.

IV

While, therefore, the President's journey has shown that the people everywhere have the kindliest feeling toward him, respond to his abundant good-nature, like his ready comradeship, and believe in his sincere wish to do his duty, it has shown also a lack of popular or party leadership and a widespread doubt of successful definite new achievements by his Administration.

Perhaps there is not an honest man in the country who, if he had a case in court, would not like to have it tried in a court over which Mr. Taft presided. But in the stress of every-day life and of political effort, the people feel that he does not know them nor understand the movements and meaning of public opinion. There is no spontaneous sympathy between them. Their thoughts or wishes or interests must take some sort of legal form before he will guite understand them. His journey among the masses of the people, therefore, has been a mildly pleasant journey, but not a journey that provoked any great enthusiasm. For he lacks the quality of popular leadership.

A distinguished public man who has the kindliest feelings toward the President recently described him in a conversation in this fashion: "Mr. Taft is a man of abounding good nature and of good impulses and good intentions, a just man, as he sees justice, and a patriotic man. But he believes, perhaps without knowing it, that society is necessarily into two classes — the rulers divided and the ruled; and he feels that he belongs to the ruling class. Of course such a division is, in a literal way, true. But it is also false - essentially false in our theory of democracy. He doesn't see the falseness of it; he doesn't feel the falseness of it. Consequently he can never know the people, the every-day millions of men, and he can never take their point of view. His just mind is statute-ridden. He is a good type of man for certain kinds of public service, notably for the bench or for the administration of a department of the Government. It may even be well to have such a man now and then in quiet times for President. But in a time when the Presidency calls for wise and sympathetic popular leadership and for constructive work, he is of the wrong temperament."

His administration is no doubt acceptable to most men who wish things to remain as they are, except to certain big interests. He himself regards those who desire change as radical, and radicalism is offensive to his nature.

A great change surely from our experience of a few years ago! In some ways it is a wholesome change; in other ways, not — that is as you look at it, through the glasses of your own temperament or of your own party convictions. But serious students of politics and government do not see much constructive work going on under his Administration.

THE SENTIMENTAL END OF RECIPROCITY

THE voters of Canada rejected the American reciprocity pact by an overwhelming vote and swept the strongly intrenched Liberal party out of power, with the purpose apparently of maintaining a high tariff between the two countries.

Seldom, if ever, did a general election, which was supposed to be held to decide about a great commercial and economic proposal, turn on reasons so far removed from the subject. The simple question was whether it would be to the benefit of Canada as a commercial nation to join in closer relationship with the United States. The election actually turned on a purely sentimental question, namely, whether or not closer political relationships of any sort should be established between the two nations. In her answer Canada said that she is emphatically opposed to any alliance with the

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United States. It was an expression of sentimental nationalism.

One of the most used campaign documents was a silly remark made by Speaker Champ Clark, which he declared he meant as a joke — the remark that reciprocity would lead to annexation. In the closing weeks of the campaign the opposition press in Canada "featured' this speech on the front pages of its news-papers and "played up" in a striking way the importance of Mr. Clark as a spokesman for the United States. Probably not one out of a thousand of the Canadian voters knew anything about Mr. Clark or knew what value we put on his remarks; but his sounding title carried conviction to their minds, and they voted not on reciprocity but on annexation.

The American Government sought reciprocity because we believed that it would be of advantage to the consumer in both countries. We believed that in throwing open our market we were taking the first important step in reducing the cost of living and in giving the Canadians a wider market. No attempt was made on the Canadian side of the line to refute this proposition. It was cast aside for a declaration of a new sort of loyalty to the Empire and a suspicion of American policies and politicians.

The result has set back the clock a little; but it brings us more clearly than ever before to the necessity of a downright, vigorous revision of the tariff. It is mainly upon that issue that our own election of 1912 is likely to be fought.

A NEW KIND OF NATIONAL CONFERENCE

MORE than a million immigrants came into the United States in 1910, and 300,000 of them registered their previous occupation as farmers or farm laborers. Yet of this 300,000 less than 50,000 seem to have found their way to the great agricultural states. Many of these men who can till the soil drift into city cellars and hovels from which they emerge to pick up odd jobs. They would like to go on the land and the land needs them. The railroads, the merchants, the farmers, all want these men in the agricultural regions. Something is wrong in this situation.

To attract these new comers to the land and to attract other thousands in the cities, Americans and foreigners alike, to whom farming in the new spirit offers opportunities for work, prosperity, and independence — to help crystallize the "back to the land" discussion into a real movement of people, is the aim of the first American Land and Irrigation Exposition to be held in New York this month. Mr. Arthur E. Stilwell of the Kansas City, Mexico and Orient Railway is president; and on the governing board, most of the great railroads are represented. President Mc-Crea of the Pennsylvania, President Brown of the New York Central, Mr. Yoakum, chairman of the board of directors of the 'Frisco system and a great believer in the campaign for the drainage of swamp lands - these and many other men, besides bankers, business men, and a half dozen college presidents including President Wheeler of the University of California are on the board.

The National Conservation Congress Kansas City in September devoted in itself chiefly to the maintenance and improvement of the soil and to the creation of better living conditions on the farm. Then there will come the National Irrigation Congress in Chicago in December, which will concern itself chiefly with the inauguration of a campaign to accomplish the drainage of the eighty million acres of swamp and overflowed land that lie idle such a campaign as that which resulted in the creation of the United States Reclamation Service and the re-awakening of the country to the possibilities of irri-gation, which, in the last twenty years, has remade the Far West.

Great representative, national meetings of this sort were unknown a decade or two ago. They indicate a new movement of thought and of effort. They are the outward and visible signs of a deep belief that is coming to more and more people that farming is a great profession, a profession worthy of the best men, and one which offers a new chance on a solidfoundation tomanya capable "misfit" in the cities. And, best of all, the farmers themselves are waking up to their opportunities and problems and becoming prouder of their calling. It all augurs well for the country.

WHY A PEACE ERA IS POSSIBLE

I NTERNATIONAL peace used to be looked upon as an impractical dream of amiable old gentlemen. It is impossible longer so to regard it, impossible longer to refuse to see that a time "when wars shall be no more," at least between the most advanced nations, may be close at hand.

The wholly unwarranted war on Turkey by Italy is likely to make the world-sentiment for peace stronger. It will emphasize the anachronism of the seizure of territory. The public opinion of the strong nations will use it as an unexpected chance to assert itself.

The chief cause of this mightily changed prospect is a financial one. War can no longer be profitably waged. On the contrary, for victor and vanquished alike it has become almost impossibly expensive in its prosecution and without gain in its results. Even victory is more likely to mean bankruptcy than profit.

The Russo-Japanese war cost probably \$3,000,000 a day. A European conflict would certainly consume \$5,000,000 a day — consume this, literally, burn it up, throw it away, destroy it, and withdraw it from the wealth by which the business of life is carried on. How enormous would have to be the compensation for so terrific a cost! In fact, no such compensation is possible.

But that is not all. So interwoven have become the financial affairs of the great European nations that the very fear of war upsets them, and a declaration of hostilities would clearly precipitate disastrous panic. A little while ago Germany and France were so seriously at odds that conflict began to look inevitable. Then Paris began calling on German banks for the payment of loans, and stocks on the Berlin Bourse fell to panic prices. It did not take long for Germany to appreciate the situation; for the modern prosperity of Germany is built largely on money borrowed abroad; her gigantic industrial advance and her wonderful commercial expansion have been made possible by international credit. War would bring that structure of credit crumbling to the ground. Germany could have taken nothing away from France without taking it away from herself. She found she could not even threaten France without doing herself injury. Such is the interdependence of modern nations. The organized part of the world to-day is a thing different from what it was in the days of profitable war. As Mr. Norman Angell says, if a German army were to take London, the first care of the German commander would be to put a strong guard around the Bank of England in order to keep the soldiers from looting it and so impairing Germany's credit.

The wars of the future are likely to be between the least developed nations, as this war with Turkey or in South America and in the Orient, where financial and all other kinds of economic organization are less developed. In a word, the great industrial nations are becoming freer and freer from the danger of war.

MUCH TROUBLE WITHIN THE NATIONS

B^{UT} if the prospects of international peace grow bright, the internal peace of the nations is alarmingly threatened. Not since the era of '48 has the spirit of revolution been so rife throughout the world.

In Portugal they have overturned the Government by violence. In England they are overturning it, much more effectively, by peaceful revolution, though of late there have been ominous demonstrations of force in great strikes. Parts of Spain have again been put under martial law, as has Vienna also for the first time in half a century. In Budapest there has been rioting. In France a dozen centres have witnessed marching Germany is a-ferment with socialmobs. ism. Russia has broken out again in assassination. Even China is at last seething with the spirit of revolution. The mood of the time has scarcely touched us conservative people of the United States, though even here there is at work a spirit of insurgency so determined that it

seems to some distressed people as if the foundations of the round world were dissolving and the firmament were about to melt with fervent heat.

In domestic affairs as in international affairs, the determining cause is to be found in economic and financial conditions. The nations will keep the peace because they must do so to prosper: the people of the nations will "insurge" because they wish to be more prosperous.

Perhaps it was always so. No doubt patriotism and love of liberty are merely euphemisms with which history describes motives quite as material as those which confessedly inspire the restless population to-day, namely: the demand for a bigger share of the good things of the world.

The conflict of the future will be fought within the nations — not between them.

CLEANING THE ROADSIDES

THE New York legislature did a happy thing when it passed a law making it a misdemeanor to put up advertising signs in public highways, and expressly exempting from punishment persons who removed signs so placed.

On the very dawn of the day when the law went into effect, the roads in the neighborhood of New York City were scenes of the sport of many bands of lawful destroyers. Telephone and telegraph poles, trees and lamp-posts were cleared of bills, tin signs, and boards, extolling the merits of various brands of breakfast food, soap, toilet powder, and cigars.

It is an open question whether any law is really needed to legitimatize the destruction of signs affixed to trees and posts or otherwise set up on public roads. It is likely that any one is free to destroy them unmolested. The law might, however, properly turn its attention to the display of signs from private grounds. What right has the owner of a barn to disturb passers-by by thrusting into their faces hideous arrangements of paint screaming of pills and pepsin? If one may not start a tannery or a rubber factory against the objection of neighbors whose nostrils it offends, has he any better right to affront their eyes? Here is a realm of law which ought to be exploited.

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The Appellate Division of the Supreme Court of New York has also recognized that what pleases the eye is valuable and deserves protection. A street contractor had destroyed shade trees on the parking strip between the sidewalk and the street in front of a residence. The owner sued him and recovered \$500 for each tree — recompense for the loss of actual physical property — and \$1000 additional for the loss of beauty to the whole place.

When the legislature encourages beautyloving citizens to clear the roads of defacing signs, and the courts hold officially that the beauty of a tree increases the value of the ground around it, it means that there is a very widespread appreciation of these things among the public; for the legislatures and the courts always follow slowly in the wake of the people's thought.

A CHRISTMAS-PEACE NUMBER

THE next issue of this magazine the Christmas Number — will contain a survey of the movement for International Peace. The keynote will be set by an article in which the President of the United States talks with great candor and earnestness of the General Arbitration Treaties which the Government has negotiated with Great Britain and France and which now await action by the Senate.

Norman Angell, author of "The Great Illusion," will show how the new financial inter-dependence of the nations prevented the Franco-German conflict lately threatened. Prof. Simon N. Patten, author of "The New Basis of Civilization," will show how modern conditions, particularly of transportation, go to make war unprofitable and ridiculous. There will be also expressions about universal peace held by such men as Cardinal Congressman Underwood, Gibbons, Messrs. John Bigelow, Charles W. Eliot, Oscar Straus, the Japanese Minister of Foreign Affairs, Lord Avebury, Arthur C. Benson, William DeMorgan, and Maarten Maartens.

WHO BUYS MORTGAGES?

MAN who wrote to THE WORLD'S WORK not very long ago, sent in a list of the investments that he had and wanted to know whether there was any good reason why he should change his way of doing business, and buy stocks and bonds. His list consisted of the names of six first mortgages, four of which were on farms and two of which were on individual houses in his own city.

He stated in his letter that for twentyfive years he had kept his money engaged at from 5 to $5\frac{1}{2}$ per cent. in this same class of securities. His loans were renewed on an average every three years. He stated that he had never had any trouble in collecting his money but once, in 1894, when he had to extend a five year mortgage for another period of three years. He attends to the collection of his interest himself and he has had but little trouble on this score.

He was advised to stick to his mortgages. This advice was based partly upon his own temperament and habit of mind, which called for a quiet unlisted investment without any market possibilities, but coming due in the form of money every now and again. He professed a certain fear about tying his money up in bonds and said that his main objection to them was that they ran for too kong a time, and, although he could judge the credit of the corporation at the time he made the purchase, he did not know what it would be in twenty years.

For investors of this type, mortgages of standard class are one of the most reliable and satisfactory, if not the most reliable and satisfactory, of all forms of investment.

Standard classes of such real estate mortgages consist of direct first mortgages on farm land or other land producing an income under cultivation, and direct first mortgages on improved rent-producing property. In each case the standard of the mortgage depends very largely upon the conservatism of the valuation placed upon the property and upon the percentage which the mortgage bears to that valuation. A proper appraisal in the first place and conservatism in the size of the mortgage in the second place are the fundamentals of the making of a sound mortgage.

There is a fundamental difference between the man who holds a direct first mortgage, which is the whole first mortgage on a piece of property, and the man who holds a bond, certificate, unit, or other portion of a large mortgage split up into small pieces. The first man has in his own hands the power to enforce his lien on the land or other property, and to enforce the payment of interest when due. The second man is a member of a group often widely scattered and unrelated, and, in order to take any action to protect his interests, he is obliged to gain the coöperation of other members of the group and such cooperation is very often impossible. Therefore, in the phrase "first mortgage" as used in this article, the divided lien is not included, and the comment is concerning the direct mortgage, the whole of which is held by the investor.

The main widely scattered class of first mortgages consists of direct liens on farms as a class. These mortgages are recognized as stable, solid, and conservative investments for income only. Of course the questions of valuation and of the size of the mortgage are very vital factors here. Prior to the panic of 1893, millions of dollars worth of farm mortgages were sold in the East upon lands in the Western states valued at boom prices and put under mortgages for a very large proportion of these prices. The experience of the sav-ings banks, insurance companies, and individuals who bought these mortgages, is a landmark in the history of mortgage dealing in this country. Collapse was almost universal; and to this day some of the big insurance companies hold great blocks of such lands, which they expect in time to work out to a satisfactory con-

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clusion. These buyers were able to protect themselves, but in the majority of cases the individual buyer was not. When values went to pieces, he had to allow the properties to go by default, being unable to take them up or in any other way to protect his investment.

Therefore, in buying farm mortgages, it is necessary to know that the valuation is not excessive and that the amount of the mortgage is not ex-cessive. If a man is lending in his own community and is able to form an intelligent judgment on the lands himself, that is the most satisfactory way to make loans. If, on the other hand, he buys from dealers, it is necessary to gain confidence that the dealer knows what he is doing and to know that his statement may be relied upon. In the settled communities where values are very stable, and where the farm is practically a developed income-producing plant, 50 per cent, of the established value is not too high a mortgage rate, and this is the rate that is generally allowed savings banks of conservative states to loan on such mortgages. In the newer states the more conservative lenders insist on a valuation at least three times the amount of the mortgage, and this is a wise basis.

Another big class of real estate mortgages consists of liens on office buildings, high priced city property, and all other very greatly improved and highly developed urban real estate. This class of mortgages is usually found either on deposit as collateral under bond issues of corporations, or held by big institutions like savings banks and insurance companies. In the state of New York, for instance, the value of mortgages held by the life insurance companies is nearly \$415.000.000, of which a very large proportion consists of these big loans. The average investor is not in a position to buy an undivided mortgage on property worth from a hundred thousand to several million dollars.

The second big division of the mortgage field that comes within the ken of the individual investor consists, therefore, of mortgages on homes and on small plots of property which are to be used for homes or for small enterprises of various sorts. This is a good class of security if well selected. The usual mortgage of this class is handled by lawyers and real estate agents who get a commission from the man who owns the property for borrowing the money from the lender. Here there is danger; for, unless you know your lawyer or your agent, you are apt to encounter a class of mortgages which is very desirable from the standpoint of the agent or the lawyer, in that it pays him a very high commission and possibly also gives him a chance for a little legal busi-The question of value and ness later on. the character of the man who is borrowing the money becomes a vital factor here as it is in farm mortgages, and it is perhaps a little more difficult to check it up and find out the exact conditions which surround the loan. Therefore the critic will not give a wholehearted endorsement to this kind of mortgages as a class, no matter how very good they may be individually.

In this class, however, there is a special division of guaranteed mortgages. If they are, guaranteed by institutions of noted reputation and of known financial strength, it means that, before the guarantee is endorsed upon them, they have passed through a very rigid examination, and that the risk is exceedingly small. Therefore, guaranteed mortgages of this class demand a high price and do not yield by any means so big an income as one obtains in a similar mortgage without a guarantee. The guaranteed mortgages are a fine form of investment for income only.

The aggregate of loans and mortgages on real property in the United States is, of course, enormous. By way of illustrating where the bulk of it goes, the following figures are taken from recent publications and show the volume of mortgages held by the banks and insurance companies in recent years.

Insurance com	par	nies			\$1.111.000,000
Savings banks	•				1.005,000,000
Loan & trust	con	որս	nic	s .	10 ⁵ .(68),088
City banks .					77.305,000
Private banks	•	•			4,510,000
Total .			-		\$2,488,005.000

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Outside of this enormous aggregate, it is probable that, if there were any way to find out the amount of realty loans held by private investors throughout the United States, the total volume of such investments in the hands of lenders would be considerably more than doubled, but such an estimate is pure guess work. Since the aggregate value of real property and improvements in the United States is put at about \$53,000,000,000 in the census of 1900, and the assessed valuation is over \$23,000,000,000 in the same period, the estimate appears to be fairly within the bound of reason, and that is about all that we can say concerning it.

THE BUSINESS WORLD ON PRESENT CONDITIONS AND REMEDIES

HE WORLD'S WORK sent an inquiry regarding business conditions and the causes of them to a carefully selected list of men of practical experience in every state in the Union — bankers, railroad officers, presidents of chambers of commerce, merchants, manufacturers, and a few editors. The effort in selecting the list was to make sure that every man on it was a man of successful experience and of good business standing.

The questions were as follows:

had? And what is the effect on business of the anti-trust law as these decisions leave it?

IV. Is credit too much concentrated in the great financial centres to the detriment of legitimate business men and business uses throughout the country?

V. Most of all — What would you suggest as the best help now toward permanent, stable, and good business conditions —what constructive policy or plan?

Replies were received from more than a hundred and a general summary of them is shown by the table.

SUMMARY OF REPLIES

	EFFECT OF CONGRESS- IONAL INVESTIGATIONS			ELFECT OF TARILE DIS- CUSSION AND LEGIS- LATION			EFFECT OF SUPREME			IS CREDIT TOO MUCH CON- CENTRATED	
	Good	Bad	No Effect	Good	Bad	No Effect	Good	Bad	No Effect	Yes	No
New England States. Manufacturing states of N. Y., N. J.,	8	8		9	4	I	4	4	7	•6	10
Pa., O., and Ill Middle West Agricul-	12	19	2	9	22	4	12	9	to	12	16
tural states	12	8	2	1 8	IO	2	7	1	11	12	8
Southern States Rocky Mt.and Pacific	9	8	2	, 7	11	3	8	t	10	13	8
States	5	7	2	3	6	3	3	3	8	5	8
Totals	46	50	8	36	53	13	34	18	46	48	50

I. What effect, if any, do you think the Congressional investigations into corporations and other business are going to have on the business and financial outlook and situation?

11. What effect, if any, are the recent tariff discussions and the certainty of more tariff legislation next winter having?

III. What effect, if any, have the Supreme Court decisions in the Oil and Tohacco cases This poll is, perhaps, not large enough to warrant definite, sweeping conclusions about the opinion of the successful business world on these subjects; but the answers given are good indications and the letters that accompany them are interesting and illuminating.

The first thing that strikes one in study-

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ing the foregoing table is the great diversity of opinion on most subjects.

As regards the effect on business of the Congressional investigations, opinion is almost equally divided.

As regards the effect of tariff discussion and legislation, as might have been expected, there is a large preponderance of opinion that this discourages business.

It is noteworthy that the largest number think that the Supreme Court decisions have had no effect on business conditions or a good effect.

And opinion about the undue concentration of credit is almost equally divided.

It is interesting, too, to observe the division of opinion in the different sections of the country. For instance, a majority of these men in New England and New York do not think that there is too much concentration of credit; but in every other section a majority thinks that there is — notably in the West and in the South. This is what one would expect.

In general, three conclusions are warranted from these answers:

(1) The business world finds the discussion of the tariff and tariff-legislation a depressing influence;

(2) The Supreme Court decisions have had no effect, or a good effect, on business conditions; and

(3) Opinion is divided geographically about the too great concentration of credit — in other words, about a "moneytrust."

The most instructive part of these replies are the answers to the question, "What would you suggest as the best help now toward permanent, stable, and good business conditions — what constructive policy or plan?"

The positive suggestions that recur most often are these three:

(1) A revision of the banking and currency laws. Many favor the plan of the Aldrich Commission, and no other plan is mentioned.

(2) Federal regulation of interstate corporations including supervision of their issues of securities.

(3) Most of all, get done with tarifflegislation. Many suggest a quick re-

vision, others (fewer) wish the whole subject to be dropped. A majority think that this is the most disturbing influence of all.

A large number of positive suggestions are made by a few men, such as:

Turn war-expense into internal development.

Reduce pensions.

Destroy the corporations' power in public life by direct legislation.

Require publicity of the ownership of corporation stock — no dummies.

Increase postal savings banks.

But most of the suggestions are general or negative; and these two recur oftenest:

(1) "Let us alone": business can take care of itself.

(2) Demagogues (chiefly in Congress) are the cause of the trouble.

The deepest impression left on the mind after reading in detail these hundred or more letters — many of them written at considerable length and with great earnestness — is the profound distrust that they express of men in public life. "Jawsmiths," "demagogues," "disturbers," "miserable office-seekers," "fools in Congress," "self-seeking men," "men of no business experience" — such terms of reproach recur again and again. This distrust is profound. So far as these letters reveal the mind of the business world, it is disgusted with the law-makers and some are disgusted even with the judges.

In a less degree but still noticeably, a similar distrust is expressed of the news-papers and of the "muck-raking magazines."

There is nothing to show in any letter whether the writer be a Republican or a Democrat. The presumption is that some belong to one party and some to the other. The prevailing criticism, therefore, of public men is not partisan — surely not dominantly partisan. It strikes too deep for that. It shows a general distrust that the business world feels of the political world; and there is no blinking this fact.

This distrust is more instructive than any constructive plan proposed. In fact the absence of significant suggestions

in most of the letters indicates that the writers have not very seriously thought out remedies or policies, further than to cry, "Let us alone."

If, therefore, these letters burn with indignation at the political world, it is only fair to say that a very small proportion of them show, in any constructive way, how the political world ought to do its duty. They reveal very little serious or broad thought and very little statesmanlike grasp. They hardly give reason to hope that a Congress of successful bankers, manufacturers, and merchants would be safe to trust with legislation about the great economic problems of our time.

Again, however, it must be remembered that it is very much easier to criticise the politicians when they do their tasks badly than it would be to do those same tasks well.

One of the best informed men who answered these inquiries wrote:

"You will get no constructive plan from bankers, manufacturers, and such men. The men who are doing things in the business world are not the men who are thinking out things for the public welfare. The business world contains many very able men but they are giving their thought only to their own problems. They see things too much from the point of view of their own work. We have no class of statesman-like business men."

This observation is true, so far as these letters reveal the mind of the business world. Most of these correspondents show that they have not thought deeply or constructively from the public point of view.

But they show also the admirable quality of modesty, except in their resentment against the politicians. Man after man writes such a sentence as this: "I am not able to prescribe a remedy: we need real statesmen for that."

And the kindly, good-natured tone of the replies is noteworthy. Few give evidence even of discouragement, until they happen to mention the politicians. Business conditions, they say in effect, are not satisfactory; but they do not show depression or discouragement about the ultimate outcome. The spirit of these answers can be got from such quotations as follow. Everyone of these gives a pretty clear insight into the philosophy and the point of view of the man who wrote it. Taken all together they probably as fairly represent the thought and feeling of the successful business world as any other measure that could be made of it.

"What the public wants is clear, explicit laws, under which corporations managed honestly, intelligently and within the law, can be free of governmental interference and annoyance. That is all the constructive policy or plan required. Freedom of action within proper and wholesome limits, with ample restraints to protect the general interests of the public, is all the Government needs to furnish."

"People generally in business are honest and are builders, not wreckers; encourage them; do not legislate to hamper them. Those engaged in unusual and hazardous undertakings, such as developing new fields, are entitled to unusual profits; their success means general betterment; general betterment in turn gives employment to a greater number of people and good times result. Less legislation and more encouragement to legitimate business would be better for all concerned."

"I believe that little needs to be done of a constructive character except to provide for better banking laws. If political agitation of business would cease, business would be good. If the country would be satisfied to respect experience and cease the tendency to experiment, it would go on with its natural prosperous development."

"Give us a settled policy so that we may have a basis for calculation."

"Encourage men with a wealth of brain, as well as a wealth of money, to develop the tremendous resources of this country, and do not hold up to the public eye, as being objects of derision and suspicion, great captains of industry who have through their brain and energy turned the tide of trade balance with Europe in our favor, stopped the outflow of gold, made the United States nation the envy of the world."

"Business is too often hampered by little men in high places. With the Government assuming the regulation of business, it ought

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to put into the responsible positions, most efficient and capable men, well tested in the business world, so that business and the public will both be the gainers. The Commerce Court of distinguished business men would be helpful to the public, to the Government, and to business." "Let the sound business men make the laws,

"Let the sound business men make the laws, not the wild imaginary progressive who has never had any business experience — owns nothing now — nor never did."

"I think publicity in corporate matters is the most important thing of all, and real publicity, not partial or pretended, would cure most corporate evils. For the rest the doing away with the issuance of any stock that was not paid for, while perhaps quieting to risky enterprises would have a tendency to eliminate the accumulation of great fortunes without their being earned."

"There is a general hostility toward corporations, evidenced by all kinds of legislative and administrative attacks. The real strength of this hostility lies in the hostility of the poor toward the rich. The existence of 'the corporation' makes the attack easy and serves to disguise its real spirit. Hitherto, the institution of private property has been protected by the courts. The 'recall,' which is being much advocated, is intended to destroy this protection. The fundamental necessary, to bring about good business conditions, is to convince the American people that the institution of private property is a good thing and that corporate property is just as sacred as any other kind of property."

"Greater interest in politics by successful business and professional men to eliminate the prophets and demagogues masquerading as reformers who pose as saints but usually turn out fools or grafters. This alone will save our republican form of government."

"As a banker I should like to ask, how many bank presidents would loan \$1,000 to the average member of Congress? And yet we send there people to control the expenditure of hundreds of millions."

"I believe the country has never had a more brilliant outlook for general prosperity than at the present time, and if the legislators at Washington will shake off their egotism, that is some of them, and listen to the advice of one of the best Presidents this country has ever had, and be guided by him through the quicksands of tariff revision, all will be well." "The main thing needed is the concentration of attention upon the need of currency reform, which is less a banker's question than a business man's question, because the trader suffers from the inability of the banks to supply credit at reasonable rate when most needed. I believe currency reform to be the most important and the least understood economic question before the country."

"Too much politics and not enough administrative ability."

"Above all, let everything be done which is possible to disabuse the American mind about the supposed evils of corporate management in this country. Challenge every editor, preacher, novelist or poet or politician to take up any specific instance of alleged corporate wrongdoing, and fairly and candidly state wherein is the wrong, or wherein the public suffer by the alleged wrong, and whether the proposed remedy is not worse than the disease. Then. if possible, force him to admit that all this wondrous development of business for the last seventy years, was possible only by the corporate method, by which the resources of everybody have been enlisted in the corporate business of the country. The great danger is in the popular ignorance and prejudice against corporate and large capital. The true constructive policy will be found in getting at the truth and making it known."

"First, repeal of the Sherman law; second, a federal incorporation act to cover all industries doing a national, as distinct from a state, business; third, rigid regulation in the interests of stockholders, employees and consuming public, to the end that large corporations will keep out of politics because they have no need to enter them, that the people shall be masters, and the corporations servants with fair play from each toward each. The large corporation with its economies and superior organization is as legitimate and inevitable an economic evolution as any labor-saving ma-chine. They are here, and attempts to drive them away only confuse and delay tangible relief. If these attempts succeeded it would be as though labor had succeeded in its first opposition to labor-saving machinery. They are useful, but their benefits should be fairly distributed.'

"No more state or federal laws which are framed supposedly to make business conditions better. A return to private life of a lot of jawsmiths who can tear down but do not build up; who would sacrifice anything for

but in a society so complex as ours, which daily grows more intricate, there must be concessions on the part of individuals for the common good. Such conces-sions would not be without a very substantial quid pro quo. A departmental bureau empowered to issue to an inter-state corporation, a national franchise or license, upon a full and detailed statement as to the enterprise in which it proposes to engage; provision for supervision of present and future issues of securities, mergers, and matters of similar importance; a complete monthly statement of earnings on a prescribed form; an annual or bi-annual report along certain well-defined lines, accompanied by the certificate of a duly accredited certified public accountant, who would proceed under certain departmental requirements, is practically all that would have been necessary. With such a statute on the books there would have grown up a body of rules and methods of procedure under which business could have been carried on decently and in order and with the smoothness of the affairs of our thousands of National Banks.

Would there be any difficulty in enforcing the pure food and drugs law statutes forbidding discrimination on the part of industrial organizations or any other laws applicable to large aggregations of capital when its non-observance would involve a suspension and possibly a revocation of license or franchise?

The Sherman anti-trust law, being punitive in nature, should have followed, not preceded such a statute as that briefly outlined. There need not have been any abridgement of corporate freedom, initiative, expansion, or profits. Society generally is not injured by large corporations making large gains. Every dollar made to-day competes with the dollar made vesterday and in accordance with an inflexible economic law, if capital is not kept employed, thereby benefiting the body politic by its activity, the interest is first lost and then the principal begins to disappear and ultimately finds its way into the hands of those who can use it more skillfully.

If, heretofore, there has not been ade-

quate enlightenment on this subject. certainly the passing years have furnished ample and most expensive data and ex-Why then is not an attempt perience. being made now by the Congress to give to the business world the relief so sorely needed? Why is it still compelled literally to stumble along or else to stagnate under a law which, at the time it was made, was recognized as merely a political makeshift? By reason of the shadiness of its origin it was allowed to slumber undisturbed until its usefulness as a political weapon was discovered, when the awakening from its long sleep was rude and sudden. While it slept, the bold, the daring, and the unscrupulous, often joining forces with the undesirable elements in politics, utilized the opportunity for improper advantage to the great discredit of legitimate business and decent politics. A sane, carefully thought out law along the lines indicated would not have remained in obscurity. It would have been so valuable to honest enterprise that much use would have kept it bright — a shining mark, too brilliant to escape observation and criticism, if necessary. In its strong reflected light no departmental official would have dared conduct his office on standards less high than those of the Comptroller of the Currency. So ambiguous were the terms of the statute as enacted that it became necessary for the Supreme Court to in ject into it a "rule of reason" before attempting its interpretation; but from this august body has come a decision of but little future value to our business world.

For years the great producing interests of the country sought but in vain for information as to what course they should pursue. Now, as a result of the Supreme Court's decision, we are witnessing a readjustment of the organization of the great corporations, and all similar concerns will be subjected to the same process; for the President at Detroit again defined his attitude toward the trusts and stated that the requiring of their readjustment is a policy of the Administration. He expressed himself as "entirely opposed to any amendment of the anti-trust law" which he believes "is a valuable government asset and instrument."

This statute is enforced, not necessarily because it is wise to do so, but because it is on the books and the Chief Executive is without discretion. The compulsory readjustment is not based on the theory that the corporations thus far brought under the ban of the court are vicious in their operation or economically un-It has not been shown that they sound. oppress labor, diminish the volume of trade, fabricate inferior articles, or fix the price of commodities beyond the normal changes which arise from the operation of the law of supply and demand; but they have in some way, not made entirely clear (in fact it appears that each case is to be settled on its individual merits), violated the terms of a vague statute. And, although these great organizations stood like a rock against business chaos during the period of demoralization following the panic of 1907; though they have given labor the highest and steadiest wage ever known in its history; though they have invaded the markets of the world on a continually expanding scale and have demonstrated their great value to the public — they must be brought into court and have their technical legal sins purged away in a manner acceptable to the Attorney-General of the United States and thereafter proceed on their way armed with an injunction-proof, court-made license.

Quite aside from the enormous temporary economic waste both actual and potential involved in this process, the question still arises: After existing corporations have had their day in court and with the Attorney-General, how are similar organizations yet to come to be cared for? Uncertainty is the bete noir of business. Does there not rest on the Congress the responsibility of taking firm hold of this problem and providing adequate machinery for the yet unborn corporations, or are we to go on indefinitely substituting shadow for substance? Courts are not license bureaus nor are they legislative bodies. They cannot pass on corporations to be formed, but only on their acts after they are in operation. Without wise action

on the part of the Congress, future business activities will still be in hopeless confusion; and, with the full restoration of competition as now contemplated, will come again its baneful effects both on capital and labor.

To equip our commercial interests with the best banking and currency system which human ingenuity can devise, is a duty of Congress second only in importance to the adequate support and protection of our business activities. Τo aid it in this task there is now available, thanks to the thorough work done by Congress through its Monetary Commission, ample and complete data. The earth has been ransacked for information and experience; and the result of the search, formulated by the Chairman of the Commission in the shape of suggestions for a national reserve association, is masterpiece of careful constructive я Everything useful that other thinking. nations have to offer is to be found therein, duly fashioned to our special needs. There should be as little delay as possible in crystalizing these suggestions into law, approved as they are by commercial and industrial bodies, by bankers associations, and by practically all expert students of economics.

The plan does not contemplate the centralization of banking power; rather it would promote decentralization. lts adoption would not diminish the independence or efficiency of any financial institution, no matter how small; but on the contrary would increase it greatly. It would not impair the credit of any bank, but enormously strengthen it by the creation of a higher credit on which all participating banks could rely confi-Under dently in time of financial stress. its influence the intensity of crises would be lessened, panics would be wholly avoided and we should not again be humiliated in the eyes of other nations through the discreditable suspension of cash payments. The looseness and consequent weakness of our present system would give way to unity and strength. The creation and full utilization by our banking institutions of such an association would indeed give us, as has been characterized so aptly by an eminent authority, "the strongest organization in the world for the performance of banking functions." Armed with this and with adequate legislation well suited to our business needs, the people of the United States would achieve quickly that industrial, commercial, and financial supremacy to which they are entitled, and in its benefits all classes would share.

Before leaving this phase of the subject, further reference should be made to the tendency to concentrate the banking power of certain localities. Failure on the part of Congress to provide an adequate monetary system is responsible in large measure for this feature of modern banking. It is in reality an attempt at self-protection, crude but effective, as was the issuance of Clearing House certificates in the panic of 1907. The popular idea of this concentration - an idea that is most industriously disseminated by a certain class of politicians — is that it was inaugurated solely in response to the sordid desire for greater gain. That it will produce a centralization and probably an increase of profits, there is no doubt; but there is also no question that the motive of self-preservation, owing to the absence of a coherent protective monetary system, plays a very important part in such combinations of financial interests.

The average citizen has but a short memory; therefore it is well to recall that these "concentrators" are the men who, with the Secretary of the Treasury, stood the brunt of the panic in 1907, when our inadequate banking system was completely demoralized; and they determined then and there that never again would they allow themselves to be caught in so vulnerable a position. We are but little better protected now than To provide the country with a then. stable banking and currency system would be to deprive the misnamed "Money Trust" of any menace it may possess. It is the only thing that can do it. This is so elemental and has been explained in detail so repeatedly in the public press that further reference would be but tedious repetition. Congress is powerless to touch this concentration of banking power, save in the manner indicated, unless, indeed, the very foundations of our national life are to be uprooted.

It will be seen from the foregoing, therefore, that the Congress is recreant to its duty every moment it fails to provide that protection against financial and business upheavals which a proper banking and currency system would give to us — as it has given to many other countries. Undue extension of credit always culminates in crises of greater or less magnitude and intensity and cannot be elminated altogether, but panics are preventable. Crises occurred all over the world in 1907, but the distinction of a wasteful panic and its hideous consequences was reserved solely for the United States, which by virtue of its conspicuous position among nations should be an example to the world in the matter of sound banking. As it is, we are, finan-cially speaking, a world menace, and what is far worse, our present banking and currency system is a source of danger to every wage-earner, in that its weaknesses render us liable at any moment to financial trouble and the consequent disruption of all industry. The national representatives of the people can not perform a greater service than to see that this evil is promptly cured. In brief, the business world of the

In brief, the business world of the United States is utterly discouraged. Not only is it beset by all the difficulties inherent in business pursuits; it is wholly without what the coast-wise mariner calls "sailing lights." Worse even than that, it is trying to navigate in a legal fog; and in addition, instead of having the aid and comfort of an efficient banking and currency system, it has to get along as best it may with the crudest monetary contrivance now existent among civilized nations.

The correction of these defects constitutes the paramount issue of the day. Beside it the tariff sinks into insignificance. The political party which has the wisdom to realize this, and comes with sincerity, fearlessness, and intelligence to the relief of business, will be clothed with political power for an indefinite period.

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DR. WILEY AND PURE FOOD

SECOND ARTICLE

THE CHIEF OF THE BUREAU OF CHEMISTRY AS WASHINGTON KNOWS HIM — THE TRAINING THAT MADE HIM A FARMER, SCIENTIST, SCHOLAR, POET, AND A GOOD COMPANION

ΒY

ARTHUR WALLACE DUNN

N THE month of April, 1863, a big raw-boned youth of eighteen, clad in a home-made suit of homespun, his feet encased in coarse cowhide shoes whose reddish color showed that they had been worn long without blacking, and carrying a small bundle over his shoulder, tramped along the hills and through the valleys of Indiana beside the Ohio River. He was going from a farm to Madison, Ind., where there had been a college which for many years it was his ambition to enter. He was beginning to seek the knowledge which finally resulted in making him the nation's chief defence against impure foods and drugs.

Dr. Harvey W. Wiley, Chief of the Bureau of Chemistry of the United States Agricultural Department, is one of the most picturesque figures in public life. He comes from that sturdy Scotch element which early occupied Virginia, afterward crossed the mountains and settled Kentucky, whose descendants peopled the valley of the Ohio on both sides of the river. Some of his ancestors lived to be **100** years old, hale and hearty to the end. If Dr. Wiley has inherited their constitutions and if he retains his hold with the people, the food adulterers and drug poisoners may look forward to a continual warfare for many years to come. That may easily be the case; for he has a powerful physique, stands an inch above six feet and weighs 240 pounds. But it is the head upon the square shoulders and the strong face of the man that arrests and rivets one's attention.

The Wiley family were originally Metho-

dists, "but they had never been sprinkled," said the Doctor. "My father was sixteen years old when his people were all baptized, but he would have none of it. He ran away and hid in the woods to escape sprinkling and never would become a Methodist." However the father was eventually deeply impressed by the preaching of Alexander Campbell and others, and became a preacher himself. But this man who had hewed a farm out among the deep forests of the frontier, had had no opportunity for schooling. So, in order to fit himself for his new duty, as he conceived it, he studied Latin and Greek. These subjects were taught to young Harvey Wiley.

"My father was a remarkable man," said Dr. Wiley, "The Bible, the Concordance, a Greek Testament, Shakespeare, the *Atlantic Monthly*, the New York *Tribune*, and the *National Era*, an antislavery paper published in Washington, were what l grew up with. That was the kind of literature with which I was surrounded — and which I read and absorbed."

In those days the "New Lights," as the followers of Campbell were called, had preachers going through the country who were also school teachers. They would establish subscription schools and combine teaching with preaching. Harvey Wiley received his early education in this way. He absorbed their knowledge, but paid more attention to their teaching than to their preaching.

A German came across the river from Kentucky and established a school for higher education and Wiley had an opportunity to study Latin and higher mathe-This was in civil war times matics. when political feelings were intense. An election was held in the spring of 1863 and the German professor was one of the four men in the township who voted the Democratic ticket. When young Wiley learned this he packed his books and went "I will not go to a school taught home. by a Rebel," he announced; for he considered Democracy and rebellion to be practically the same thing. Then he went back to work on the farm. He worked one day and then made another announcement. He told his father that he announcement. He told his father that he was going to college.

Hanover College was four miles from his home and, putting on his best homespun suit, he started upon his academic career, which included a remarkable number of institutions, in some of which he was a student and in others a professor and teacher.

Young Wiley in spite of his brave resolutions did not reach the college without many misgivings and a little stage fright. The latter was caused by meeting a party of young men whom he took to be college students. He quickly noted every detail of their clothing and saw how different their appearance was from his own. More particularly they had on collars and neckties, neither of which the poor farm boy wore. He was disturbed for a moment, but his determination was not weakened, though he had no idea of the proper way to approach the college authorities or of the necessary forms for While revolving enrollment as a student. this problem in his mind he saw a face at a window — the face of a young man bending over his books. "I will make bending over his books. "I will make inquiries of him," said Wiley to himself, and upon doing so, learned that the young man's name was Elliott and that he was "prepping" for college himself. Elliott asked Wiley numerous questions, told him that in Latin and Mathematics he was fit to enter the freshman class, but that he was behind in Greek. Elliott was studying for the Presbyterian ministry. He kindly volunteered to take Wiley to the college and introduce him to the president. After this interview, during

which Wiley was examined as to his studies and told that his education was irregular — good in places, but weak in others — he was recommended to a Greek tutor and soon began his studies. When the regular term opened in September he was ready to enter the freshman class. Elliott continued to be his friend, and helped him to find a room.

While at Hanover he "kept bach" in a room which cost him fifty cents a week. He walked home every Saturday morning and worked all day on the farm. He returned Sunday night with a pack of provisions on his back to last him through the week. His chief foods were corn meal and sorghum molasses. He made the molasses himself during vacations. What a vivid impression those early days made upon the future scientist! He describes minutely the room he occupied, the furniture and utensils, all of which, save the bedstead, were brought from home.

After two years, Elliott left Hanover and Wiley did not see him again for more than forty years. Their reunion occurred at Indianapolis where Dr. Wiley had delivered an address and where a reception was being given in his honor. Among the guests was a withered, white-whiskered, and rather timid man. He shook hands with the Doctor, but his name was not understood and not until later, when Dr. Wiley, on account of some feeling that he must know the man, sought him out and interrogated him, did he realize that this little old man was the first friend he made at Hanover.

Wiley's course was interrupted in 1864, near the end of his freshman year, by a call for 100-day enlistments to recruit the Union army. Nearly the entire college responded. All who did so were passed into the next class. They became Company K of the 137th Indiana Infantry. Wiley had learned military tactics and was the only man in the company who understood the drill. He became a corporal and drill master. He was then nineteen years old. The company served in Kentucky and Tennessee and the three-months enlistment lengthened into a service of five months. During that time Wiley had a severe illness and re-

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turned home in such a condition that it was not supposed he would recover. To this day he has recurrences of the illness contracted during his service as a soldier. His army service is not told in his biography. In fact after the enumeration of his different degrees, of the scientific and other societies to which he belongs, of the universities he has attended, there is scarcely room for anything else.

After completing the llanover course, Dr. Wiley went over into Kentucky and studied medicine with a doctor who had been a member of his company during the Then came an offer for him to teach war. school in the northwestern part of Indiana and Wiley went there. "My father borrowed the money to pay my way," he said, "and I landed at Crown Point with fifty cents." He at once sought the fifty superintendent of public instruction, and was disappointed to find that the position he expected to take had been filled. But the superintendent asked him many questions and issued him a license to teach school and finally asked him to dinner. "I was glad of that," said Wiley, "as it still left me my fifty cents. Of course l wasn't afraid of starving. I was strong and healthy and a good farm hand. I could do anything on a farm.'

During the dinner the school superintendent learned that Wiley could speak German and decided to make use of that fact. He was a candidate for another office in the county and feared defeat on account of the enemies he had made as superintendent of schools. But there was a German township which had always voted the Democratic ticket and he thought something might be done in that township with a man who could speak Wiley consented to go with German. him and for two weeks they campaigned the German township. The Germans were pleased to find a man who could speak their language, welcomed the campaigners with great hospitality and never charged anything for their meals, lodging, or keep of the horse. And what was more the Germans voted solidly for the superintendent and elected him.

Wiley then departed from Crown Point to go to an uncle living in a county to the south. He still had his fifty cents and spent it for railroad fare as far as it would take him. Then he struck out on foot across the Kankakee swamp, first seeking a college friend who, he knew, lived in the vicinity. But the walking was heavy. He was in mud or sand to his ankles most of the time, and night overtook him without a habitation in sight. With empty stomach he lay down under a tree, but did not sleep much. At daylight he began his walk and tramped nearly all day, still without food. It was nearly nightfall when he heard the rattle of a mowing machine. He found the farmer who was operating it and told his plight. He was taken in and given a meal and a bed. The next day he found his friend, then went to his uncle where he remained until notified from Crown Point that a school was ready for him.

For five months he taught in this "After school receiving \$60 per month. paying my board and debts," he said, "I had \$100, more money than I had ever handled before. It was untold wealth. Then I went home and I went to Chicago. while there was offered my first college position at \$800 a year. That was riches." Later he was offered the chair of chemistry at Perdue University at \$2,000 a year. "That was a small fortune and I was fixed for life," he said. He helped to organize Perdue and start it on its way. There he interested himself very much in athletics, an activity that had very little place in the colleges at that time. He organized various teams and since then he has been made a permanent member of

the athletic association of the college. While at Perdue Dr. Wiley underwent the first of a long series of trivial as well as serious attacks which have been made upon him. It was charged before the trustees of the college that he neglected to attend morning prayer; that he rode a bicycle; that he was a pitcher on the baseball team and wore a uniform at the time; that, in fact, he was irreligious, frivolous, and undignified. Dr. Wiley admitted every accusation. He said he had attended morning prayer so often that he knew it by heart. "It is the same old prayer day after day," he said. "As to the other matters said of me," continued Wiley, "which are here confessed, l ride a bicycle, not to be wicked or rakish, but that l may get around quickly and comfortably. I play baseball with the students because l like the game and need the exercise. But there is no need to prolong this hearing. I will relieve the trustees by tendering my resignation."

But by unanimous vote they refused to accept the resignation.

It was at Hanover that Dr. Wiley first developed a taste for chemistry. Dr. Scott, President Benjamin Harrison's father-in-law, was the teacher of natural science which included everything. In chemistry he was particularly efficient and young Wiley took to it eagerly, assisting in the experiments and greedily devouring the course. Notwithstanding the knowledge acquired under Dr. Scott, in after years when Dr. Wiley was made professor of chemistry at the Indiana Medical College, he asked for a leave of absence for a year which he spent at Harvard in order to fit himself better for the work. Again, a few years later when he was a professor at Perdue he took a year's leave of absence and studied chemistry in Berlin. It was while he was in Germany that he became interested in pure foods which has been the real study of his life.

Dr. Wiley counts it a high privilege to have studied under such men as Agassiz, Tyndall, and Hoffmann. The latter he regards as one of the greatest of chemists. It was while at Harvard that he attended the lectures of Agassiz and Tyndall. He had the privilege of nearly an hour with Tyndall one evening when a reception was given to the famous English scholar. Tyndall became interested when he was told that Wiley was "from the West." He asked many questions, particularly about the settlement of the West. "When l told him," said Dr. Wiley, "how my father had cut down and burned trees in order to clear his farm, Professor Tyndall Coming from England was amazed. where trees are almost sacred, he could not understand how they could be an enemy of the farm. Those trees in southern Indiana," sighed Dr. Wiley, "they would be worth millions now if they still standing."

From these influences Dr. Wiley re Washington a very unusual combinat a farmer, a scientist, with a knowlex German and some scholarship in La particularly good conversationalist v happy sense of humor, who amused h now and then by writing verses was the man who has done one of the tasks, the purification of the people's

Since he has been in the goverr service he has lived twenty-five yea one place in Washington. He mac home with Mr. and Mrs. R. V. Belt were living in a modest house on Street. A few years ago they mov a new and more pretentious hou: Biltmore Street and the Doctor went This is his Washington resic them. He has, however, two farms of his one a small place in Maryland Washington and the other at Blue Va., about sixty miles away. Thev him recreation and pleasure and he s all his spare time on either one o other. Notwithstanding Secretary son's assertion that he is not a farme a chemist the Doctor says that he v like to match the Secretary in fail knowledge.

As a scientist, of course, his monuis the Bureau of Chemistry. Perhapmost notable endorsement which hreceived, aside from the almost univapprobation of the general public, wa dinner given him in New York on 9, 1908, on the twenty-fifth annive of his entering the government selt was given by men of his own profeand other scientists. The praise received there in the speeches, in 1 from hundreds of men in all parts c country who were unable to get there endorsement enough to last a life til

He once knew a Catholic priest whom he always carried on all cc sation in Latin. "If I had a child said, "I would teach it Latin at eigh Greek at ten. Latin is the found of most languages. This proposed universal language they are tryir introduce — Esperanto — why, it i most wholly Latin. Take the



DR. HARVEY W. WILEY THE "BIG CHIEF" OF THE BUREAU OF CHEMISTRY OF THE DEPARTMENT OF AGRICULTURE, KNOWN TO HIS FRIENDS AS A FARMER, SCHOLAR, SCIENTIST, AND A MAN OF BRIGHT SAYINGS, KNOWN TO ALL PEOPLE AS THEIR CHIEF DEFENDER AGAINST IMPURE FOODS



DR. WILEY (ON THE LEFT) IN 1854, WHEN HE WAS TEN YEARS OLD

away and there would not be enough for a skeleton of a language. Why don't they make a universal language of Latin? It would be much more practical. Greek is not a dead language. There is more difference between the English of Chaucer and the English of to-day than there is between the Greek of Homer and the Greek of to-day. I can talk Greek with boot-blacks on the street and make myself understood and understand them."

Going further in the matter of languages the Doctor said that by reason of his



AS A FRESHMAN AT HANOVER COLLEGE, MADISON, IND., IN 1863

knowledge of Latin he could read scientific articles in Italian, although he had never studied the language. "Did you know that an Italian dialect poem had been dedicated to me? Yes; Da Pura Fooda Mon." But the balance of trade, in poetry is not against him, for occasionally he writes verses himself. He has published a small volume of lines on agriculture; he has written poems to commemorate events in the lives of his friends; he has written verses to be read at dinners and other festival occasions. Also, he has



PROFESSOR WILEY IN 1870 WHEN HE WAS TEACHING LATIN AND GREEK AT BUTLER UNIVERSITY AT INDIANAPOLIE, IND.



PROFESSOR WILEY IN 1878 WHEN HE TAUGHT CHEMISTRY IN PERDUE UNIVERSITY AND WAS STATE CHEMIST OF INDIANA

written random poems which still appear from time to time in periodicals and papers. The poem in which he takes the greatest pride is entitled "Farmer Johnson's Impression of the Institute." It tells in dialect how Farmer Johnson, leaning over the fence explains to another farmer, who did not go to the Institute. what he saw and what he thought about it. Dr. Wiley had the poem illustrated and published. That was many years Only recently he received a letter ago. from the editor of a farm journal telling him that, in the "Farmer Johnson" poem, Wiley had done more for scientific agriculture than he ever did in the Agricultural Department.

But in the Department circles in Washington he is not so much thought of as linguist or poet as a man who is good company and who says things worth repeating. Soon after the President's order was issued to the effect that no information was to be given a Congressman by any employee of the Government, and that only heads of the departments could furnish information, Dr. Wiley met a member of Congress.

"Good morning, Doctor; how are you this morning?" was the greeting. "I can't tell you," promptly responded the Doctor; "you'll have to ask the Secretary.

One of the best examples of his quickness of repartee is the exclusive property of the women of the Bureau of Chemistry.

They all call him "the Big Chief." Once a petite young woman of the Bureau met the Doctor as he was passing along the corridor to his office.

"Good morning, Big Chief," she said. "Good morning, Little Mis-Chief," retorted the Doctor.

During the time when the situation in the Bureau was darkest, when it seemed as if his enemies with the aid of higher officials would get the better of him, a close friend of Dr. Wiley in the Bureau asked:

'Why don't you fight? Why don't you go for each and every one of these people and make it so hot for him that something will have to break?"

"I have no time to spend knocking



THE OLD WILEY HOMESTEAD AT KENT, INDIANA. AS IT LOOKED IN 1902

chips off people's shoulders," replied Dr. Wiley. "When I was a young man I made up my mind that I was never going to allow myself to harbor any personal resentment. It doesn't pay."

"From a long and intimate personal acquaintance with Dr. Wiley," said the person who told the story, "I am sure that he has lived up to that rule. He has had the utmost provocation not only to make an official and public declaration against his treatment, but also to make it a personal matter with several people. He seems to be able to press an electric button within himself, so to speak, and control his impulses like a machine under the most trying circumstances.

As a witness in the lecent investigations,



THE BELT HOME **BILTMORE STREFT, WHERE DR. WILEY LIVES** IN WASHINGTON



OVERSEEING THE PREPARATION OF THE "POISON SQUAD'S" FOOD



WEIGHING BREAD FOR THE "SQUAD"

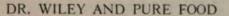
Dr. Wiley did not perhaps fulfill all the expectations of his admirers, because he was guarded, scrupulously careful to keep to facts, and did not express opinions he was known to possess of those who have been conspiring against him. Yet there were occasional flashes characteristic of the man.

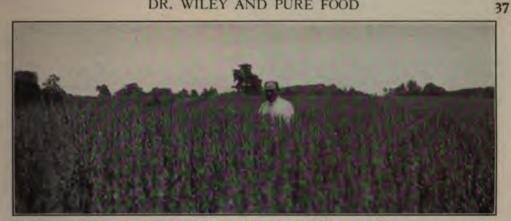
One member of the committee seeking to establish a high professional standing for members of the Referee Board, whose decisions had reversed the Bureau of Chemistry in a number of cases, asked Dr. Wiley several questions as to his knowledge of the men, and then inquired:

"Do you know what their several standings are among investigating scientists of the world?"



Copyright 1908. by Grantham Bain DR. WILEY'S FAMOUS "POISON SQUAD" EARLY IN THE EXPERIMENT WHICH HE CONDUCTED TO FIND OUT WHETHER OR NOT BORAX USED TO PRESERVE FOOD WAS INJURIOUS





BORN AND BRED ON THE FARM

"I think they have stood very high in the scientific world," replied Dr. Wiley, and then, after a short pause, added: "until they made these decisions. I do not think they stand so well now." The last was added with enforced and significant emphasis.

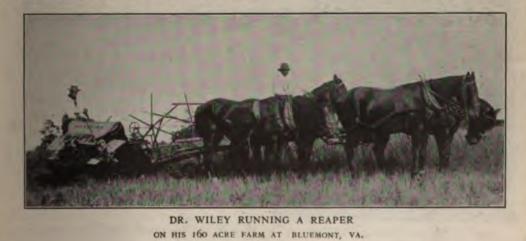
'They would stand a little bit worse with those who did not favor the decisions, but better with those who did?" pursued

the member. "Very much better with those who did," replied Dr. Wiley, and, in that incisive tone which means so much, he continued: "They have a much higher regard among those who would adulterate foods than they had before."

At another point Dr. Wiley explained the process in the Board of Food and Drug Inspection by which Dr. Dunlap and Solicitor McCabe overruled him, with especial reference to numerous cases



THE DOCTOR AND HIS FAVORITE HORSE IN THE COUNTRY





ONE OF HIS MANY TRIPS ABROAD HE HAS BEEN A DELEGATE FROM THIS COUN-TRY TO FIVE INTERNATIONAL CONGRESSES OF APPLIED CHEMISTRY

where Dunlap had first voted with Dr. Wiley and afterward reversed his vote.

"He withdrew his vote approving my course," said Dr. Wiley, "and changed it to meet the vote of Mr. McCabe. Along about December, 1909, Dr. Dunlap, in a great many cases, did not vote until he



ON THE WAY TO A CONVENTION

sent the vote to Mr. McCabe to get his vote first, and in those cases he never disagreed with Mr. McCabe's vote.'

"So," said the questioner, "instead of, as formerly, the voting being Wiley, Dun-

ap, and McCabe, it came to be Wiley, McCabe, and Dunlap?" "Yes," replied Dr. Wiley, and, with a sardonic smile, added: "It facilitated business."

Dr. Wiley had stated that in the enforcement of the law he had always looked to the interest of the consumer and a member of the committee asked him if there was any interest in this country that was in conflict with the interest of the consumer.

"I do not think," replied the Doctor, with carefully measured words, "there is any interest that is in conflict with the interests of the consumer. I think there are some interests which make themselves so that ought not to; because, in my opinion, the manufacturer who makes pure foods is the one that works with the consumer; but there are manufacturing establishments which use these substances, of which I have spoken in the preparation of their foods, and which misbrand their foods, and they have opposed me at every step."

Secretary Wilson told the committee of the House of Representatives that Dr. Wiley was an "apple of discord" in the Agricultural Department. However this may be in the upper circles of the Department it is not true with regard to his subordinates. These are his earnest admirers and sing his praise at every opportunity. They all believe in him and even at the present time, when to speak well of Dr. Wiley might result in dismissal, the loyal subordinates of the Chief of the Bureau of Chemistry do not hesitate to uphold him staunchly.

An illustration of the manner in which Dr. Wiley treats his subordinates is embodied in a story every woman in the Bureau loves to tell. Dr. Wiley prepared a very long report on a subject to be sent to Congress. It required a great deal of labor and he finally dictated it to a young woman stenographer. The next day she was in great consternation and trouble. She could not find the note

DR. WILEY AND PURE FOOD



THE REGULATIONS COMMITTEE WHICH FORMULATED THE REGULATIONS FOR THE FOOD AND DRUGS ACT IN 1906. MR. S. N. D. NORTH, THEN OF THE DEPARTMENT OF COMMERCE AND LABOR, ON THE LEFT, DR. WILEY IN THE CENTRE, AND MR. JAMES L. GERRY OF THE TREASURY DEPARTMENT ON THE RIGHT

book and all the Doctor's labor was lost. She finally mustered up courage to go into his office.

"Doctor," she faltered, "I've lost my note book with all that dictation." "Have you?" he replied; "then we will

have to do it over again."

And that was all. No storm; no criticism, but merely taking the loss as an incident of the day's work.

When the mercury was hovering around

the hundred mark last summer Dr. Wiley declared that heat suffering was largely a matter of imagination. His advice as to how to avoid heat prostration and alleviate the conditions of the weather was "Eat one fourth less in summer than in winter. Banish all alcoholic beverages. Eat largely of cooked fruit and vegetables. Drink nothing below 60 degrees in temperature and drink sparingly. Be careful to seek the society of cheerful



DR. WILEY AS A WITNESS BEFORE THE HOUSE COMMITTEE ON EXPENDITURES IN THE AGRICULTURAL DEPARTMENT



REST AND CONTENTMENT ON THE FARM

friends. Practice moderation in open-air exercises. Don't fret. Don't worry." And the day this advice was published a friend found him eating two large imperial crabs, one large steak with trimmings, a special salad, and drinking a few mugs of ale. The Doctor acknowledged that the joke was on him.

Prohibition has a practical advocate in Dr. Wiley. "I am not a prohibitionist



WITH A PARTICULAR FRIEND

from principle, but for policy," he said.

"They have validated the adulteration of all whisky and beer and other drinks, so there is nothing but alcohol with such additions as they see fit to put in to make what they call whisky or beer. It is unhealthy and dangerous. There is not much danger of drunkenness in pure whisky. In fact, it is too expensive except for the very well-to-do. Under present conditions with adulterated and poisonous whisky freely sold it would be better to have prohibition. But it should be nationwide. It will not do to have one state dry and another wet. The whisky men and drunkards would all go to the wet states."

Dr. Wiley's idea of unadulterated liquors has prevailed at the Cosmos Club which he has frequented for so many years. All whisky and other drinks at that club have undergone the "Wiley test" and are declared absolutely pure.

Money making is not a Wiley talent or characteristic. Since the time that he began teaching school he has merely had the money necessary to supply his modest wants. The salary of his office has been of less concern to him than getting appropriations for carrying on the great work of his bureau. "I have never tried to make money," said the Doctor, "nor have I spent much money. No man of my age has spent as little money on himself." And yet he has enjoyed life and had a good time. Much that is pleasant and satisfactory to Dr. Wiley is not expensive and his different salaries have always been adequate to meet his personal requirements. His doctrines of frugality are very well known in Washington.

The utter lack of pomposity and disregard of ceremony and display which is characteristic of Dr. Wiley is best illustrated by a story. The chief clerk of the Bureau of Chemistry is Mr. Linton, with an office next to Dr. Wiley's. Naturally, the chief clerk issues most of the orders to the employees. A boy who had been employed as a messenger for about five months finally became inquisitive as to his fellow employees. "I say," he aid to one of the men, "who is that big, fat man that works for Mr. Linton?"



THE SOUTH REALIZING ITSELF



REDEEMERS OF THE SOIL



AN UPBUILDING OF A WHOLE PEOPLE BY THE PRACTICAL AGRICULTURAL TEACH-INGS OF INDIVIDUALS, THE STATES, AND THE NATION. THE RISE OF GEORGIA FROM ELEVENTH TO FOURTH PLACE AS AN AGRICULTURAL STATE

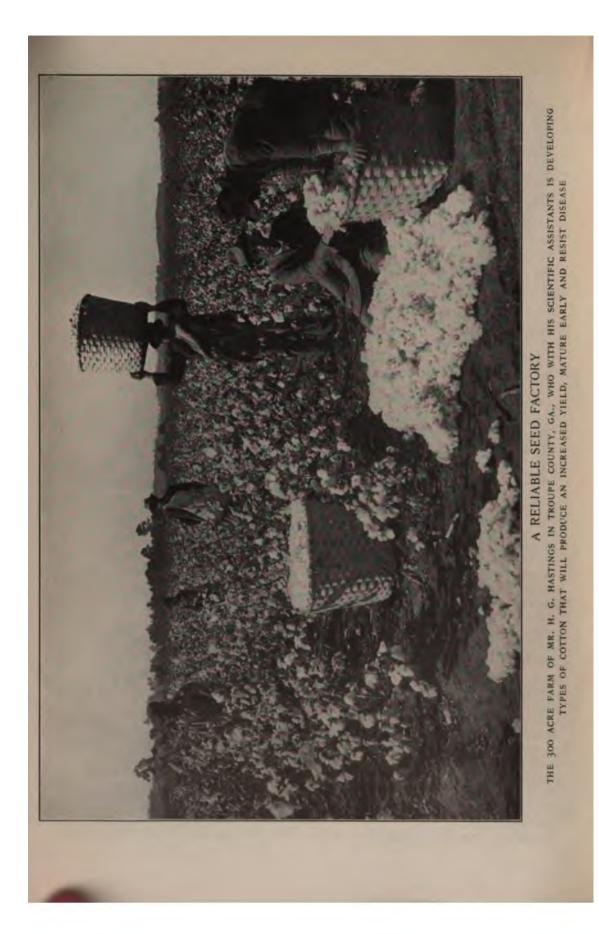
BY

EDWIN MIMS (PROFESSOR OF ENGLISE IN THE UNIVERSITY OF NORTH CAROLINA)

VERYWHERE in the South to-day there is a rising tide of interest in farming and in the improvement of country life. As I write these words, an agricultural train, under the direction of Clemson and Winthrop colleges, is making a tour of the rural districts of South Carolina; in nearly every county of North Carolina, farmers' institutes are being held under the supervision of the State Department of Agriculture and the Agricultural and Mechanical College; while in Auburn, Ala., more than one thousand farmers are in session to receive the latest teachings of agricultural authorities and to witness results wrought out upon the state experiment farm. Recently, at the Summer School of the University of Virginia, an entire week was given to the discussion of farm life problems by men and women from all parts of the country and to stories of practical results accomplished by the agents of the Demonstration Farm Work. At the Preachers' Institute, conducted by the Theological Department of Vanderbilt University, an important feature of the programme was the consideration of the

country church and of agricultural conditions in general.

Better than much talk, however, is the actual achievement that one may see on farms from Virginia to Mississippi. As might be expected, there are some farmers who have inherited from their ancestors a practical knowledge of farming and wise business methods. Though a great many of the ante-bellum plantations have deteriorated and the houses upon them have either gone to wreck or have passed into the hands of aliens in search of country homes, there are some that are managed efficiently by sons of the original owners. Without the knowledge of modern science, such men have mastered the art of farming and have some times unconsciously worked out for themselves principles and methods of the most advanced cultivation. Dr. Webber, the best known expert in the study of cotton, found, for instance, that the planters of the Sea Island cotton had for fifty years practised the art of seed selection in accordance with the most recent results of scientific study. There are whole sections of the South that give evidence of constant progress in agriculture throughout the past hundred years



- farms that have made a perfectly natural transition from slave labor to free labor, from one crop to diversified crops.

Such sections as the Valley of Virginia; Marlboro County in South Carolina; Maury and Williamson counties in Tennessee; Piedmont, Carolina; and the large areas of valley lands in Georgia, Alabama and Mississippi, give striking evidence of the masterfulness and resourcefulness of Southern planters, who have taken advantage of the climate, the natural productiveness of land, and their own talents.

These lands have sometimes been improved by men who have traveled in other sections of the country. I have in mind a large plantation near Augusta, Ga., which has been in cultivation for a hundred years, and around which dikes were built more than fifty years ago to save it from the floods of the Savannah River. After serving as a cotton plantation for many years, it passed into the hands of an expert dairyman who took advantage of its natural proclivities for grass, but who in time allowed the land to deteriorate. Seven years ago it was bought by Mr. J. C. Jack, who had as a boy hunted upon this plantation and had dreamed of some day owning it. He had studied engineer-



CAPTAIN R. S. WALKER WHO WITH HIS SONS HAS MADE HIS OLD ESTATE AT WOODBERRY FOREST A MODEL FARM, A MOST PROSPEROUS BUSINESS, AND AN UNEXCELLED PLACE ON WHICH TO LIVE

ing at the University of Virginia, but could not become interested in his work. In company with his father, a prominent railroad official, he had traveled in many parts of the United States and Canada, and had been attracted especially by the large hay farms of the middle and far West, acquiring almost unconsciously a knowledge of the most modern methods of cultivation and farm management. He was



THE WOODBERRY FOREST SCHOOL BUILT ON CAPTAIN WALKER'S FARM WITH MONEY MADE BY ITS PROPER CULTIVATION. ONF OF THE BEST SCHOOLS IN THE SOUTH ON ONE OF THE BEST FARMS IN VIRGINIA — THE SCHOLAR AND THE FARMER HAND IN HAND



THE GEORGIA STATE COLLEGE'S TRANSFORMED "ABANDONED" FARM THE SITE OF THE INSTITUTION FROM WHICH IT TOOK \$7,149.58 WORTH OF PRODUCTS LAST YEAR. THIS "WORN OUT" LAND HAS RAISED AS MUCH AS TWO-AND-A-THIRD BALES OF COTTON TO THE ACRE, AND HAS BEEN PARTICULARLY EFFECTIVE AS A DEMONSTRATION OF THE VALUE OF KEEPING BLOODED STOCK

traveling in Holland, where he had been impressed by the expert handling of the low lands, when he received a cablegram announcing that the farm which he had always coveted was for sale. He returned home, bought the farm, and began to build up the land. He drained it with twelve-inch tiles, so that there is not now a ditch on the farm, nor a waste place of any kind, nor a weed. He has himself been an untiring worker, living and spending his entire time on the plantation. By the introduction of modern machinery he has two push-rakes which recently cleared sixteen acres of hay in four and one half hours - he has gradually cut down the number of his mules from fourteen to seven and the number of his "hands" from twelve to seven.

He makes from four to six crops a year of vetch, peas, etc., but mostly of Johnson grass, which has been considered a curse by many farmers of the section but which is more valuable than timothy hay. The 22,000 bales of hay which he grew last year netted him \$9,000, on an investment of \$25,000. The farm is not only profitable, but it is recognized by the tourists who come in great numbers to Augusta as one of the most beautiful and at the same time best managed farms of the entire country.

Sometimes improvements of old farms have come as a result of training in agricultural colleges. In Madison County, Va., Capt. R. S. Walker, the descendant of a long line of gentlemen planters, bought in 1873 the estate of Wood-



FARMERS INSPECTING THE COLLEGE DEMONSTRATION FIELD AT ATHENS, GA. BESIDES THE 290 STUDENTS — WHO GO BACK TO THE FARM ON GRADUATION — THIS INSTITUTION REACHED 10,000 PEOPLE THROUGH INSTITUTE WORK, 350,000 BY ITS AGRICULTURAL TRAIN, MORE THAN 100,000 BY CORRESPONDENCE AND MANY OTHERS WHO CAME TO ATHENS. GEORGIA NOW BELIEVES IN AGRICULTURAL EPUCATION AS THE BEST MONEY CROP

THE SOUTH REALIZING ITSELF

berry Forest, formerly owned by the brother of President Madison. For a while after the war, Captain Walkerone of Mosby's men, distinguished for his bravery in many battles - found it difficult to curb his restless spirit; he would ride through the country as of old, taking venturesome chances with the Federal Army still encamped in the region; he endeavored to work off his surplus energy by fox chases; he went to Louisville, Ky., in obedience to the call of the West, then so compelling for young Southerners. He finally settled upon the Woodberry Forest estate to find a natural outlet for his powers between plow handles, and in the manage-ment of his farm. One of his sons, Frank, showed a strong disinclination for academic work. From his childhood he had been interested in farming. So the father, instead of giving him a classical education at the University of Virginia, as he did his other sons, decided that this boy should go to the Polytechnic Institute. The son objected because it took him away from the farm. As soon as he



A MACHINERY DEMONSTRATION "FARM IMPLEMENTS DOUBLED IN ONE YEAR IN ONE GEORGIA COUNTY, AS A RESULT OF FARM TOOL DEMONSTRA-TIONS ON THE FARM

went to Blacksburg, however, he found that the very subjects which he wished to study were taught there. Besides the regular course in agriculture necessary for his degree he took extra work in horticulture, veterinary science, and dairying. The days were all too short for him; often in the afternoons, when others were engaged



SOME OF THE 55,000 PROGRESSIVE FARMERS OF THE NEXT GENERATION MEMBERS OF THE BOYS' CORN CLUBS WHO HAVE JOINED THE AGRICULTURAL REVOLUTION AND WHOSE EXAMPLE ALSO FORCES THE OLDER MEMBERS OF THEIR FAMILIES INTO PROGRESSIVE METHODS



AN ALMOST PERFECT COTTON PLANT (BRED FROM IMPROVED SEED) WHICH IN TURN IS BREEDING PROSPERITY, COMFORT AND CULTURE FOR ITS GROWER

in athletic sports, he was learning how to graft and spray orchard trees, or making inquiries about the live stock in the college herds. So successful was he in his studies that his professors urged him to become a teacher of agriculture; his fellow students invited him into their ventures in orchards, which were then just becoming extremely profitable in Virginia. But he returned to his father's farm, satisfied now that the education he had received was worth more to him than the bequest of a large plantation.

He soon took charge of the old farm and bought out the interest of his brothers in their grandfather's farm near by, which had for several years been in the hands of careless renters. On these two farms of more than a thousand acres he has applied the lessons of his college days - always with the hearty coöperation of his father, whose long experience in practical farming has been of invaluable service. He saw at once that lime was needed to build up the farm; his knowledge of fertilizers and of their relation to the soil enabled him to mix his own and thus reduce the costs; he redeemed the galls and gulleys by sowing legumes and by the rotation of crops. In one year he raised 4,000 bushels of wheat, 6,000 bushels of corn, and three to four hundred tons of alfalfa, clover, and pea hay. Best of all, however, he has established a well equipped live-stock farm, with registered Holsteins and Guernseys to supply cream for the markets of



A FARM LIFE DISCUSSION AT THE SUMMER SCHOOL OF THE UNIVERSITY OF VIRGINIA ONE OF THE RESULTS OF THE RISING TIDE OF INTEREST IN THE IMPROVEMENT OF COUNTRY LIFE THAT IS SWEEPING OVER THE SOUTH



THE BARNS ON THE ALABAMA EXPERIMENT STATION AT AUBURN

Washington and Richmond, and a herd of fine hogs, beef cattle, and horses. The farm has become a sort of unofficial demonstration farm for his neighbors; at the same time his maternal uncle, who has a large orchard at Somerset, profits by his nephew's knowledge of horticulture.

One of his classically trained brothers once said to him that he would never amount to any thing if he didn't stop following a cow's tail. And yet that brother, who, with the coöperation of his father and other brothers, has established on the old place what many consider the best preparatory school in Virginia, now reaps the benefit of the income from dairy and farm, which goes to the equipment and efficiency of the school. The hundred boys who come there from all sections of the country are provided with more wholesome milk, vegetables, and meats than school-boys generally have. We find in this story, then, an illustration of the way in which farming may become more and more economically profitable and spiritually interesting. The neighboring estate of President Madison has passed into the hands of rich Philadelphians, who have let the land go down while they have remodeled the ancient house in accordance



THE NEW BUILDING OF THE ALABAMA POLYTECHNIC INSTITUTE THE WORK OF THE COLLIGE, THE STATE AND NATIONAL DEPARTMENTS OF AGRICULTURE, AND ALL OTHER FORCES HAVE BEEN COÖRDINATED BY A CENTRAL BOARD SO THAT THERE IS AN EXPERT, INTENSIVE HANDLING OF THE WHOLE STATE, INCLUDING AN EX-PERIMENT FARM AND A DEMONSTRATION FARM AGENT IN EVERY COUNTY

with modern notions of comfort and luxury. But Woodberry Forest, still preserving all that was best and most distinguished in the old régime - the house now stands amid its immemorial trees as stately as when ex-Presidents of the United States were wont to stop there on their way from Washington to Monticello - has been made over into a more and more prosperous farm. Nowhere else in this country

be made to overcome inertia and indifference, economic fallacies, and stupid blunders. There must be organized effort on the part of state, nation, and com-munity; the public spirit of masterful leaders; well-equipped institutions of learning - all of these vitally related to all the forces that are making for the rebuilding of agricultural commonwealths.

The story of Mr. Walker has already



THE SOUTH GEORGIA DEMONSTRATION AGENTS

TYPES OF MEN WHO IN RESPONSE "TO AN APPEAL TO THEIR PUBLIC SPIRIT AND BECAUSE THEY WE THE WORK" ARE REVOLUTIONIZING THE METHODS OF FARMING AND THE DECAUSE THEY LOVE THE WORK" ARE REVOLUTIONIZING THE METHODS OF FARMING AND THE LIVES OF THE LOVE THE WORK" ARE REVOLUTIONIZING THE METHODS OF FARMING AND THE LIVES OF THE FARMERS. SOME OF THESE AGENTS ARE OWNERS OF LARGE AND SUCCESSFUL FARMS AND DO DEMONSTRATION WORK AT A GREAT SACRIFICE AND MANY OF THE YOUNGER MEN HAVE REFUSED OTHER POSITIONS WITH HIGHER SALARIES

will one find such a suggestion of what is most beautiful in the scenery and in the home life of rural England.

But the improvement of agricultural conditions in the South is much more than the work of individuals who have had exceptional opportunities arising from heredity, travel, and education. When we consider the deterioration of lands as the result of senseless methods of cultivation, the undeveloped wet lands and sandy regions, when we consider, too, the great masses of untrained and even stolid men, we realize that heroic efforts must suggested the importance of agricultural colleges as one of the agencies in this constructive work. I know quite well the inadequacy of many of these institutions. The prejudice that has existed in the minds of many serious men against their failure to accomplish their mission has been sometimes well founded. It is rather disheartening to find that, in a list of more than 500 graduates of a Southern agricultural and mechanical college, only forty-six have become real farmers and only forty-five are in any way connected with experiment stations or colleges; to learn also that many

who have been presidents of these colleges have failed to realize their obligations to the masses of the people; and that many of the scientific specialists have not considered sufficiently the problems presented by actual local conditions. Within the past five years, however, many of these facts have been materially changed; for the agricultural colleges, partly as a result of their own increasing efficiency and partly of the changing attitude of the public to scientific work, are in a far better position to direct the work that has been committed to them.

Although I recognize that all the agricultural colleges of Southern states offer rich material for stories such as I am writing, and although they all are older and have larger incomes — Clemson, for instance, receives \$260,000 from the fertilizer tax — and a larger number of students, I have selected the State College of Agriculture of Georgia as the most recent, and in many ways the most striking manifestation of the spirit that is transforming these institutions.

Although for many years there had been nominal Department of Agriculture in connection with the State University at Athens, it was not until 1906 that a distinct institution was organized and not until 1909 that an adequate building was provided for its work. The trustees were fortunate in securing as president, Andrew M. Soule, who had been trained in the great agricultural college of Canada and had spent several years as professor in the agricultural colleges of Texas, Tennessee, and Virginia. He is a man who combines with a practical knowledge of farming conditions, a spirit of initiative in research work and a remarkable ability to set forth, both by writing and by speaking, the results of his and of other men's discoveries and to inspire others with his own ideas of the world-wide movement now looking toward the improvement of rural conditions. He has been fortunate in gathering about him a body of trained scholars and farmers who have cooperated with him in making an efficient institution. The atmosphere of the farm pervades the place; the difficulty in holding these men is not their desire to go to other insti-

tutions, but that they want to work on their own farms. The greatest object lesson that they have given to the state is the transformation of an abandoned farm — the site of the institution — into a successful farm, the gross products of which amounted last year to \$7,149.58. On this land they have raised as much as two and one third bales of cotton to the acre, have maintained forty head of grade Hereford cattle, and Holstein and Guernsey cows, eighty head of Berkshire and Tamworth hogs, eighteen horses and mules of good quality. The farm has served both as practical laboratory for students and as an experiment and demonstration farm for the thousands who come to See it. The agricultural building is fitted up with laboratories specially adapted for research work in entomology, agricultural chemistry, plant breeding, farm machinery, veterinary science, and other subjects necessary in the expert handling of agricultural material; and besides, the students have access to the instruction and laboratories of the University of Georgia on another section of the campus. These facts all assume new significance when one realizes that last year there were 200 students of agriculture in the college, that some of last year's graduates declined remunerative salaries to go back to the farm, and that one of the students, who had throughout his student career developed a superior variety of corn, is now a Demonstration Farm agent in an adjoining county.

Important as such results are, however, that which has appealed most to the people of the state has been the extension work undertaken by President Soule and his associates. Last year thirty-three farmers' institutes and fourteen teachers' institutes were held in different parts of the state with an attendance of 10,000 people. From February 7th to March 25th, the second Educational Special - with exhibits of every department of the work of the college and the farm and with practical and effective demonstrators visited 120 counties, traveled 5,467 miles, and reached — at a conservative estimate - 350,000 people. The correspondence of President Soule amounted last year to 30,000 letters, while those in charge of special departments of instruction have likewise carried on an extensive correspondence with people who are sending up a Macedonian cry from all parts of the state. The prejudice against "book larnin'" is disappearing with such tangible and practical results as have been wrought out by this flourishing institution. The boll weevil and other pests and the sudden awakening to the errors of the past are causing the people to turn with almost pathetic yearning to men of authority. It is no wonder that the legislature, which has just closed, should have contributed \$50,000 for the further development of such work. The people are saying that there must be some connection between Georgia's leap from eleventh place among the states of the Union to fourth place in agricultural products and the increasing attention given to science and expert management.

Perhaps the most distinctive work done by this college is that of Prof. J. H. DeLoach in connection with cotton. To see him in his laboratory or on the experiment farm, studying every detail of the cotton plant, conducting experiments with every known variety of cotton, that he may determine points relating to length of staple, strength of fibre, diseases such as anthrachnose, the distance between plants, the amount and quality of fertilizers is to have a new sense of the specialist in this era of Southern development. While teaching in the Indian schools of Oklahoma several years ago he was greatly impressed with the instructions in agriculture. He returned to Georgia as botanist at the Georgia Experiment Station, studied in the government laboratories at Washington, worked with Dr. Webber in his experiments with the cotton plant, and has for four years been Professor of Cotton Industry at Athens. He has done his part in the extension work already referred to - in 1908 under his and President Soule's direction the first cotton school ever held in the South was attended by farmers from eighteen to sixty years of age from all parts of the state. He has prepared bulletins on every phase of cot-

ton culture. His special contribution to science has been the careful study of the diseases of cotton and the development of a special variety of cotton called "Sunbeam," the seed of which has been distributed to planters of the state. It is estimated that his investigations have already saved Georgia millions of dollars.

One of the greatest obstacles that such men have had to contend against in their efforts for the improvement of farming is the lack of attention on the part of farmers to proper seed selection. Only a few of them are capable of breeding their own seed; and unfortunately many seed houses are thoroughly unreliable. It is a matter, therefore, of great impor-tance that such men as Mr. W. A. Simpkins of Raleigh, N. C., and Mr. H.G. Hastings of Atlanta are breeding and selling seed of special quality. Three years ago, Mr. Hastings, seeing that it was impossible to rely upon others for the seed which was more and more demanded of him, bought and began to cultivate a farm of three thousand acres in Troup County, Ga., with the special purpose of developing types of cotton that would produce an increased yield, that would mature early, and that would resist disease. Although he himself has by extensive travel, by careful study of agricultural bulletins, and by association with specialists become an expert seedsman, he has employed to aid him in this work Mr. Tarr, who was trained especially by Professor DeLoach and who is, therefore, particularly fitted to superintend the experiments with all known varieties of cotton and to keep records While the plan is still in its of them. initial stages, already the results in the development of special varieties of cotton and in distributing them have been noteworthy. The farm has not only supplied the seed for a very large constituency, but has become a demonstration farm for the entire section of the state. In connection with it the International Harvester Company conducts demonstrations for the exhibition of improved machinery. Mr. Hastings, by his 600,000 attractive circulars, which are distributed in all parts of the country; by his offering of

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prizes for Boys' Corn Clubs; by his articles in newspapers and from the vantage ground of his position as Chairman of the Agricultural Committee of the Atlanta Chamber of Commerce, has become a great influence in the dissemination of proper ideas of farming, in the preparation for the boll weevil, and in the general uplift of agricultural conditions. "Bringing of the cotton plant to its maximum capacity is a life work, but it is worth while," is a saying that indicates his devotion to higher ends than the purely commercial.

Another still more notable agency in reaching a still larger public is found in the best agricultural papers of the South, and especially in the Progressive Farmer and Southern Farm Gazette, with its more than 100,000 subscribers extending from Maryland to Texas. Its editor, Mr. Clarence Poe, of Raleigh, N. C., is not only an alert and open-minded interpreter of the best agricultural achievements and thought of the day, but has gathered about him a staff of editors and contributors of exceptional ability to But in spite direct and inspire farmers. of this Mr. Poe has realized that there are farmers who will never read Government or experiment station bulletins or become subscribers to farm papers; that there is a great number of farmers who will never take the trouble to secure good seed or to learn the meaning of a fertilizer formula; and so he was one of the first to recognize the far-reaching importance of the farm demonstration plans projected by the late Dr. Knapp. He has printed in his paper time and again "the ten command-ments of agriculture." He has this summer published a series of articles setting forth the definite results of demonstration agents in all the Southern states. In a word, he has been one of the most persistent disciples of this great teacher.

It is not my purpose in this article to write in detail either of Dr. Knapp or of the system of agricultural education inaugurated by him for the instruction of adult farmers and of boys and girls; for I take it that the reading public is already familiar with both. What I should like to do is to give some idea of the great order of agents now found in nearly every county of the South. One has only to talk with these state and local agents to realize that they are a body of men as noteworthy for their consecration and unselfishness as for their expert and even scientific knowledge. In their aggressiveness and enthusiasm they remind one of some of the religious orders of the Middle Ages.

As an illustration of the state agents, l cite the case of Mr. Gentry of Georgia. He was a farmer in Texas when Dr. Knapp began his demonstrations in On hearing one of Dr. that state. Knapp's lectures he was so impressed with the personality of the man that he sought an interview; and Dr. Knapp was so impressed with him that he immediately offered him a position as agent. Although he was then making a profit of \$3,000 from his farm he immediately accepted and worked for three years in Texas. In 1907 he was transferred to Georgia where he began work with six local agents, a number which he has since increased to It is interesting to hear him fifty-two. tell of his experiences and especially to know of the local agents whom he has secured for various counties. He has, for instance, one farmer in South Georgia who is worth \$250,000 — the most successful farmer in this section, who now gives half his time to the demonstration work. "How do you get such men?" asked an the International Harvester agent of Company. "They do it in response to an appeal to their public spirit and be-cause they love the work," answered Mr. Gentry, who has himself recently refused a position as superintendent of farms that would have doubled his salary. The reports of Mr. Gentry and his local agents to the Department of Agriculture make as interesting reading as one could demand — they will be of invaluable service to the historian of the future. Notes like the following, written as the result of observation in different sections of the South, tell the story far better than any statistics.

One man has cotton six to nine inches high, with roots sixteen to twenty inches long, as the result of deep plowing in winter, while his neighbors are replanting. . . . As one of the main ways to fight the boll weevil I

have secured from the State Board of Entomology a case of boll weevils and affected squares, which I am taking with me on my rounds. . . I saw twelve pure bred Berkshire sows on vetch and rye pastures. . . Farm implements doubled in one year in one county as the result of farm tool demonstration on the farm. . Where they have been reading agricultural literature, they are now studying it. . . . Farmers have bought over four thousand two-horse plows since last fall and are buying harrows faster than men can supply them. . . . Forty cars of farm implements as against two last year were sold by one wholesale dealer as the result of demonstration talk. . . . There has been sold in one county a car load of There good Western mares.

Such field notes — and they might be indefinitely --- suggest multiplied the transformation of agricultural conditions. One of the most successful farmers in Alabama and at the same time one of the most effective agents is Mr. Clarendon Davis, whose farm is in the rich Tennessee valley near Huntsville, Ala. He attributes his success to the reading of The Progressive Farmer over a period of many years and finds his greatest joy in using the demonstration farm system as a means of helping his less fortunate neighbors. I wish that space allowed the account he once wrote of the year's activities on his farm — every day filled with its special duties, every laborer made efficient by an expert overseer, every acre of ground raised to its highest efficiency by crop rotation and other devices of the modern farmer. It is little wonder that he raised last year 6,626 bushels of corn an average of 65 bushels to the acre — 4,240 bushels of oats, 1,000 bushels of wheat, 65 bales of cotton, 295 tons of hay, \$3,000 worth of sheep, and other valuable live stock. The reader may easily imagine the effect of the demonstration teaching of such a man.

While there are literally hundreds of stories that might be told of the definite results of such teaching, I think that two letters, one from a white man and the other from a Negro, will suggest the economic profits and at the same time the new vision of life that have come to the most helpless Southern farmers.

Stony, Texas, Nov. 17, 1910. Dr. S. A. Knapp,

Washington, D. C.

DEAR SIR:

I feel it is my duty, also take it as a privilege, to write to you pertaining to the demonstration work. I can't find words to express my appreciation of what the demonstration work has done for me. When last spring a year ago, Mr. Ganzer preached the gospel of better farming in Decatur, I was one of the men who signed up for the demonstration work because I was convinced that there was something in it.

I was financially involved very deeply. I was owing about \$1,250. I did not have a cow or hog of any kind. I had an old pair of mules 29 years old, and I told Mr. Ganzer that I had to do something better in the way of farming or lose my home of 125 acres, of which 90 acres are in Denton Creek bottom; so I set out to follow instructions on 10 acres each of corn and cotton. I was so pleased with results that it nearly trebled the yield of both over the rest of the crop cultivated the old way. Myself and family were carried away with the results. I followed this year the instructions on my whole crop. The results were overwhelming. I made a bale of cotton per acre and 50 bushels of corn per acre. I paid every dollar of my indebtedness and have \$400 on deposit and about 700 bushels of corn. I bought a good span of mules worth \$500, 3 cows, and have \$300 worth of good hogs.

Now, dear Dr. Knapp, can you blame me when I say that I cannot find words to express my appreciation for what the demonstration work has done for me. I owe my great improved condition to you first, and to Mr. Ganzer, the demonstration agent, next. I hope that this great work you are doing will benefit other farmers as it has benefited me, and it will if they follow instructions.

In regard to the great move you made in organizing the boys' corn clubs to educate them in better farm methods, 1 will say it has caused a wonderful awakening among the boys. My son, Archie, 13 years old, has raised 50 bushels of corn to the acre, and was a winner of one of the prizes of Wise County.

Now, Dr. Knapp, the above facts which I am fully able to prove by either of the banks of Decatur, or by my neighbors. Myself and family certainly bless the day when the demonstration work was brought to us. I will close by saying that some day I hope to meet you, shake your hand and thank you more fully.

I remain very respectfully,

(Signed) A. L. FOSTER.

A. D., 7-16-10.

SIR, Mr. S. A. Knapp, I rite you a few lins in the gards of farming agricultur. I do say that your advice have Ben Folard and your direcksion have Ben o Baid an I find that i am successful in Life. Say, Mr. Knapp, I do know that there is gooder men as you an as fair as you, But o that keen eye ov yourse that watches ever crook in farming, that can tell ever man whichever was to Gro to be successful in Life. On last year I folered your advice an allso yer Before last. On 1908 i made 14 Bails of cotton an 1909, 17 Bails an startid With 1 mule an now I own 3 head ov the great worthies, an thanks to you for your advice a Long that Line an Great success in your occupation to you.

Say, Mr. Knapp, I am a culered man, Live near Graysport, Miss., Corn a plenty, allso make a plenty of Sweet potatoes, but I read your advice a Bout them. Will close,

Yourse,

(Signed) WM. WASHINGTON. Mr. Will Criss is my agent, visited twice a month.

Perhaps the state in which the farm demonstration work may be seen at best advantage over a large area is Alabama; for there, as a result of the remarkable appropriation by the last legislature of \$52,000 to supplement the \$32,000 appropriated by the United States Department of Agriculture, the activities of the State College of Agriculture at Auburn and the National Department of Agriculture have all been correlated and coördinated under the control of a central board. As a result, Alabama now has a demonstration farm agent in every county, experiment farms for the study of soils and plants in every county, in addition to the noteworthy work long done by the local forces Under the supervision of at Auburn. Professor J. F. Duggar, whose excellence as a scientific investigator has been recognized throughout the nation, all this work is closely related to that of the State Department of Agriculture, under the direction of Captain Kolb. As a result of such intensive and expert handling of the whole agricultural situation, Alabama is in a position to combat the anticipated ravages of the boll weevil, which now has already invaded its western border. Such are the agencies and forces and

such the individual men who are now reshaping agricultural conditions in the Southern states. But even these are not sufficient to deal adequately with the situation in its entirety. Men who have been primarily interested in the building up of cities and who therefore represent large interest of capital, are considering wisely and effectively plans for the improvement of undeveloped land and for the introduction of desirable immigrants. There is scarcely a section of the South from the coastal regions to the Mississippi bottoms that is not now being exploited and developed. The railroads are taking a most important part in the opening up of these lands. One of the most notable conventions ever held in the South was held recently at Gulfport, Miss., with the avowed object of providing for an extensive system of small farms from the cut-over timber lands and the undrained swamps of Mississippi and Louisiana. The leader in this movement is Mr. P. H. Saunders, president of the Commercial Bank & Trust Company of Laurel, Miss. and New Orleans, and vice-president of the Gulf States Investment Company. Formerly Professor of Latin and Greek in the University of Mississippi, a man welltrained in the best institutions of this country and Germany, he has for six years given himself to the building up of his native state. He is really an industrial statesman who has spoken with candor and courage of the necessity for the coöperation of all social and industrial forces in the making of a better rural civilization.

Such men are sacrificing mere temporary advantages to the permanent prosperity of coming generations and are proving once more that the practical plans of enlightened captains of industry are better than the dreams of ineffective philanthropists.

One of the most striking evidences of the intelligent handling of undeveloped regions of the South by men of large commercial vision is the policy recently adopted by the Chamber of Commerce of Charleston, S. C. While in South Carolina recently I made my first visit to the historic city, attracted thereto by its romantic association with American history and literature, and with the words of Owen Wister and Henry James in my mind. After hearing the chimes of St. Michael's from the quiet cemetery -asuggestion of some old cathedral town of England — and after walking along the Battery, famed in legend and song, l entered the Chamber of Commerce, from the walls of whose historic building looked down the portraits of its presidents of a hundred years. It was nearly two hours before I could see the secretary; for his office was filled with busy men and committees. Finally I learned that the secre-tary was Mr. A. M. McKeand, for six years Secretary for the Chamber of Commerce of Oklahoma City. And then 1 heard such a story of enterprise, of public spirit, as one might expect only from the most progressive cities of America.

Two years ago some of the most progressive citizens of the town, notably Mayor Rhett and Mr. P. H. Gadsden, determined that they would secure the best secretary for the Chamber of Commerce that was available, regardless of salary. Their choice was Mr. McKeand, who entered upon his duties last October. His first observation, after a survey of the field, was that only two per cent. of the four counties around Charleston was under cultivation. And his first declaration of policy, readily sanctioned by his Board of Directors, was that whatever effort might be directed toward the widening and deepening of Charleston Harbor or toward the industrial prosperity of Charleston business concerns, the primary duty was With to develop the surrounding land. his experience gained from the building up of Oklahoma and Kansas, he has gone to work upon a consistent and intelligent plan, first organizing a company for the purchase of 60,000 acres to be drained and cut up into small farms and provided with all the advantages of the best agricultural communities. Fortunately, at Summerville just outside of Charleston, Clemson College has recently established an experiment farm of 300 acres, which has thoroughly demonstrated that land with an average of four inches of water over its surface can be drained and cultivated

so that it will, on staple crops, yield a profit of \$53 per acre; and that, furthermore, white men can live and work upon such plantations the year round, with the best conditions of climate and health. Furthermore, the Drainage Law, passed, by a recent session of the legislature, providing for the issuance of bonds by drainage districts and for the use of the dispensary fund, is working to the same end.

So that in the next few years one may expect to see that whole section of South Carolina, which has for a long time been considered as utterly worthless, redeemed and made an attractive place for men to live and work in. Vulgarization is descending upon Kings Port, as Owen Wister sadly observed, but is not industrial and social wellbeing participated in by an increasing number of people of all classes and from all sections and all nations better than an aristocracy, exclusive in its spirit and reactionary in its policy? That such a change is now coming in all parts of the South — that all lands are becoming fruitful as well as a few favored spots, and that all people are being brought within the current of the world's activities and within the scope of all the best influences of society and government — this is surely one of the most hopeful, most inspiring, tendencies in American life.

For such material prosperity as 1 have suggested in this article is a prophecy of intellectual and moral development as well. Sidney Lanier said more than thirty years ago:

A vital revolution in the farming economy of the South, if it is actually occurring, is necessarily carrying with it all future Southern politics, and Southern relations, and Southern art, and such an agricultural change is the one substantial fact upon which any really New South can be predicated.

The third article will deal with the application of the scientific spirit to Southern manufacturers, to the cotton mills, the steel business, the turpentine industry, etc., and, by concrete stories of the careers of certain men, it will tell some of the results which are notable national accomplishments. — THE EDITORS.

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LITTLE STORIES OF BIG SUCCESSES

WONDER-TALES OF SCIENTIFIC FARMING IN THE SOUTH

BY

CLARENCE POE (EDITOR OF "THE PROGRESSIVE FARMER," RALEIGH, N. C.)

E TOOK me to his home in an automobile (and he has a right to run one, for his net income in 1910 was \$10,000); we got out and went into a hall lighted by electricity; when I went to my room, I found the house fitted with an up-to-date system of water-works; and there was a typewriter on my friend's desk, and a telephone hung beside it.

And this man was a farmer and had made his money farming! His name is W. S. Cobb, County of Robeson, State of North Carolina; age, thirty-six. Eighteen years ago he was an ordinary-looking eighteen-year-old Southern farm boy with eighty acres of land, two mules, one horse, and some one-horse plows and just one thing else: plenty of pluck.

Now he crops 900 acres of land, has 27 horses and mules, besides gasoline engines, a shredder, a hay press, a manure spreader, a grain drill, a corn binder, a wheat binder, harrows, listers, cultivators, and the like; his neighbors call him "Senator Cobb" (for he is a member of the upper house of the general assembly), and he expects to sell \$80,000 worth of stuff this year.

The explanation is, of course, that Mr. Cobb had his eyes open to begin with, and he has kept them open ever since. He was not content to do things merely as his neighbors and as his father and grandfather had done them. Some of his land was very hard, and he decided that he needed a heavy two-horse plow to tear up the unmanageable soil. "My neighbors told me that I would ruin my land," Mr. Cobb told me the other day. They thought him "set in his ways" when he disregarded their warning; he was, but his "ways" were ways of progress instead of ways of stagnation, as are those of so many people who are "set." He bought a two-horse plow, and the local merchant who helped him introduce his innovation into the community seventeen years ago now sells \$900 worth of such plows a season.

And so Cobb went on. He began to get the stumps out of the land. Stumps use land and pay never a copper in rent, and Cobb decided that they had to go. He also began to ship truck-crops to Northern markets. Deeper plowing, cowpeas, two crops a year - all sorts of progressive ideas found favor with him. He began to make money, and after ten or twelve years he felt able to erect a beautiful \$10,000 residence, having, of course, married in the meantime a true helpmeet. And now, with his land cleared of stumps and put in the best condition, which was his first great expense, with his house built and another tract of land purchased, he is planning to put up some thoroughly modern barns and to take up hog raising and cattle raising. He is too longheaded not to realize that there is no permanently profitable farming without carrying on stock raising in addition to his ample supply of work stock and milk cows.

Mr. Cobb is a fine type of the new business farmer. Freight rates, market conditions, crop conditions in other sections — he has all this information at his fingers' ends. "We'll make good profits on that crop," he said at one place as we rode through his trucking lands, "for our Jersey competitors are ten days late." He is as busy in spring with potatoes and beans as he is in summer with cantaloupes and watermelons, and "when the frost is on the pumpkin," Cobb's corn is in the shock — several thousand bushels of it — and no other farm in the community is more musical with the songs of dusky cotton pickers. Nearly every acre of his land grows two crops a year. The flourishing young corn and cotton which 1 saw on a recent visit, grew on land from which crops of potatoes, peas, and beans had already been harvested. Although some of his corn land had grown no other crop this year, one may say that he will get two crops on this land also because he will get a good harvest of peas along with the corn. He is making two crops a year on some land which his father thought would not grow a crop at all. And all this as a result of better methods than people knew about in other days.

In short, Mr. Cobb is a captain of industry. During the busiest season more than one hundred and fifty hands are employed, and all are paid cash, Mr. Cobb never being in debt to them nor they to him when Saturday sun-down comes. He is as surely a captain of industry as the cotton manufacturer — with this advantage on his side that in healthfulness and physical development there is no comparison between Mr. Cobb's laborers and those who are cooped up at monotonous work in the cotton factory.

Mr. Cobb is not only a good farmer, but he is interested in everything that makes for the improvement of farm life or for the development of his community. He is president of the Robeson County Farmers' Union, and is especially interested in agricultural education. In the recent general assembly he was the leading champion of the Farm Life School measure which promises to open the doors of opportunity for many boys and girls in all sections of the State.

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It is not about Southern men only that such stories of success may be told. Northerners, too, are beginning to get their share of profit and of pleasure by applying scientific methods to the lands of the South. Take, for instance, the case of A. L. French, of R. F. D. 2, Byrdville, Va., a "Yankee" who came down South and has made good. In fact, he has more than made good: a thoughtful friend was justified in remarking to me a few days ago, "I guess there's not another practical farmer in the South better known than French" — or more popular, he might have added.

It was eleven years ago that Mr. French sold his Ohio farm for \$70 an acre and bought a piece of unpromising Piedmont dirt near the Virginia-North Carolina line, for \$12 an acre. "All I had," he said to me, "was \$3,000 in cash, a carload of stock, two babies, a wife with plenty of grit, and a case of tuberculosis for myself. In fact, I shouldn't have left Ohio but for the tuberculosis. I paid \$1,000 down on the 240 acres of \$12 land, which left me \$2,000 free to work with, and I went at it."

There were plenty of discouragements from the first. Before he left Ohio, a great Angus breeder went to see him and said, "French, you are a blank fool, going to the God-forsakenest country l've ever seen to sell stock. Why, you'd better give your cattle away." French may have thought the same thing sometimes after he moved. The land he bought was part of a 7,000-acre tract that had been skinned by tenant negroes for more than half a century, and 75 acres of the 240 wouldn't even grow hen's nest grass. "Who is that man?" somebody asked

"Who is that man?" somebody asked when French went to the nearby town the first time.

"Why, that's the Yankee who has bought that poor Bethel place," was the reply. "But he won't be there long."

And when French's father and mother came down two years later, the father looked over the farm only to remark to the mother:

"Well, I'd never have thought a child of ours would be such a fool!"

"Two other friends from Ohio came down," he says, "and gave me that pitying smile that hurts worse than a hit in the face."

But French was no quitter. He began fattening the starved hillsides and bottoms, not with commercial fertilizers, but with cow-peas and clover; and he set about putting in tile drains. The seventy-five acres that wouldn't make poverty grass when he took hold made fifty bushels of corn per acre last year, and the plantation as a whole makes five times as much per acre as when he began working on it.

Again, French has made a pile of money selling stock - Aberdeen Angus cattle. He has sold a great many more than the big Ohio breeder has sold, who called him a fool for thinking such a thing possible, and is worth several times as much. ln fact, he can't meet the demand, and he has quit advertising because orders for future delivery exceed his supply. He could sell three times as many calves as he can raise, and at prices equalling those paid in Northern States. When he came, there were six beef cattle in the county, and now there are 450 in sight of his house. He has shipped cattle into ten states, shipped the first hogs ever shipped out of the county, and he says that he can raise both cattle and hogs more cheaply than he did in Ohio and that he could do so even if land values per acre were the same. "I can also raise corn and hay more cheaply," he says.

Meanwhile, Mr. French has been building up his farm. He has refused \$16,000 for land that cost him less than \$3,000 and that could have been bought five years before he came for \$1,000. All his land grows a legume crop — clover or peas — sometime during the year; and two-fifths of it is growing legumes all the year. "That's the secret," he will tell you, "vegetable matter, humus, in the soil. It not only adds fertility but holds fertility, as commercial fertilizers alone do not."

But what of French the man, for the man is always more important than his possessions? Upon that point 1 can say that I know few happier, more popular, or more useful men. He has almost forgotten that a consumptive's grave once menaced him. He and his fourteen-vearold boy cultivated fifty acres in corn and forty acres in peas this year without help. "As for the talk that Southern people do not give a hearty welcome to North-erners or Westerners, 1 have found noth-ing of it," he says, "nor has my wife." And pretty good proof is found in the fact that his is a "close" county politically and when his party wanted a popular man to nominate for County Commissioner, they picked French and elected him. When the farmers' state convention was organized, French was about the first man chosen

to head it. Whenever farmers' institutes are to be held, the farmers are likely to let it be known, "We want French." The Southern farmers don't care where a leader was born. They showed this when they gave love and loyalty to the late Dr. Knapp such as they have given to few native Southerners. If a man doesn't think himself "different," they will not treat him differently.

"How do farming opportunities North and South compare?" I asked Mr. French. His reply was: "There is no comparison. A man in the South can make more money and make it easier. My teams work eleven months in the year. I get practically twice as much out of them, and they keep harder and fatter, too. The soil is not naturally so rich as Northern soil, but it can be built up much faster."

Like Mr. Cobb, Mr. French is interested not only in a better agriculture, but in a better rural civilization. He wants especially to increase the efficiency of country churches through the concentration of effort.

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No less interesting than French's experience is the story of a man who gave up a good position on a Pittsburg daily paper, to try out a farming experiment in the sand hills around Southern Pines. N. C. His name is Bion H. Butler, and his first plan was to have an orchard and vineyard. Accordingly several thousand trees and vines were planted, but San José scale and grape mildew finally conquered, after a long struggle between him and them. Then Butler decided to make butter.

The first lot taken to market was received with some humor and the decided assurance that "nobody will buy Southern butter." But this man who had studied production and markets for years, had learned that you can sell anything if it is worth selling and that you can make anything if you know how. So he announced that he proposed to make butter of the kind that would sell, and that until his butter sold no other butter would be needed in his market. He proceeded to prepare a booklet freely illustrated, telling **about** butter, its composition, its method of production, and showing why butter made at Valhalla Farm and sent to market the day it was made must be the best butter possible to procure in his vicinity.

The argument was plain, the printing was neatly done, the booklets were attractive, and he filled the town with them. The people responded at once. Blotters to enclose in an envelope and printed matter of other kinds, he has had on hand at all times to tell the story of Valhalla Farm butter, and he has not yet had enough butter to supply the demand at the highest prices.

At Valhalla Farm some things are done the left-handed way. For instance, a few acres of cotton are planted, not for the cotton but for the cottonseed, which is the most important cattle feed on the place. Cotton is a by-product. Corn is raised for the silo, and if grass comes in the corn it is not dreaded as an enemy, but cut with the rest of the forage for cattle feed. A few hogs are kept, not for the sake of doing much with the hogs but as a means of profitably converting the skim milk into something that can be The fundamental idea has been utilized. to make good things at Valhalla and to show the people wherein the goodness consists. That is why Valhalla can always sell its cream for fifty cents a quart and its butter for several cents more than other butter brings in the market.

I wonder if it would be too much of a digression if I should pause here to quote what Butler said to me the other day when I asked him about his change from a high-salaried position on a Northern newspaper to a beginner's work on a Southern farm? It ought to be interesting as showing what can be done when a man who is worth while takes hold of Southern soil, even in what was once regarded as an almost barren belt; for Moore County was once thought of but little use except to grow longleaf pine and to hold the rest of creation together. At any rate, here's what Butler told me:

"I do not have as much money annually, and I don't need as much. I have a larger house than in the city, no rent to pay, no fuel bill, no water tax, no milk bill, no meat bill, no vegetable bill, no hanging to a strap in a trolley car; for we have a surrey, a buggy, and four saddles if we want to go into town or around the neighborhood. Our eggs are fresh, our poultry is not from cold storage; when the weather is cold, we go out with the wagon to the wood-lot for pine knots and oak logs for eight fires, six of them in open fireplaces, and we do not care if the price of gas is ten dollars a thousand.

"Then the children are rugged, they can ride a horse bareback like an Indian, can swim, shoot, walk, and they have air that is not thick enough to lean against and water that does not have to be skimmed and shaken before using. The first day my little chaps came to the country they were surprised when I told them to pick all the flowers they wanted, and they asked me if the park police would not make them quit. That's one reason I like to live on the farm. It is ours, and we may do as we like.

"Then, too, it is as much of a satisfaction to make and sell really gilt-edged butter for the highest market price as it used to be to see my name on the front page of the paper at the top of a threecolumn special story. When people will pay ten cents a quart for Valhalla Farm buttermilk as against five cents for the buttermilk from other places, you know you are making good."

Another saying of Butler's is worth remembering not only by farmers but by all sorts and conditions of men: "Everything that we send out is expected to bring two returns, one in cash and one in the friendly confidence of our patrons in us and in our products."

IV

No report on the new farming in the South would be complete without mention of Jerry Moore, the fifteen-year-old South Carolina boy, who has gained a national reputation by making 228 bushels of corn on a single acre last year, the biggest yield on record but one. The average yield for the United States as a whole is twenty-five bushels. Byron never more surely "woke up to find himself famous" than did this fifteen-year-old farm boy as a result of his exploit. "No," said a little chap in a South Carolina Sunday school class a few weeks ago, "I don't know anything about Jere-miah, but I can tell you all about Jerry Moore and his big corn crop."

Jerry is only one, although now the most famous one, of all the fifty thousand Southern farm boys who are at present enlisted in corn-club work.

Nor are the girls neglected. In Jerry's own state a champion of the farm girl has arisen in the person of Miss Marie S. Cromer of Aiken County. She is the organizer of the Girls' Tomato Clubs, a movement which within a twelve-month has spread into five states and is yet only fairly started.

IV

These snapshots have now included almost all types of farmers in the South except the Negro, and it should not be forgotten that he also is profiting by the new spirit that is abroad in the land. The Negro is nothing if not imitative, and he has a relative advantage over the white man in that, doing his own work exclusively, he has reaped all the advantages of bigger yields and higher prices without suffering any of the disadvantages of higher priced labor. About as good a story of successful Negro farming as I know is one told by ex-Governor Carolina. Aycock of North While Governor, he made a trip to his old home in Goldsboro and in the course of the visit ran across an old Negro, Calvin Brock, who had educated himself, learning his letters from an alphabet scrawled on a pine shingle by a country carpenter, and had also acquired considerable possessions by his industry and prudence. "1's mighty glad to see you, Mr.

"I's mighty glad to see you, Mr. Aycock," he said, "and mighty glad you are Guv'ner of the State." And then he laughed the darkey's contagious chuckle. "As fer me," he continued, "you know I couldn't affo'd to be Guv'ner."

"Couldn't afford to be Governor? Why not, Calvin?"

"'Cause you see, sir, I gits more fer my strawberries an' truck than North Calin'y pays the Guv'ner for a whole year's work!"

THE COÖPERATIVE FARMER

WHOSE ORGANIZATION GIVES HIM THE BEST MARKETS TO SELL IN AND SAVES HIM FIFTEEN OR TWENTY PER CENT. IN BUYING - DEFINITE EXPERIENCE

BY

JOHN LEE COULTER

(MINSELF & MINNESOTA FARMER, OF MALLORY, MINN., MEMBER OF THE FACULTY OF THE UNIVERSITY OF MINNESOTA. AND SUPERVISOR OF AGRICULTURAL STATISTICS OF THE CENSUS BUREAU)

HAVE several hundred letters, some from every state in the Union, asking about coöperation by farmers.

Scarcely a day passes without one such letter or more coming to me. Some are from professors and other teachers; more are from people in the cities who connect the subject with the high cost of living; many are from newspaper editors; but most are from farmers or managers of farmers' societies. Some writers are anxious to know what has been done in this and other countries; others write to tell of their experiences; others are anxious to tell why coöperation will always fail, or why it will prove to be a panacea of all ills economic, social, and political; but most of the writers want information telling how they may improve the conditions of their immediate vicinity. Many of these people not only tell of the need of coöperation but they give in detail the weaknesses of the present industrial system.

Anyone who does not follow the subject will be surprised at the extent of successful cooperation among the farmers of the United States and the rapidity with which it spreads. The producers are finding out in every section of the country that it is necessary; and, in every part of the country, they are profiting by it. In what follows I give a very hasty glance at the extent and kind of rural coöperative effort.

The greatest activity in the United States is shown by the farmers in the states of the Northern Mississippi valley. In Michigan the grape-growers have very efficient associations. In the graingrowing states the farmers own approximately 1,600 grain elevators. These range in value from \$4,000 to \$10,000, and every one looks after the marketing of approximately 150,000 bushels of grain. The average number of members is about 125. There are, therefore, in this region about 200,000 coöperating farmers; they have invested about \$15,000,000; and they control the sale of nearly 250,000,000 bushels of grain. Many of these same societies look after the selling of other farm products and act as live-stock shipping associations. They also purchase such twine, fuel, fertilizers, and feed as the farmers need.

In these Northern states, too, where dairying is important there are now probably 2,000 coöperative creameries. Minnesota alone has nearly 700. There are in the United States probably 4,000 other creameries. These should be owned by the farmers, and many more should be established. Little Denmark with fewer cows than Minnesota has 1,485 coöperative dairies, according to the last report at hand.

The farmers in these Northern states own more than 150 coöperative stores; and practically all these have sprung up during the last five years. I have visited many of them which are thoroughly successful. These same farmers have hundreds of coöperative telephone companies and farmers' mutual fire-insurance companies. The spirit of cooperation is spreading very rapidly. There is room, however, for many times as many organizations as yet exist, and there is room for much improvement in the conduct of many of the societies that have already been organized. But we are safe in attributing a large amount of the prosperity of these states to these intelligent organizations. Certainly most of the progressive, democratic legislation of the last few years is the result of intelligent agitation among the farmers.

States farther west have heard of the movement, and coöperative organization there is well under way. In Colorado the Grand Junction fruit growers and those in neighboring districts are well organized. In Idaho there are a number of successful, though small and local fruit growers' marketing societies. In Washington and Oregon there are a number of local coöperative marketing associations. A large number of these local societies are now making the first strong effort to establish a central marketing exchange.

No statement of coöperation among farmers would be complete without referring to the success in California. In that state the fruit growers' exchange controls the marketing of probably threefourths of the citrus fruits produced. Other smaller organizations control most of the remainder. The California Fruit Growers' Exchange is looked upon as the most successful farmers' organization in the United States. It is perhaps the largest organization at the present time, and yet in its present form it is only about six years old. The 10,000 members have about 300 packing houses and produce 50,000 carloads of fruit every year.

The California Fruit Exchange, which very much like the fruit growers' is exchange, looks after the marketing of the deciduous fruits. It is newer and much less important, but it is rapidly demonstrating that organization is possible and necessary. The recently organized Al-mond Growers' Exchange, with a dozen local societies, controls the marketing of considerably more than half the al-monds produced in the United States. The Walnut Growers' Association, with eighteen local societies, controls the marketing of 15,000,000 pounds of walnuts, which is probably eighty per cent. of the walnuts grown in the United States. In California, too, there are about fifty cooperative stores, as many cooperative creameries, and many local societies of less importance.

Turning to the Southern states, we find one of the strongest and most successful farmers' societies in the United States. Some ten years ago, farmers residing in the two counties on the east shore of Virginia formed a produce exchange which now markets nearly all that the farmers in these two counties produce. Last year that society handled more than 1,000,000 barrels of Irish potatoes and 800,000 barrels of sweet potatoes in addition to thousands of crates of berries and other The capitalization is only products. \$50,000, divided into shares of \$5 each. It does a business of approximately \$2,500,000 a year. Yet it represents prob-ably less than 5,000 farmers. Many of our states have 200,000 farmers and there would be room for forty such societies in the average state. Yet not a dozen organizations like the produce exchange of the eastern shore of Virginia can be found in the whole United States.

The apple growers of Virginia are organizing and the peach growers of Georgia are struggling with their problem. They have not yet succeeded in perfecting as successful a series of organizations as is necessary; and they could learn many valuable lessons from the experiences of other farmers' organizations. Last year the people in the City of Washington were paying exorbitant prices for Georgia peaches. I found it difficult to get such fruit as I wanted one day in that city, but the next day I found, while passing through Georgia, that the farmers were hauling decayed fruit away from the stations. A successful fruit exchange would know almost exactly how much fruit could be shipped from day to day, how many cars would be needed, what the freight rates would be to the different markets, how many cars of peaches the people in the different cities would need from day to day, what outside competition would have to be met, and practically what prices should be received. That same organization could purchase at wholesale the crates, the spraying materials, and the like, for the members and make a considerable saving.

The citrus fruit producers of Florida have studied their problem in the right

The leaders have carefully investiwav. gated the California methods of marketing. and during the last two years have been trying to apply the same principles. They Many cannot expect to succeed in a day. mistakes will be made. But, following the system which they found in use among the fruit growers of California, they are on the right track. Fruit growers should stick to the organizations and increase their membership. It is to the interest of all the people of Florida and indeed of all consumers of good fruit to help in every way possible to reduce the cost of fruit by better marketing methods, to carry better fruit to the consumers, and at the same time to make the growers more prosperous by giving them a larger share of what the consumer pays.

There are other smaller societies in the Eastern and Southern states, but probably not more than one farmer in a thousand is yet a member of a successful coöperative society. If the farmers in these states are to become prosperous they must organize. They have now before them many good illustrations of what is possible. And if they do not become more prosperous they cannot hope to buy land, build roads, build churches and schools, hire efficient teachers, and pay fair salaries, and they cannot expect to have the facilities in their homes which are found in the homes of people living in the cities. I am not now speaking of the Southern planters with their broad acres of land; I am speaking of the average farmers.

The Farmers' Educational and Coöperative Union is doing much valuable work in the Southern states. It has doubtless done more real educational work in teaching the farmers modern business methods during the last five years than any other similar organization in the history of the South. Many of the principles which it advocates might well be taught in the schools and colleges.

There are several hundred organizations among the cotton growers which control the storing of the cotton. There should be several thousand local coöperative unions to control the local gins, warehouses, presses, and oil mills. These local unions should be organized into larger district and central unions which could look after the marketing of the products. The time has passed for petty jealousies and individual bartering. Business must be done in a business like way. It is possible, of course, for many large, individual planters to own mills and gins themselves, but they should also belong to central organizations which could market their products.

There are in the lower South and in Tennessee and Kentucky a number of small local societies interested in the marketing of vegetables and such products. None of these has yet reached a very high state of perfection. In Tennessee and Kentucky the tobacco growers have been struggling for some years to improve their conditions. They have made some mis-takes. "Night riding" and "limitation of output" - both of these written about very much but practised very little were serious errors. These farmers should follow the lead of the Southern cotton growers. First of all they must own their warehouses; and they should control the tobacco which they produce until they are able to get fair prices for it. If outside organizations are not willing to pay satisfactory prices, the farmers' society should, if possible, begin manufacturing themselves.

The rice growers in Louisiana and Texas have taken up the new movement. The Louisiana organizations, with headquarters at Crowley, have adopted the methods of the California fruit growers. They advertise rice in the same way as the Californians advertise "sunkist" oranges. The Texas rice growers have not been so successful. They have not been willing to stick together in the same way. Advertising is necessary and the members must work together not only to support their present organization but to bring in all who are not members.

In Texas the truck growers along the southern border have taken up the cooperative movement. In 1905, when they produced 500 carloads of onions, their system of marketing was no better than it had been eight years before when they were offering a few hundred crates for sale. The present organization was incorporated in January, 1906, with a capital of \$10,000. Shares were to be sold at \$1 each, but every member was required to buy at least five shares. He was required, however, to pay only thirty per cent. of his subscription at the beginning. Thus any farmer could very easily join the organization. Growers of about seventy per cent. of the crop for 1906 became members, and that year the association marketed 900 carloads. In 1909 it handled 2,500 carloads with an approximate value of \$1,500,000.

There is a considerable number of small coöperative societies in New England, but the farmers there have not yet succeeded in forming large and successful organizations. There is no doubt in my mind that many of the deserted farms and much of the poor agricultural conditions are due to poor organization. The same thing is true of the farmers in the other North-Atlantic states. There are in parts of New York and in Pennsylvania thoroughly successful business societies, but they are comparatively few. The grape growers in western New York are probably the best examples.

Let us now see what degree of prosperity some of these societies enjoy. The Tamarack Coöperative Association of Michigan has completed its twentieth year. Mr. E. T. Duane, the manager, reports that the capital stock paid in is \$64,610. On February 18, 1911, the twentieth annual dividend of \$104,821.60 was declared. If it had been divided among stockholders in proportion to the capital invested, it would have amounted to an additional dividend of 162 per cent., because the regular interest had already been paid to stockholders. But this dividend was declared on purchases and, since the business of the year amounted to \$866,063.45, a dividend, or rebate, of 12 per cent. on purchases was declared in February. There are about 2,000 families interested in that society, and the average family purchased about \$430 worth of goods. The rebate of 12 per cent. almost one eighth of the purchase price — amounted to \$51.60 per family in addition to the interest on the money invested in a share of stock. Since starting business that society has had a total business of \$8,113;917.85 and has returned rebates of \$938,033.67 to its members. In twenty years these members have saved nearly \$1,000,000.

But this is a big company. How about small ones and young ones? The Jackson County Coöperative Company, of Lakefield, Minn., has 225 members. Last year the sales amounted to \$139,230.86, or nearly \$600 per member. The net gain or rebate, was \$12,700.21 and members received, as rebate, 10 per cent. on all purchases, or about \$60 per family, after a dividend of 6 per cent. had been paid on all capital stock. The company gave non-members a rebate of 5 per cent. and advised them to join and showed them that they could pay for their stock in four years by the rebates. A reserve of \$4,000 is always kept on hand for emergencies.

Let us take a still smaller society — the Kidder Coöperative Company of Kidder, South Dakota. It has only 104 members. In 1910 they purchased \$34,298.43 from their store, or \$325 a family. The net profit for the year was \$5,037.98. After all expenses were paid including interest at 7 per cent on all capital stock, a rebate of 8 per cent to members and 4 per cent. to non-members was declared. This amounted to \$26 per member's family, or one-twelfth of the annual account. These are typical cases. Hundreds could be cited.

In the grain business, in which farmers now have nearly 2,000 separate elevators and many local companies, the same successes are found. The educational and social advantages are everywhere noticeable, but the money gain "sticks out "clearly or the companies would not last long. The Farmers' Elevator Company at Marcus, lowa, has been a success from the It was organized January beginning. 1888. In order to be on the safe side, a surplus of about \$9,000 is kept on hand, and a dividend of from 20 to 25 per cent. is declared every year. In this company the surplus is divided among share holders, who are farmers. Each member has only one vote, no matter how many shares he holds, and he must be a farmer who sells grain. In addition to the dividend each farmer gets better grading, truer weights, and better service than formerly.

The Farmers' Coöperative Elevator Company of Wheaton, Minn., handled about 100,000 bushels of grain last year and declared a dividend of 40 per cent. Two years ago the company at Clinton. Minn., declared a dividend of 40 per cent. There are many better records than this. Hundreds pay 25 per cent. Many pay only 6 or 7 per cent., save a large surplus. or reserve fund, and then divide all net profits in proportion to the amount of business done. This is similar to the policy among the stores.

In conclusion then we may say that the farmers in all parts of the United States are now interested in the movement which I have attempted to describe very briefly above. More than half a million farmers are now receiving valuable benefits from these coöperative societies to which they belong. They have been forced to organize. They have found that it is not enough to pass laws regulating other business organizations. Thev have waited in vain for the national, state, and local governments and the educators to assist in the movement. They have made many mistakes and in thousands of local districts have gotten far behind the procession.

But we now have illustrations enough of what is possible, and of what is being done, and of the prosperity which results from the success of these local coöperative societies to pass judgment.

It is my thorough belief that the time has come when the educators of the country must select the wheat from the chaff. They must acquaint themselves with what is being done; they must point out the errors and point the way for the 5,000.000 farmers who have not yet joined any active local coöperative society. Until this is done and until the farmers have acted upon the advice which they should receive we cannot hope for a prosperous agricultural class; and without prosperity in the country districts we cannot hope for better roads, better churches, better schools, rural telephones, better sanitation, better education, and *better living*.

WOODROW WILSON-A BIOGRAPHY

SECOND ARTICLE

AT COLLEGE – PREPARING FOR PUBLIC LIFE

A FAIR STUDENT AT COLLEGE STUDIES AND A HARD WORKER ON THE SELF-CHOSEN SUBJECT OF GOVERNMENT— THE INFLUENCE OF SIR HENRY LUCY— AN UNDERGRADUATE LEADER

ΒY

WILLIAM BAYARD HALE (AUTHOR OF A WEEK IN THE WHITE HOUSE WITH PRESIDENT ROOSEVELT)

HEN Woodrow Wilson got off the train at the little station in Princeton, early in September, 1875, one of 134 new-

comers, he found himself in a charming old town of maples, elms, and catalpas, among which stood the college buildings, dating, one of them, back to 1756. Almost within view of the metropolis of the hemisphere, Princeton, three miles from a railway main line, was, as it is still, uniquely sequestered, the noise of the city's activities reaching it as a dim echo —as the murmur of waves that beat on shores scarcely aware of the winds that raised them.

But it was very far from being the Princeton of to-day. It was still the "College of New Jersey," commonly known as "Princeton College." The college buildings numbered only sixteen; Witherspoon Hall was just about to be begun. The faculty consisted of twentyseven professors and instructors, seven of them Presbyterian ministers. It can scarcely be said to have contained any great teachers, but there were in it several men of considerable force of personality the President, Dr. James McCosh; Professors Charles A. Young, the astronomer; Cyrus Brackett; John T. Duffield; William A. Packard, a cultured latinist; Arnold Guyot, the celebrated geologist and geographer. President McCosh was in his prime, but Professor Guyot was on the verge of retirement. Princeton in 1875 was a good old-fashioned college where a man might learn his physics, his logic, his moral science, mathematics, "belles lettres," astronomy, go on with his Latin and Greek, and study the harmony of science and revealed religion as well as anywhere.

The place, full of traditions of the Rev-olutionary War, had been a favorite resort of Southern students up to 1861. The first war had battered the front of Old Nassau Hall, and the second had done more substantial, if less picturesque damage in withdrawing from the institution a large part of its Southern patronage the South could ill afford to send its young men far away to college now. This year, indeed, there came twenty men from the Southern states. It is remembered that some of these youths needed reconstruction; one of them needed it badly: Peter J. Hamilton of Alabama later developed into a man whose career is a credit to his native state as well as to his college, but he came up to Princeton a rare fireeater." In the campaign year of 1876, the last in which "the bloody shirt" was flagrantly waved, Hamilton demonstrated his sentiments by going out into the street rather than pass underneath a National flag suspended over the sidewalk. The action got noised about, and Hamilton was waited on at night by a committee of students, who pulled him out of bed, made him do reverence to the emblem he had disdained, and, after sundry hazing stunts, wrapped him in the flag and put him back to bed.

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Wilson is remembered in no such way. He was known as a Democrat of stout opinions from the day he first opened his mouth on the campus, but no recollection remains of his having displayed any sectional passion. A classmate remembers, however, that on one occasion when a group of fellows were talking of the misfortunes that follow in the wake of war, Wilson, who was in the group, cried out, "You know nothing whatever about it!" and with face as white as a sheet of paper abruptly left the company. Nevertheless, one of his nearest friends of that day remarks that it was only years after, as he was reading a tribute to General Lee in the "History of the American People" that he first realized the Southern origin of his old classmate.

All testimony goes to indicate that "Tom" Wilson immediately took his place as a leader in the class. He appeared as a young fellow of great maturity of character, blended with unusual freshness of interest in all things pertaining to college life. He had the manners of a young aristocrat. His speech was cultured. He soon won the reputation of already wide reading and sound judgment. There is abundant evidence that he was, from the start, a marked figure among the men who now constitute the "famous class



THE BOARD OF EDITORS OF THE "PRINCETONIAN" IN 1878 ON WHICH WOODROW WILSON (SECOND FROM THE RIGHT SITTING) SERVED AS MANAGING EDITOR

THE WORLD'S WORK

of '79." There have been more famous Princeton graduates than these, but there has never been a class of so high an average of ability. Robert Bridges, one of the editors of *Scribner's Magazine*; the Rev. Dr. A. S. Halsey, Secretary of the Presbyterian Board of Foreign Missions; Charles A. Talcott, M. C.; Mahlon Pitney, Chancellor of the State of New Jersery; Robert H. McCarter, Ex-Attorney-General of New Jersey; Edward W. Sheldon, President of the United States Trust Company; Colonel Edwin A. Stevens of among them; he ranked forty-first in the class.

The fact is that this son of clergymen and editors hadn't come to school to pass through a standardized curriculum and fill his head with the knowledge prescribed in a college catalogue. He had come to prepare himself for a particular career and before he had been at Princeton three months he had finally determined on what that career should be.

The class historian, Harold ("Pete") Godwin, celebrating the advent in Princeton



THE FAMOUS CLASS OF '79, PRINCETON IN SEPTEMBER, 1874, WHEN IT ENTERED COLLEGE

New Jersey; Judge Robert R. Henderson of Maryland are only typical members of a class of unusual mental capacity. Among such men, Wilson from the start ranked high. Not as a student perhaps. He was

Not as a student perhaps. He was never a bright particular star in examinations. Princeton graduated as "honor men" such students as had maintained throughout their four years' course an average of 90 per cent. No less than fortytwo out of the 122 graduates of '79 were "honor men." Wilson barely got in of the members of the class that graduated in '79, declares that on arrival "Tommy Wilson rushed to the library and took out Kant's 'Critique of Pure Reason.'"

To the library Tommy Wilson unquestionably did rush. But not to read of pure reason; if ever there were a student who demanded facts, concrete subjects, applied reason, it was this same Wilson, even in his early college days.

The truth is that, prowling in the alcoves of the Chancellor Green Library — new then — one day early in the term, the

WOODROW WILSON - A BIOGRAPHY

boy stopped at the head of the south stairs, where the bound magazines were kept, and his hand fell upon a file of the Gentleman's Magazine, that ancient and respectable repository of English literature which Dr. Samuel Johnson had helped to start, away back in the middle of the eighteenth century, with his reports of Parliamentary debates. When Johnson lay on his deathbed, refusing to take "inebriating substance" and having the church service read to him daily, he declared that his only compunction was those Parliamentary unworthy successor of Edward Cave) feeling round for an attractive feature, hit upon the idea of resuming the Parliamentary reports. Accordingly, there began in the number for January, 1874, a series of articles entitled "Men and Manner in Parliament" by "The Member for the Chiltern Hundreds" — the signature being an allusion to a Parliamentary practice which need not be explained to those familiar with English affairs. The author was introduced by the editor "with particular pride and satisfaction."



THE CLASS OF '79, AS IT GRADUATED

WILSON IS SHOWN SEATED THE SIXTH FROM THE LEFT IN THE BOTTOM ROW WITH HIS HAT IN HIS HAND

reports. For, of course, they were "fakes" ingeniously composed with the aid of William Guthrie, a Scotsman, who had a way of getting into the House. Nevertheless the eavesdropper's meagre recollections amplified into lengthy speeches full of sonorous generalities in the true Johnsonian style (the redactor taking mighty good care "that the Whig dogs should get the worst of it"), lay at the foundation of the prosperity of the Gentleman's Magazine.

Now it happened that in the '70's last, the editor of the day (himself not an "He is, I think, a not altogether unworthy successor, after a long interval, of one who gave to the readers of this periodical the at first unprivileged and now historical narratives of the proceedings of Parliament some hundred and thirty years ago."

Thomas Woodrow Wilson happened to pick up this volume of the Gentleman's Magazine and to turn to the pages occupied by "Men and Manner in Parliament" — and from that moment his life-plan was fixed.

It was an era of brilliant Parliamentary history. There were giants in those days:

THE WORLD'S WORK



SIR HENRY W. LUCY WHOSE "PARLIAMENTARY MEN AND MANNER" IN THE "GENTLEMAN'S MAGAZINE" DID AS MUCH AS ANY OTHER CIRCUMSTANCE TO MAKE PUBLIC LIFE THE PURPOSE OF WILSON'S EXISTENCE

John Bright, Disræli, Gladstone, Earl Grenville, Vernon Harcourt - the per-sonnel of the House of Commons had never been more picturesque, the atmosphere more electrical. The "Member for the Chiltern Hundreds," in intimate daily familiarity with the Parliamentary scene and its actors, wrote in a style of delicious charm - the leisurely style of good-humored banter and elegant trifling, his chatter nevertheless affording withal a picture of unsurpassable vividness, vivacity, and verity. He made to live before the eye the figure of Bright, coming into the House with his chiselled and polished witticisms in his pocket, ready for setting in the framework of a speech; of Gladstone, a marvel of verbal resourcefulness, bewildering when (as usual) he wished to bewilder, clarifying and convincing when the time for clear statement had come; of Disraeli, with his poisoned sentences spoken to the accompaniment of bodily jerks (supposed to be gestures) "graceful as the waddling of a duck across a stubble field." He drew unforgetable pictures of Mr. Lowe, Sir James Elphinston, "the bo'sun," Mr. Scoonfield, with his anecdotes — of scores of others, their voices, attitudes, their very collars. Safe behind his anonymity, there was no personality, no measure, no method upon which "the Member for the Chiltern Hundreds" hesitated to turn his keen and discerning eye.

It will be news to Mr. Wilson that the *Gentleman's Magazine* contributor was Henry W. Lucy, who later created for Punch the character of "Toby., M. P." and was knighted by King Edward. It should be said, however, that this inimitable Parliamentary reporter has never since quite equalled his early performance as the anonymous successor of Doctor Johnson.

Nothing could have better served to awaken in a young reader a sense of the picturesqueness and dramatic interest of politics, and Mr. Wilson has said to the writer of this biography that no one circumstance did more to make public life the purpose of his existence, nor more to determine the first cast of his political ideas. The young man turned back to



WOODROW WILSON AS A PRINCETON UNDERGRADUATE — A FAIR STU-DENT, STANDING 41 IN A CLASS OF 122, MAN-AGING EDITOR OF THE COLLEGE PAPER, A LEADER IN UNDERGRADUATE ACTIVITIES

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the first volume of the Gentleman's Magarine. Then, going to other sources, he took up in earnest the study of English political history. He became saturated with the spirit of the life and practices of the British Parliament; the excitements of political life enchanted him; the methods of high debate impressed themselves upon him, and, of course, the history of England for many years past became as familiar to him as that of his own country.

The Lucy articles could not fail to reveal

merits of open Parliamentary and private committee government — became a theme around which Wilson's mind continued to revolve for many years — as we shall see.

The characteristic thing about Wilson's undergraduate days at Princeton was that his work was done in practical independence of the ordinary college routine of instruction — at which even in those days he was sometimes heard to rail. His mind had now settled definitely upon a public career — the impulse he had re-



THE PRINCETON FACULTY DURING WILSON'S TIME IT CONSISTED OF TWENTY-SEVEN PROFESSORS AND INSTRUCTORS, SEVEN OF WHOM WERE PRESBY-TERIAN MINISTERS, OF WHOM PERHAPS THE BEST KNOWN WERE PRESIDENT MC COSH, CHARLES A. YOUNG, THE ASTRONOMER, AND ARNOLD GUYOT, THE GEOLOGIST

that the business of the British Empire was done in public by men who, through their talents, had risen to leadership which they had to maintain in daily tournaments before the whole world. Wilson was almost immediately led to contrast the British system of government with that of America, his conclusion being that the dramatic and swiftly responsive English system was infinitely the better.

This subject — the methods of democratic government — the comparative ceived from the Gentleman's Magazine had been decisive. His purpose in Princeton was henceforth the clear and single one of preparing himself for public life. Always he was reading, thinking, and writing about government. He was in no sense a "dig," and seemed to have no particular ambition in the college studies, but he devoted every energy to the furnishing and the training of his mind as an authority on government, the history of government, and leadership in public

THE WORLD'S WORK



WHIG HALL

THE OLD DEBATING SOCIETY (ITS CONSTITUTION WAS WRITTEN BY JAMES MADISON) IN WHICH WILSON PLAYED AN ACTIVE PART. HE WAS NOT ON ITS DE-BATING TEAM FOR THE CHIEF PRIZE, HOWEVER, BECAUSE HE REFUSED TO ARGUE FOR PROTECTION AGAINST FREE TRADE

life. He began to practice the elective system ten years before Princeton did. He had an eye keen for what he needed, and to its pursuit he gave all his energies. There was nothing casual nor accidental in his work. His study was bent on government, the history of various attempts in it, and the theory of it, and the lives of political leaders. To this he added assiduous practice in writing and extemporaneous speaking: the seeking for skill in expression and readiness in debate. He followed this course from the very start and kept it up until the day he graduated. His most intimate classmate, Robert Bridges, says of him that his college career was remarkable for the "confident selection" of his work, and his "easy indifference" to all subjects not directly in line with his purpose. His business in college apparently was to train his mind to do what he wanted it to do — and what he wanted it to do he knew. He had already made himself proficient in stenography, finding it of great value in making digests of what he read and quotations which would otherwise have occupied him long.

Princeton was not then remarkable in the teaching of English; the head of the English Department, Professor Murray, was himself a clear writer and speaker, but without grace of style and quite without ability to teach English. But the men trained themselves, in literary societies. The body of the students was divided into two "Halls," so-called secret societies, but really debating clubs the American Whig Society and the Cliosophic Society. Wilson belonged to Whig Hall, an organization whose constitution had been written by James Madison.

Here the young man was in his glory. He entered eagerly into its traditions and became almost immediately one of its leading spirits. To reading and writing day and night upon his favorite themes he began to add practice in elocution. One of his classmates troubled with a weak



THE CHANCELLOR GREEN LIBRARY WHERE WILSON SPENT MUCH OF HIS TIME READING ABOUT GOVERNMENT OUTSIDE OF THE ORDINARY COLLEGE ROUTINE. HE BEGAN THE PRACTICE OF THE ELECTIVE SYSTEM LONG BEFORE THE COLLEGE ITSELF DID

WOODROW WILSON - A BIOGRAPHY

throat, who was sent down to Potter's woods to practice exercises, often saw Wilson in another part of the woods declaiming from a volume of Burke. On vacations he was known to spend a good deal of time reading aloud and declaiming in his father's church at Wilmington. Another debating society organized by Wilson himself, called the Liberal Debating Club, was fashioned after the British Parliament, a group of the members representing the Government, and being obliged to mainBurke, Brougham, and Bagehot were his great favorites — Burke first of all. From Brougham it may be conjectured he acquired his taste for a finished peroration — though the fancy never led him into the extravagances of the Irish orator, who one day ended a speech with an ecstatic prayer, for which he fell on his knees a posture from which his friends dragged him in an unseemly struggle, attributing his collapse to over-indulgence in the port with which he was accustomed to prime



WITHERSPOON HALL WHERE WILSON ROOMED IN PRINCETON, FINISHED WHILE HE WAS IN COLLEGE

tain the confidence of the Chamber or go out of power.

Wilson does not appear as a great prizewinner. His record does not compare with that of Elsing, Bridges, or Halsey. Elsing was the first freshman speaker, the first sophomore orator, the first junior orator and winner of the junior debate. However, Wilson did score as second sophomore orator in the Whig Hall contest and was one of the literary men of the ciass, an oration on Cobden and an essay on Lord Chatham (the younger Pitt,) being especially recorded. Chatham, himself. Macauley held the student's attention for a while, but he soon became critical of the historian's overloaded style.

Connected with the two big prizes of the college are two stories which throw light upon Wilson's character as a student. The English Literary Prize of \$125 his classmates thought that Wilson might easily win; but when he learned that to compete meant to spend time studying Ben Jonson and two plays of Shakespeare, he refused to go into it, saying he had no time to spare from the reading that interested him.

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The other big prize, that of the Lynde Debate, had been founded the year of Wilson's entrance to college, and he had undoubtedly looked forward to winning it, throughout his course. The Lynde was an extemporaneous discussion participated in by three representatives from each of the two Halls. The Halls' representatives were thus chosen: a subject was proposed by a committee and candidates were required to argue on either side as was determined by lot. By universal consent Wilson was now the star debater became Whig Hall's representative — and lost to "Wood" Halsey, Clio's man who attributes his success to the fact that an opponent who would have vanquished him was over-sensitive.

It will not be supposed that life was all work even for this rather serious-minded youth.

Princeton was famous for the pranks of its students. On one occasion, they had taken a donkey to the cupola of Nassau Hall. Every class considered itself disgraced unless it had made way with



OLD NASSAU

BUILT BEFORE THE REVOLUTION, NOW, AS IN WILSON'S TIME, THE SENTIMENTAL CENTRE OF PRINCETON

of the Whig Society. He was quite in a class by himself, and there was no doubt in anybody's mind that he would represent the Hall and win the prize. The subject for the preliminary debate in Whig Hall was "Free-Trade versus Protection." Wilson put his hand into the hat and drew out a slip which required him to argue in favor of "Protection." He tore up the slip and refused to debate. He was a convinced and passionate free-trader, and nothing under Heaven, he swore, would induce him to advance arguments in which he did not believe. "Bob" Bridges

the clapper of the college bell. There was a cane-rush between freshmen and sophomores. The '78 class wore the mortarboard; the '79's did not. Wilson ridiculed '78's head-gear.

Wilson lived first at the house of Mrs. Wright. One of his classmates, "Bob" McCarter, who also lived at Mrs. Wright's, tells of a certain evening when the two were engaged in Wilson's study in a quiet game of euchre, a forbidden pastime in those days. On the table, as it happened, lay a Bible. A knock was heard at the door; McCarter swiftly

swept the cards out of sight under the table and went to the door. Before he opened it, he turned his head for a moment, the thought flashing over him that the conscientious Wilson might have put the cards back in plain view on the table, but what he saw was — Wilson reading the Bible.

It was the time of the great popularity of "Pinafore" and the strains of Bob L'p Serenely, My Little Buttercup, and W bat Never? were all the go. Doctor Greene of the Princeton Seminary possessed a deep, solemn voice. One day in chapel he gave out unctuously the hymn containing the well-known stanza:

That soul though all hell should endeavor to shake

I'll never, no never, no never forsake!

But the effect was somewhat spoiled by an irreverent voice in the rear of the chapel: "What! never?"

Fraternities were not permitted at Princeton, but the college had plenty of organizations of every possible variety and description — "Cyclops," "The Potato Bugs," "The Princeton Gas Company." Wilson belonged to none beside the "Whig," his little debating circle, and an eating club, whose members called themselves "The Alligators."

When Witherspoon Hall was finished, Wilson moved into it. His room was 7, West. At this time, it is recorded that he weighed 156 pounds and stood five feet eleven.

While without particular inclination or ability in athletics — and while back in '75-'79 athletics did not play the part in college life that it now plays — Woodrow Wilson was a leader in the encouragement of sports and in '78-'79 was president of the Athletic Committee, at another time of the Baseball Association.

His classmates and schoolmates concur in describing the college lad as a fellow of dignity, yet perfectly democratic. The picture is that of a youth of unusual mental and moral maturity — a well-poised fellow, never a roisterer, yet always full of life and interested in everything that was going on. He was popular — of that there can be no doubt. The young man had a certain charm of manner and sweetness of soul that forbade anybody's disliking him, although he was generally felt to be "a little above the crowd." He never belonged to a clique. He was a normal college boy, not a prig nor a "dig" nor a "grind," but a healthy, hearty, all-round chap, interested in everything that was going on, mingling with everybody though cherishing some particular friendships that have endured.

The years passed. Recitations were attended; examinations duly passed. The The. library yielded up its secrets to the mind; life in the little commonwealth of young men matured the character; intercourse with kindred spirits awakened generous enthusiasms. In '77 Tom Wilson went on the board of editors of the Princetonian, the college newspaper, then a bi-weekly. In '78 he became its managing editor. Under his management it continued about as before - not overwhelmingly interesting to the outsider, though here and there is discernible a little brightness scarcely to be found in earlier issues. Occasionally we discover a satirical note like this:

A literary meeting was held at Dr. McCosh's residence on the evening of the 13th. Mr. David Stewart read a paper on Ethics. The *discussion* was interesting.

A department headed "Here and There" was the *Princetonian's* best feature. Once in a while its writer broke into rhyme — not always so tragically sad as this:

I will work out a rhyme If I only have time," Said the man of "Here and There," So he tried for a while: Result — a loose pile Of his beautiful golden hair.

During his senior year, Wilson threw into the form of a closely reasoned essay the chief results of his thinking on the subject of the American contrasted with the British systems of government. This article he sent to what was regarded as the most serious magazine then published in America, and it was immediately accepted for publication. The author was twentytwo years old and an undergraduate.

In the files of the International

Review, issue of August, 1879, may be found an article entitled "Cabinet Government in the United States," signed by Thomas W. Wilson. It was an impeach-ment of government by "a legislature which is practically irresponsible," and a plea for a reformed method under which Congress should be again made responsible and swiftly responsive in some such way as is the British Parliament. The author's quarrel is with the practice of doing all the important work of Congress in secret committees. Secrecy, he says, is the atmosphere in which all corruption and "Congress should legislate evil flourishes. as if in the presence of the whole country, in open and free debate." (These words were written thirty-two years ago.) He attributes the growth of the committee system to the lack of leaders in Congress, and his plan for the creation of leaders is that of giving cabinet ministers a seat in Congress. He quotes Chief Justice Story to the effect that the heads of departments, even if they were not allowed to vote, might without danger be admitted to participate in Congressional debates. Wilson argues with much ingenuity that the method he urges is the ideal one for the insuring of a strong Congress and a strong cabinet, for securing the attention of the country (the possibilities of congressional debate and the fall of the cabinet being dramatic) and for the insurance of the greatest possible amount of publicity.

With this achievement of breaking into a high-class magazine, Woodrow Wilson closed his undergraduate days at Princeton. During his senior year, he had concluded that the best path to a public career lay through the law. In the autumn, therefore, he matriculated in the Law Department of the University of Virginia, that seat of liberal learning organized by Thomas Jefferson.

At Charlottesville his life was in many respects a repetition of that at Princeton. Here, too, he immediately took his place as a leader. The Law School men were in close fellowship with the undergraduates of "Virginia." Study was rather more necessary than at Princeton in those days; a man had to work to pass his examinations — these, by the way, were conducted on the "honor plan." Still, there was a gay set as well as a steady set, and Wilson had friends among both sets.

He joined the chapel choir and the Glee The latter circle of harmonious Club. spirits. directed by Duncan Emmett, now and for some years past a practising physician of New York City, made serenading excursions in the country 'round about, two or three times a week, winding up its pleasure-imparting career with a Grand Concert in the Town Hall. Wilson many a night stumbled along the rocky roads with his fellow glee-men to arrive at last under the balcony of some damsel and lift his fine tenor voice in "She sleeps, my lady sleeps," and "Speed away!" At the Grand Concert, which was given on the evening of the Final Ball, a brilliant audience that crowded the hall beheld the prize-orator and prize-writer step down to the footlights and render a touching tenor solo. Wilson is best remembered as a singer, however, by the thrilling effect with which he usually achieved the high note near the end of The Star Spangled Banner.'

At Charlottesville, as at Princeton, the student-body was divided into two literary and debating societies: the Washingtonian and the Jeffersonian—in the common tongue, "Wash" and "Jeff." The fortunes of each alternately waxed and waned; "Jeff" was the stronger in 1879, and Wilson joined it. His talents at once won recognition, but he found a competitor to respect in another "Jeff" man, William Cabell Bruce, of Charlotte County, Va., a young orator of extraordinary ability. He was later president of the Maryland Senate, and is now president of the Woodrow Wilson Association of Maryland.

The chief annual event at Charlottesville was a debating contest in the Jeffersonian Society, at which two gold medals were awarded, one for debating, the other for oratorical ability. In the contest in which Wilson and Bruce participated, the latter was given the debater's medal, while the orator's prize went to Wilson. The opinion of pretty nearly everybody, aside from the judges, was that the award should have been reversed. Bruce was ornate in style; Wilson simple,

direct and logical. The prize "orator" could scarcely be prevailed upon by his friends to accept an honor which he conceived so injudiciously bestowed.

Wilson did a good deal of writing while at Charlottesville, some of it receiving publication in the University Magazine, and some in The Nation. From the road in front of Dawson's Row, passersby would see him sitting at the window darkly engaged with an ink-bottle, out of which he had conjured, before a year was up, the Writer's Prize.

The law professors of the University of Virginia were Mr. Southall, who held the chair of International and Common Law — an easy-going and much-beloved man; and Dr. John B. Minor — who taught everything else in the course, and *was*, in fact, the College of Law.

Dr. Minor probably influenced Wilson more than did any other teacher he ever had. He was indeed an able and forceful man, a really great teacher, who grounded his pupils, beyond all possibility of ever getting adrift, in the broad principles of law. He employed in class a text-book which he had himself written or rather revised; for it was frankly based on Blackstone as that legal philosopher's teaching had application in the United States and especially in the state of Virginia. Dr. Minor was a man of impressive presence and fine face, with an aristocratic nose, at the extreme tip of which he wore *pince-ne*?, through which he glanced at his roll-sheet. He used the Socratic method, with more than Socratic sternness. He catechised and he grilled, but with such effectiveness that, though the victim writhed, the class meanwhile mentally groaning in sympathy Wilson learned never to forget the point to which the professor led him. Wilson's seat was in the front row at the Professor's left hand. So popular, despite his severity, were Dr. Minor's courses, that it was a saying at Charlottesville that, if Minorwere to announce an "exam at midnight, a man had better be on hand at eleven o'clock to be sure of a seat.

As a young man, Wilson suffered much from indigestion — an ill which later he entirely outgrew. Just before Christmas, 1880, he found himself so unwell that he left Charlottesville. The next year he spent at home in Wilmington, N. C., nursing his health and reading.

In May, 1882, Woodrow Wilson went to Atlanta, to enter on the practice of law. Atlanta was chosen for this experiment simply because it was the most rapidly growing city of the South. The young man knew nobody there. He went to live at the boarding-house of Mrs. Boylston, born Drayton, and a member of that old South Carolina family, on Peachtree Street. Here he met another young man, like himself a stranger in the city, whither he too had come to practice law — Edward Ireland Renick. The two agreed on a partnership; on mutual inquiry, Renick proved to be slightly the older, so that the shingle was lettered "Renick & Wilson." It was hung out of the window of a room on the second floor, facing the side street, of the building 48 Marietta Street.

Atlanta litigants did not rush *en masse* to 48 Marietta Street. In fact, they never came. The brilliant legal victories for which, no doubt, Messrs. Renick and Wilson were competent were never won. Atlanta seemed to prefer lawyers whom it had known.

Wilson's sole idea had been to use the law as a stepping stone to a political career; most of the public men of the South had come from the ranks of the law. In eighteen months in Atlanta he learned that it was impossible for a man without private means to support himself long enough in law to get into public life; impossible, certainly, to establish a practice without giving up all idea of study and writing not strictly connected with the The law was a jealous misprofession. tress. He had begun writing a book on Congressional Government, and he found the work of its composition full of joy. With joy he found he could not contemplate years of effort to further the interests of clients under the capricious and illogical statutes of Georgia, interpreted by a Supreme Court whom he could not then look up to as masters in the law.

But the Atlanta experiment was not without its great good fortune:

During the summer of 1883 Mr. Wilson found time to make what turned out to be a momentous visit. His old playmate and cousin, Jessie Woodrow Bones, with whom he had played Indian on the Sand Hills near Augusta, was now living in Rome, Ga. Mr. Bones had started a branch of his business at Rome, and, finding the Georgia town the prettier and more agreeable place, had moved his family there. To Rome had come also another family with whom the Wilsons had been intimate in Augusta — the Axsons. The Axsons were a Georgia low-lands family; the Rev. S. Edward Axson's father was a distinguished clergyman in Savannah, and his wife's father, the Rev. Nathan Hoyt, was long pastor of the Presbyterian Church at Athens, Ga.

The calls upon his time not being entirely occupying, as has been hinted, young Wilson went to Rome to see his cousin and stayed to see more of Miss Ellen Louise Axson. The meeting was on the piazza of the Bones home in East Rome. To be accurate, it was not quite the couple's first meeting: he had been a passionate admirer of the lady when he was a boy of seven, and she was a baby. The sentiment of those days, beyond the recollection of either, revived. He took her home that her home that evening - she lived in Rome across the river. She must have been captivating; for, as he came back across the bridge, he clenched his hand and took a silent oath that Ellen Louise Axson should one day be his wife.

Which also in due time came to pass.

They had seen each other eleven times before he had persuaded her to say "Yes." There was no idea of an immediate marriage. Already, perceiving that the practice of law was not the path for him, he had settled upon the plan of going to Johns Hopkins University to spend two or three years more studying the science of government.

The partnership of Renick & Wilson was dissolved. The young man to whom the people of Atlanta gave so little encouragement, but who had won what made him inestimably happier than anything else Georgia could have given him, went north in September. About the same time Miss Axson too went to New York to develop her already recognized talents in painting, as a member of the Art Students' League.

The next two years of Woodrow Wilson's life were spent at Johns Hopkins University as a student of history and political economy. The professors who mainly directed his studies were Doctors Herbert B. Adams, historian; and Richard T. Ely (now of the University of Wisconsin), economist. The chief social life of the University (which was a place of graduate study chiefly and is without dormitories or "college life") was in the weekly seminars, in which perhaps thirty men gathered to read and discuss papers under the direction of a professor.

Here Wilson was one of an unusually interesting group, which included Albert Shaw and E. R. L. Gould, John Franklin Jameson, the historian, Arthur Yager, now President of Georgetown College, Ky., and Thomas Dixon, who writes novels. (Dixon was not long at Johns Hopkins). Prof. Ely was just back from Europe where he had been studying socialism and had fallen under the influence of certain German "socialists of the chair." He gave a course on the history of French and German socialism.

The advantages enjoyed at Johns Hopkins by Wilson lay, however, not so much in the hearing of lectures as in the opportunity of making researches under, and working with, Ely and Adams and his fellow students. Here he got a valuable impulse in the direction of the careful and exact ascertaining of facts. Though always priding himself on dealing with actualities, Wilson was never a grubber after facts — and indeed never became one, as Jameson, for instance, But he undoubtedly did get here a did. training that balanced the natural tendency of his mind to work from within outward; and saved him from the consequences which might have followed the ease of expression he had attained.

He remained two years, the second year as holder of the Historical Fellowship. The time was brightened by occasional visits to New York, and his fiancée; and to Philadelphia, where lived an uncle of hers whom she sometimes visited.

Early in 1885 was completed and published — the result of the suggestion made by the perusal of the Gentleman's Maga*zine* articles ten years before, and of constant thought and study ever since a book, "Congressional Government. A Study of Government by Committee, by Woodrow Wilson." It was the first account of the actual working of the Constitution of the United States; an inspection of our government, not as it is theoretically constituted, but as it actually works.

The book met with instant success. A serious work seldom makes a sensation, and that word would be too strong to apply to the impression produced by "Congressional Government" but it is quite true that it received an enthusiastic reception at the hands of all interested in public matters. Of its merits it is enough to say that Mr. James Bryce, in the preface to "The American Commonwealth" acknowledged his obligation to Woodrow Wilson.

It was a great moment in the life of the young man — indeed a great moment for two young persons. Success like this meant that life was at last to begin. On the heels of the fame won by "Congressional Government" came invitations to several college chairs. There was more work still to be done for a Ph.D. But the Johns Hopkins faculty was to accept the book as a doctor's thesis, and the author accepted one of the calls — that from Bryn Mawr, which wanted him to come as associate in History and Political Economy.

Woodrow Wilson and Ellen Louise Axson were married at her grandfather's house in Savannah, on June 24, 1885. In the autumn they came to the pretty Welshnamed village on the "Main Line" near Philadelphia, and a new chapter of life began.

THE FARMERS ON FARM LIFE

THE OPINIONS OF THE MEN ON THE LAND IN MISSOURI

BY

W. L. NELSON

(ASSISTANT SECRETARY TO THE MISSOURI STATE BOARD OF AGRICULTURE)

T IS extremely difficult to get a true insight into country conditions. Like a great peak in the foreground shutting out from view the real picture beyond, some one fact may stand forth so prominently in the investigator's mind as to hide all else.

Sometimes we are given a dark, sordid and distorted description of the country. The days are long, the work monotonous, conveniences few; there is much drudgery and discontent, with but little cheer and comfort. But now we hear more of the farm home with up-to-date water, light, and heating systems — modern in every respect; of labor-saving devices that have done away with drudgery and most of the ordinary work; of travel from farm to town by automobile, and of life, made up mostly of leisure. Both representations are, of course, wrong. They represent exceptions rather than rules.

One mistake often made by the student of rural life is that of considering country people as apart from and differing from all others. Another error is in thinking of farmer folks not so much as individuals, but as a class lt is true that distinctions based on wealth are not so marked among country people as among the dwellers in the cities; for, in the main, the country makes neither millionaires nor mendicants — just men.

But most of the literature about the country has been written by city people; and it is more interesting to know what the farmer himself thinks of farm-life. In Missouri an investigation was recently made which took somewhat the form of a farmer folks' forum. A list of questions was sent to some 500 farmers. The replies cover every county in the state, a state growing both corn and cotton, feeding great numbers of hogs and cattle on its 1,000-acre prairie farms, with dairies in the Ozark uplands where there were formerly free ranges, and intensive farming in its reclaimed lowlands, richer than the valley of the Nile.

How does the Missouri farmer see himself? Is he optimist or pessimist? Is he mastering his business or is he "loafing on the job?" What is the secret of the state's decrease in rural population during the last decade?

It is very gratifying to note that the answers received are not the answers of disgruntled men or chronic fault-finders, but of thoughtful, intelligent men who see many remedies within their own reach. More is said of the need of crop rotation, soil conservation, better seed and well-bred stock than of trusts, combines, and monopolies. There is convincing proof of the passing of Populism, meaning by this a personal philosophy, not a political party. Ranting has given place to reason; the taller, to the thinker; the doubter, to the doer.

There is nothing to indicate that many Missourians have left the farm because of a failure to make money. Abundant crops have been garnered. Still the census shows that many have left the farm — left it despite the "lure of the land" and the "call of the country," of which many have spoken and written so eloquently. Why?

In reply to the question, "What, in your opinion, is the greatest need of the farmer of to-day, or the greatest problem with which he must contend?" One hundred and eleven out of 440 Missouri farmers answered, "Hired help." Ask the average man of family who has left the farm why he did so, and the substance of his reply is almost sure to be that it was because of the scarcity of help. Question him more closely and the probability is that he will have something to say about the "women folks" and how hard it was to keep help in the house. When you have got these replies you are on bedrock. You are at the root of the matter.

There is no use talking religion to a

starving man; for what he wants is soup, not salvation. Nor is it worth while wasting words telling a worn-out country woman, without help in the house, of an organization for the promotion of culture. Her need is not so much for a club as for a cook. Given the cook, she will no doubt look more favorably upon culture, for literature has ever drawn an inspiration from the land.

With the exception of the boys and girls, who may have been attracted to the city by social or business prospects, or who have seen their parents "wearing their lives out at work," as it seemed to them, most people who leave the farms and go to town do so not so much from choice as from what seems to them at least a necessity. They may wish for better schools, churches, and roads; but, not for these things alone, important as they are, do large numbers of farmers sell their old homes, leave tried and true friends and neighbors and go to Most of them go only when they town. have made up their minds that they must. When the time comes when "the girls" are all married and gone, when "mother" no longer has the strength of her younger days, and when "father" is unable to look after the work in the fields - when these days come and help can no longer be had in the house or on the farm — the old Then the turn home is sold or rented. is toward town - to town, where there will be "less work for the women." And how often does this seem tragedy. Af**ter** years of toil and planning the old folks leave the house where they have seen much pleasure and some sorrow, the house which has come to seem almost a part of themselves.

That this scarcity of labor is a condition and not a theory is shown by replies to the following question submitted to 500 women whose homes are in rural Missouri: "What one change or improvement about the farmhouse would, in your opinion, be of the greatest benefit to the housewife? In other words, what one would you rather have?"

More than 53 per cent. gave it as their opinion that the greatest need is some system of running water in the house. The country housewife sees in a modern water system less need of hired help and a greater probability of getting help if there be the need of it. Servants, like housewives, are attracted to the town house, provided with running water and other modern conveniences.

It is the belief of 95 per cent. of the Missouri women already referred to that it is now harder to get help in the house than it was ten years ago, despite the increase in wages of 46 per cent. Wages for farm hands show an advance of 41 per cent. in the last ten years, yet 88 per cent. of the farmers say that it is harder to get help than it was at the beginning of the last decade.

Interesting as these figures are, they are less convincing than the letters from which they are taken. These letters constitute a kind of confidential interview concerning country life conditions. They give more than facts. Some give secrets — stories of heart yearnings and dreams for the morrow. They prove that the farmer has problems, and more, that he is studying to master them, just as the pioneer mastered the problems of the past.

Comforts, rather than luxuries, go with the land. In Missouri less than one-andone-half per cent. of the farmers own automobiles.

The "modern" home is still rare. According to reports made to the Missouri State Board of Agriculture, less than two per cent. of the farm homes are provided with water systems: less than 3 per cent. have furnace or other up-to-date heating systems; and less than 4 per cent. have gas or other modern lighting systems; and Missouri farm homes are believed to be far above the average throughout the country. As these and other improvements come to lighten the work of the housewife, and as labor-saving, time-saving, and money-saving machinery is more generally used, there will be less talk of moving to town. Then families will retire to the farms instead of from them. Despite the unfilled demand for hired help both in the field and in the house, the country is to-day, more than ever before, a good place to live — but not as good as it is going to be. With rural mail service and country telephones here, and with better roads, a necessary aid in the revival of the country church and the real rural school, the future of country life seems full of hope and promise.

We are," in the language of the shall teach Roosevelt, school in the country, which shall teach the children as much outdoors as indoors, and perhaps more, so that they will prepare for country life and not mainly for life in town." Such a school lets the boy into the secret of the soil and impresses him with the fact that it is "not a grave where death and quiet reign, but rather a birthplace where the cycles of life begin anew to run their course over and over again." This new education will not do away with work, but it will enable the country lad to see more than long and countless steps in the plowing, more than the mere dropping and covering of seed in the planting.

The new country church, the church of to-morrow, will be the social as well as the religious centre of the community. The pastor will be more than preacher. He will be a leader, living not in the city but in the country. His home will be a rural home, and he will love the land. While admonishing men to save their souls, he will also seek to impress upon them the importance of saving the soil. He will help them appreciate the beauties of the world about them — their own and God's.

Near this country church will be a hall, or if there is no hall the doors of the house of holy worship will not be locked six days in the week. Congregational conferences and meetings for the upbuilding, beautifying, and betterment of the community will be held, and because of these meetings there will be a larger and a fuller farm life.

So will the all-embracing problem of country life be solved by those in sympathy with it — largely by those who derive their living direct from the land. Aiding these will be the agricultural teacher, not the agitator; the practical professor, not the professional politician. As the work progresses the country will more and more become a good place to live but a poor place to leave. Then shall men turn from factory to farm.

NEARLY EIGHTY MILLION ACRES AWAITING FARMERS

THE SWAMP-LANDS OF THE UNITED STATES AND THEIR POSSIBILITIES - THE COST OF RECLAIMING THEM AND HOW TO DO IT

BY

M. O. LEIGHTON

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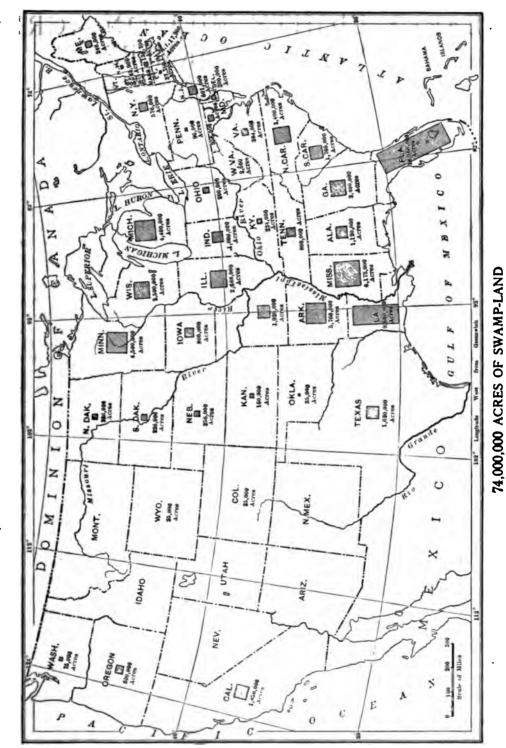
E MAY liken the American people to the man who, having sought in vain over all the earth for a four-leaf clover,

returned home to find that prize in his own dooryard. In his world-wide search for wealth the American has failed to appraise great riches that lie at his feet. Over these riches millions of our people have traveled every year, many of them with money in their hands to invest or to squander in things in other countries. These riches may be found in almost every state in the Union. They consist of land, the most fertile that we have, covered by a disguise of water and rank vegetation, and protected by mosquitoes, malaria, discomfort, and ill-repute. A few foresighted men have torn away the mask along the edges, have exploited the wealth that lies beneath and have greatly profited thereby. For the large part, however, the swamp and overflowed lands of the country are as devoid of improvement as in the days of John Smith and Myles Standish.

It is not hard to understand why the swamp lands should, with here and there a limited exception, contain the best agricultural soil of the continent. They are the catch-basins of all the silt, organic débris, fine earth, and every other cropspur that is swept from the lands above them. Vegetation grows upon them profusely. Year after year the leaves are shed, and generation upon generation of plant life rises and falls. All are intermingled and rotted until each part loses its identity, and we have a homogeneous mass of soil, completely fitted to produce agricultural wealth. Consider for a moment our greatest swamp land — the Mississippi Delta. The land in that region is the result of collecting the choicest materials of a continent, brought down by the great river from all parts of that enormous basin which it drains. Most farmers are proud to own a thoroughbred horse. Why should there not be an equal pride in thoroughbred lands?

Our present swamp-land area exceeds 74.500,000 acres. To appreciate how much land this is, compare with it the area of the United Kingdom, Italy, Japan, France, Germany, or any other princi-pality. Suppose such an area of the world's best land were suddenly acquired as an outlying possession - how eager would be the race to develop and exploit its riches! If we measure up all the Philippine Islands, including those of isolated rock and of worthless cover, we shall find only 73,000,000 acres. Wise statesmen and foresighted business men have regarded those islands as worthy of development and defense. But a larger and better land has been left undeveloped within our borders. The accompanying map shows at a glance where this land lies. Whatever may be thought of its value, it will surely be admitted that it is not a local issue.

These fertile lands have not remained in disguise because swamp reclamation is a new and untried thing. The Dutch created a kingdom by diking off the ocean and draining the land. Professor Shaler wrote that the reclaimed marsh lands of England, Scotland, and Ireland aggregate one-fifth of the present area devoted to farming, and that one-twentieth of



AN AREA GREATER THAN THE PHILIPPINE ISLANDS, WHICH COULD BE MADE TO YIELD AN ANNUAL RETURN OF THREE BILLION DOLLARS

all the agricultural land of Europe was once too wet for cultivation. Great areas have been drained in the United States, but in comparison with the total reclaimable territory they constitute but a small proportion. In drainage we are several centuries behind the times.

Our swamp lands do not remain undeveloped because there are no people to occupy them. On the contrary, the demand for agricultural land is increasing. To secure new lands at a low price, our own people have been leaving this country at a rate somewhat faster than that at which the swamp lands could, under good administration, be drained for occupancy; for 285,000 have migrated to new lands in Canada during the last three years.

The very act of tearing away the mask from swamp lands also drives away dis-The story of the mosquito, of ease. malaria, and of yellow fever is too old to require repetition. But let it be said that drained swamp land furnishes as healthful a place of abode as the land that never required drainage.

To reclaim the swamp land two things are necessary: levee construction and interior drainage. Some wet lands do not require levees, but drainage is necessary in all cases. Levees are required where the lands are periodically covered with flood-water that overflows the banks of neighboring streams and does not all readily return to those streams after the floods have subsided, because the drainage of such lands is imperfect. Drainage canals are requred to remove the overflow water and also the water which falls on the land as rain or snow. The lower Mississippi Valley is an example of ex-tensive leveeing. The purpose is plain - it merely closes a door against a trespass. If the door be stout the object is accomplished. The drainage process is internal. We are always compelled to rid swamp lands of surplus water.

But this process of drainage is not so easy as it looks; witness the many failures of men who thought that they knew how. How large, how deep, how long, how close together, and on what slope ditches shall be built are engineering problems and they have their difficulties. The laws of nature also have to be carefully regarded. River channels are through long ages scoured out to carry a certain maximum quantity of water in a certain time. This is so because they are in the habit of receiving no more than that quantity. When occasionally they are burdened with more, they spill the surplus over their banks. Now in swamp lands the rivers are accustomed to receive their water slowly. If this were not the case, if the water that lies upon or in the earth ran quickly into the streams, then the land would not be swamp. But by drainage this condition of rapid run-off is accomplished. The difficulty is that a river into which drains discharge will have heavier and more frequent overflows because of this drainage and the lands below the drained area will suffer.

Suppose a considerable area of swamp land tributary to a certain river is drained. It may be too small to affect the river very much, but the good results of that drainage encourage other land owners to ditch their lands, and eventually an area large enough to affect the habits of the river will be drained. These people will probably en-large or straighten the river channel where it abuts on their land so that it will not overflow. The water runs off until it encounters the unimproved channel below where the lands are not drained. The owners of these lands object to the deluge. They are asked to join a drainage scheme whereby the whole neighborhood may profit. Some will; some won't. Litigations follow. Thus have arisen the drainage district laws of the states, under which an obstinate minority can be coerced by a progressive majority.

Follow the matter further. Suppose more and more land be drained, and overflow conditions grow worse below. Greater and more acrimonious squabbles arise. So serious has the situation become in Mississippi that there is every reason to believe that the law constituting the Tallahatchie Drainage District will be repealed at the next session of the legislature. In the meantime all progress is stopped by an injunction of the court. Suppose that the district squabbles

are all adjusted; what is to be done when

the trouble encounters a state line? Now the project has outgrown its state-made clothes and has become an interstate issue. This is not an improbable result. Our great swamps are interstate. The famous Okeefinokee Swamp in Georgia must be drained out through Florida. South Carolina can not reclaim the fertile bottoms along its Savannah River shore without either damaging the Georgia side or inducing Georgia to come into the scheme. Mississippi people cannot reclaim their portion of the Tombigbee basin lands without dumping the water down on Alabama. The whole Missis-sippi Delta will eventually represent one great unit drainage problem. Divide it up now as we may into districts, they must all be coördinated in the end. Parts of five separate states are involved. We have the beginnings of an actual case in the St. Francis basin of Missouri and Arkansas. The Missouri people have drained large areas — the Arkansas people have the surplus water to contend with.

For these reasons the national drainage advocates declare that the natural laws and necessities governing the drainage of swamps cannot be set aside because man has set up an artificial boundary which he is pleased to call a state line.

The greater number of drainage propositions that have been suggested have been conceived in too small a way. Our swamp lands will, for the most part, continue to be a curse until some authority with a broad horizon and long foresight shall attack the problem in a grown man's fashion.

Some of the broader aspects of swamp drainage have been briefly reviewed. Let us now descend to the individual. Forty acres of reclaimed swamp are ample to support a family, and this area, or less, will eventually be the farm unit in swamp count**rie**s. The desire of the farmer to possess all the land within sight of his roof will pass away. Nothing in all the realm of agricultural economics is more thoroughly settled than the principle of the small farm and intensive cultivation. A tract of 74,000,000 acres, divided into 40-acre farms, means 1.850,000 farms. If the average farmer's family has \$350 a year to spend, the total annual purchasing power of all these would be nearly \$650,000,000. Ask the merchants and manufacturers of the country how they would regard a new field of business aggregating even half this sum a year?

Swamp land that will not make a gross return of \$50 per acre annually is very poor. Seventy-four million acres at that rate will yield \$3,700,000,000. Reduce this figure one-half if you please, and what an addition we should still have to our annual wealth production! The very old economic principle holds here — that increased population with increased production means increased wealth, the benefits of which can not be confined to any one place or to any one class.

There are some drained lands worth \$1,000 per acre which, previous to drainage, were worth nothing. Such lands are, of course, favorably located with reference to market, and their value will increase enormously. Other tracts less favorably located and poorly served by transportation, have increased in value from a nominal figure up to \$75 an acre. Of course this value is preliminary and will grow.

On the other hand the cost of drainage varies from about \$2 to \$30 per acre with a general average of from \$6 to \$9. Any swamp project, properly served by transportation routes, will, if wisely developed and judiciously handled, return greater profits on a small initial outlay than any other conservative and legitimate line of business.

The difficulty is, of course, to convince the farmers of this. A special train was sent out a few weeks ago by the Illinois Central and the Yazoo and Mississippi Valley railroads, over the territory served by these roads in the states of Kentucky. Tennessee, Mississippi, Louisiana, and Arkansas. This train was operated for the purpose of informing the inhabitants of that portion of the country concerning the possibilities, methods, and results of drainage. Among the important points that were developed during this trip were the following:

First.— A very large percentage of the farmers and merchants in that swamp

and overflow country had not, previous to the trip of the Reclamation Special, had called to their attention the possibilities and problems and results of drainage.

Second.— Those who were informed were inclined to be skeptical concerning the practicability of drainage on a large scale.

Third.— In those portions in which drainage districts had been organized or proposed, peculiar ideas abounded concerning the proper price that should be charged for the drainage of lands.

Fourth.— There was a general lack of the "get together" spirit, without which no successful community of interest is possible, Many a man seemed to be actuated by the fear that his neighbor would profit more largely from drainage than he, and therefore there should be a scaling of charges to conform with prospective profits. All of these difficulties are the result of a lack of mature consideration of the drainage problem from the common as well as from the individual standpoint.

The men on the special pointed out that, compared with the cost of other works of improvement, the cost of drainage is, as a rule, ridiculously small. The average cost of irrigation in the West, performed by the United States, is about \$35 per acre. On one project the settlers were glad to pay \$93 per acre. Place this beside an average cost of from \$6 to \$9 per acre for drainage and it is clear that a man may acquire at least four acres of drainage for the cost of one acre of irrigation. Expenses of maintenance in drainage works are generally less than in irrigation works. Drained swamp soil is, except in certain unusual and important cases, more fertile and enduring than irrigated desert soil

Consider the enormous success of desert irrigation in connection with the foregoing statement, and the petty local quarrels which are obstructing drainage improvements appear wholly indefensible. It requires only the use of a little elementary arithmetic, combined with a small amount of observation, to show that on any of our fertile swamp lands like the Mississippi Delta, any farmer who cannot pay \$50 for drainage works and still make 100 per cent. profit on the investment is not a good farmer, not a good business man, and is an unfit person to own land of that character.

To return to a national point of view every citizen of the United States should read the Report on Immigration for 1910, published by the Department of the Interior in the Dominion of Canada, and especially that part written by Mr. W. J. White, Inspector of United States Agencies and press agent.

Mr. White is the official in charge of the nineteen offices established in the United States by the Canadian Government to encourage our citizens to move across the border. These offices extend from Biddeford, Me., to Spokane, Wash. They have sub-agencies through which the work is carried on in every part of the United States "where it is thought ad-visable for us to operate." Mr. White's report has the optimistic tone of a man who has been successful in his task. He points out the steady increase in American emigration, from 2,412 persons in 1897 to 103,798 in 1910. How many citizens know that for fourteen years the Canadian Government has been canvassing the United States for settlers? The agents encounter no dull seasons. They advertise and bring about personal inquiry and correspondence, and, according to Mr. White, "the former is never left without being fully attended to and the latter never allowed to cease until the correspondent is placed in possession of all the information that it is possible to give. 'Follow up' letters are largely used and we have found that sometimes, two or three years after the first letter is received, a follow-up letter has renewed the interest and there has been gained a То settler and his family for Canada." quote further from the report of Mr. White. "the value of the immigration from the United States can scarcely be given in figures, although if this were to be considered, I believe it would be largely in excess of the \$95,000,000 placed upon it by the Department. I have met many cases where the individual took with him as much as \$40,000 or \$50.000, and hundreds have gone to Canada whose bank account ran well into the thousands."

All this while we have lying idle more than 70,000,000 acres of land far superior in fertility to that in Canada. Furthermore, to quote again from Mr. White's report, "these men and their families have mostly been taken from the farmers of the Central and Western states. They come to lands that may be tilled similarly to the lands they have worked for years, and they go on a Canadian farm educated and graduated from a school, the teachings of which fit them in every way for their larger sphere of operations in Canada."

Will the reader please remember that Mr. White is not the agent of a land company, nor even of a railroad that is endeavoring to secure increased traffic; he is the official of a foreign government and evidently a very able and successful one. He is not "gathering in" our indigent, worthless, dependent people, but those "educated and graduated from a school, the teachings of which fit them in every way for their larger sphere of operations in Canada."

One can not forbear the thought, after reading Mr. White's report, that we as a nation will richly deserve our loss so long as we make no counter effort and so long as we persist in keeping our best land unavailable for our own people. Who can say that those who have gone to Canada would not have taken up our swamp lands had they been prepared for occupancy? It is probable that the most of them would, for the American farmer is nowadays looking for the best.

IOWA'S FARMERS THE RULING CLASS

FROM PIONEER TO WORLD CITIZEN — THE STORIES OF "TILE" JOHNSON AND THE RISE OF THE HOUSE OF "CHRIS"

BY

JAMES B. WEAVER JR.

ARM changes in lowa? Yes indeed, but where shall l begin, or within reasonable limits cease, for the change embraces at once the man, the methods, and the environment.

First as to the man.

It is well here not to be dogmatic, for indeed out of the old farm life comes so much of character, so much of elemental strength and fineness, as to put our age to the test to produce its equal. You ask for proof of this? Very well. I do not know what your recollections are, but it was my good fortune to encounter "Uncle Ky." Of course his name was Malachi and his was the voice that back in the late thirties guided the great oxdrawn prairie schooner from the woods of Ohio to the valley of the Des Moines. Two hundred acres came under his sway and there he abode sixty-eight years — a father, grandfather, and great-grandfather, running that mysterious gamut of experience which we term a human life. When, after his death, an abstract of title was procured on the home farm, it contained but one entry — United States of America to Malachi Vinson — never a deed or mortgage or tax sale or judgment.

This was the type of man and farm back of the present lowa. As for the man now, I shall not say that present farm conditions make him necessarily a better man, but that he is -- different. He is. like his age, less naïve --- more self-But, if this is true, he is more conscious. conscious also of his wide social relation. This is not from a higher moral equipment, but because he is less isolated - knows from reading and travel and a wider range of activity more about his world relation than did his more obscure predecessor. Again, his calling and labor are given extended place in newspaper, book, and magazine, as a result of which comes a keener sense of his vital function in that complicated mechanism called civiliza-

tion. I go a step farther and maintain that, as modern conditions — the telephone, rural free delivery, interurban railway, automobile and the like — tend to efface the earlier radical distinction between urban and country life, so they are making to-day of the farmer not a local but a national citizen, like his brother in the city. It was once inevitable, but it is now no longer possible, to isolate the farmer and limit his human interests. He is in the grasp of the same agencies as are molding our common life; and, while he differs from his predecessor, he is not essentially different from you and me. As Kipling says for Tommy Atkins:

> We ain't no thin red 'eroes, An' we ain't no blackguards too, But single men in barracks Most remarkable like you.

He knows what is going on in the world, and he feels about it as you feel. Hardly a farm within the state of lowa, but has its magazine and newspaper — not only the farming paper, but in increasing number the daily from Chicago or the nearby city. Out of Des Moines alone go every month more than two million copies of papers published directly for the farmers of lowa and adjacent states; and these papers are by no means limited to the discussion of pedigrees, cholera cures, and seed-corn specials, but deal broadly with all phases of our common American life — its problems and triumphs, political, social, and mechanical. Imagine any one trying to limit the message of a man like "Uncle" Henry Wallace, editor, philosopher, economist, Bible student, and farmer, solely to a discussion of the virtues of the latest style of separator or the hardy qualities of Hereford cattle! Thus the old isolation has vanished with the ox-yoke and double-shovel. Is it argued that this will mean the absorption of the farmer in the high complexity of our common life -- will tend to his commercialization? Rather does it mean that he is becoming a mixer and must and will have his equal place in the organized works of altruism that are a distinguishing mark of the new spirit abroad in the world or more correctly, of an old spirit more

ly diffused.

In proof that even the outlook of a country cross-roads boy may to-day have its ample swing, I give a bit of personal experience. We were collecting money for the sufferers in the Messina disaster. Many contributions came by mail. One morning, among other mail, I found a small, very cheap and plain envelope, much begrimed, and addressed in a scrawling, boyish hand. Opening the envelope, I took out two pieces of cardboard sewed together through and through and over and over with the greatest care, in that bungling manner characteristic of childhood. Tearing off one corner, 1 poured into my hand forty cents in change, three dimes and two nickels. Looking again into the envelope, I found a letter from the country written in pencil in the same boyish handwriting, which ran as follows:

DEAR SIR: Enclosed find forty cents for the Red Cross Society for the victims of the Italian earthquake and volcano. Sent by the knights of New Chivalry, a boy's band. (Signed) Dae Shaffer, Superintendent, Charles Jennings, Treas. Contributions: Charles Jennings 15 cents, Dae Shaffer 10 cents, Frank Ullery 10 cents, Frank Jennings 5 cents.

These country boys were as alive to the Messina disaster as were any in the cities.

Most of all may the farmer salute as worth all the pains of its birth, hinted at now for a full half century, the dawn of this day wherein the cumbrous mechanical forces of our civilization — the roaring train, the wireless tower, the network of the telephone, the Hoe press, the postman's cart, and the automobile — make of him no longer a thing unto himself, but an integral part of our common life, charged henceforth, he must understand, with his full share of its responsibilities, and heir to his full share of its joys.

In lowa the revolution has been radical and all for the better. First as to area handled: The early lowa farmer was wholly without facilities for reaching the active markets of the world; few or no railroads, mills far distant, no elevators, no near centres of dense population where products were in demand. The writer's grandfather drove his hogs on the hoof ninety miles to Alexandria, Mo., to market. Sixty to a hundred miles to mill

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was a common condition. In consequence, only a limited acreage was put in cultivation, to supply the immediate needs of the family. By the slow process of the ox-team, or at most, with two horses, the prairie sod was broken. Then came the problem of subduing it. This was accomplished in an indifferent manner by the old-fashioned harrow. The result bore no semblance to the working of the modern disc that, with its multiplicity of blades, pulverizes the sod, mixing it with the under-soil, and, when followed by the harrow, makes a perfect seed-bed. Again, only the higher knolls were chosen for cultivation because of better drainage. Thus the fields of even twenty years ago were so many islands scattered about among the sloughs, indifferently prepared and inadequately tilled. Increasing population and advancing values brought home to the farmer the inadequacy of this system. Then came the craze for drainage. This was accelerated by the coming to the state of thousands of Illinois farmers who had had experience with drainage, and who brought to their new homes a passion to Tiling achieve the same results there. became the dominant topic. The legislature took notice and provided the necessary laws for the establishment of drainage districts and the assessment of the land to be drained. The result has been startling. Immense areas have been drained in every county where there was much flat land. In some of the counties like Webster, Calhoun, Hamilton, Boone, and Kossuth, these projects, each involving an expenditure of from a few thousand to several hundred thousand dollars, number as high as a hundred and sixty to the county, extending in length from a half mile up to eight and ten miles, and in some counties to a score of miles. In Monona County alone one project cost more than \$700,000. As soon as tile or open ditch outlets are thus furnished, the farmers may be seen in all directions laying the laterals for the draining of their particular ponds. Then follows the breaking of the entire quarter or half section from fence to fence, regardless both of knoll and old-time pond. Curiously enough, this drainage movement has had

a direct bearing upon the problem of keeping the boys upon the farm. I have in mind one farmer who was inclined to be satisfied with "good enough" achieved under the old conditions. He told me that on one occasion his older son, after a half day's attempt at plowing corn in the muck upon the margin of a ten-acre pond situated in the centre of a forty-acre field, came to the table one noon hour with the startling announcement: "Father, that pond will be tiled or I quit the farm — either the slough goes or I go — take your choice." And the pond "went." Today that boy riding his gang plow, descends into the old pond basin that three years ago was the habitat of the muskrat, with the very satisfying consciousness that from its virgin soil, the product of untold centuries of accumulation of vegetable mould, shall come for each acre eighty to one hundred bushels of corn. You cannot censure the boy for his demand. Would that all farmer fathers were as wise.

To supply the enormous demand for tile, great factories have grown up at Mason City, Eldora, Lehigh, Fort Dodge, Boone, Des Moines, and a score of other places, and their output is hardly to be believed. From Mason City alone in 1910 were shipped more than 13,000 car-loads of tile for farm drainage, and this does not include what was hauled locally. From one village of but 900 population 4000 car-loads were sold in 1910, and the plants everywhere were in that year unable to supply the demand.

The pioneers in the matter of tiling now find great honor. Do you see coming down the road that shaggy-bearded, quietmannered farmer, gentle and slow of speech? That is "Tile Johnson" of Dayton Township, so called by his neighbors because he was a pioneer tiler. Seventysix was the year he came and bought that first eighty acres where the new home now stands. In the eighties he began tiling. The flood years came, prices were high and his crops excellent. Then he bought more land — then more tiling, and so on, repeating the process until now he owns and farms a thousand acres. Step into his farm house with me — thirty-six feet by fifty-six. There are all the modern conveniences, from hot water heat to the modern bathroom. Off to one side stands the cabin of '76. When I spoke slightingly of it he gently demurred — there was the proper sense of values, the old feeling for association, the new feeling for comfort. By his side about that great farm, works and plans the one son — stalwart, interested, and wholly free from visions of "the city." There, with the house filled with young nieces and nephews, this man proceeds upon the even tenor of his way after the old patriarchal fashion, an object lesson to the township.

The methods which produced Iowa's \$440,000,000 worth of soil products for 1910 include, with extended drainage, the application of the most modern type of farm machinery in every stage of the process — the gang plow, the twelve foot disc, the twenty foot harrow, the gasolene motor, the gas or steam tractor or the sixhorse team, the husking machine, the separator, the binder and header, the thresher, the manure spreader, and so on down the list. There is hardly a reminder of one of the ancient implements common thirty years ago. The census of 1910 shows \$95,000,000 invested in Iowa in farm machinery — an increase of 64 per The larger area that may be cent. handled by a single farmer with modern machinery has a natural and direct relation to the slight decrease in the number of farms, and has in lowa delayed that subdivision about which economists are so solicitous. It has also tended to limit the farmer's energies to the production of grain, hogs, and fat cattle. The state's garden, dairy, and poultry products, valued in 1910 at \$84,000,000, could be multiplied thrice over by a more intensive culture - to which the lack of labor is, however, at present the greatest deterrent. In the great stock staples, hogs, cattle, and horses, remarkable advancement has been made in numbers, quality, and value. The value of lowa's live stock in 1910 reached the enormous sum of \$358,000,000.

Among the most potent influences in securing better farming methods are the "good seed" movement; the State Fair; the corn, oats and dairy specials; the "short course" in agriculture, the work of Professor Holden and his associates in the institution at Ames. To treat of them adequately would require an article for each, as would also the problem of increased tenantry and of the "retired Again lowa has contributed farmer." probably more than any other state to the purchase of lands elsewhere, a perfectly natural result from her wealth and her pioneer traditions. This has affected the question of labor, which is troublesome here as elsewhere; but the improved farming methods everywhere in evidence are reflected both in the yield, the appearance of the farms, and the steadily advancing values.

In the farm environment also is great change. Does the occupant of the city flat excuse his purchase of an automobile by pleading the necessity of a spin to the country after supper for fresh air? The lowa farmer is not slow to take the hint. With him it is change of scene. Stand aside, for here they come every evening after supper down ten thousand highways "Bill" at the wheel, and by his side "Dad" and "Mother" and the remaining household. No delay for elaborate toilets, with shirts open at the throat, bared heads and sleeves rolled back, off they go twenty to thirty miles, to town and back, forgetting for two blissful hours in their careening joy-wagon the heat and fatigue of the day. There were 28,000 automobiles in lowa on July 1, 1911, the greater number owned by the farmer and villager. This is five to one as compared with New York state on the basis of population. Nor are they used only for pleasure. Some have adjustable bodies that being removed, permit some practical attachment useful to the farmer. At Audubon recently fat hogs were being taken to market in this aristocratic fashion. And why not, for was not that automobile itself converted hams and bacon, the sacrificed ancestors of those I saw in the crate?

Now this motor car business has had another interesting result. It is uniting the town and country in the demand for good highways. As long as the farmer drove his shaggy-footed Clyde to town through the mud he cared little. But

IOWA'S FARMERS



THE FIRST HOME OF "TILE" JOHNSON IN DAYTON TOWNSHIP HE INTRODUCED TILE DRAINAGE ON HIS 80 ACRE FARM IN 1876

now that he is buying motor cars he is helping to locate, develop, and advertise great intersecting highways by the thousand, over the state. The matter is thoroughly organized, and will never rest until substantial state aid is secured. It is surpassed by no single influence in uniting city and country. My own opinion is that tile drainage is indispensable to good country roads. There is not space here



THE HOME OF "TILE" JOHNSON IN 1911 WHEN HIS 80 ACRES HAD INCREASED TO 1000 AND WHEN THE METHOD HE INTRODUCED HAD BECOME SO UNIVERSAL THAT GREAT TILE FACTORIES HAVE GROWN UP AT MASON CITY, ELDORA, LEHIGH, FORT DODGE, BOONF, DES MOINES, AND A SCORE OF OTHER PLACES TO SUPPLY THE DEMAND. FROM MASON CITY ALONE 13,000 CARLOADS OF TILE WERE SHIPPED IN 1910

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to name all these highways, regularly routed, marked, and dragged. Among the more noted are:

1. The River-to-River Road from Davenport to Council Bluffs through Des Moines.

2. The Transcontinental Route from Clinton to Council Bluffs along the Northwestern.

The Hawkeye Highway from Dubuque to
 Sioux City through Waterloo.
 The Blue Grass Highway from Burlington and Muscatine to Council Bluffs through

Chariton and Osceola. 5. The Waubonsie Trail from Keokuk and Fort Madison to Nebraska City through Centerville, Mt. Ayr and Leon.

Good land rose to \$75, \$90, \$100, now to \$125 and \$150 and more in many localities. Do you ask, will it pay to farm at such prices? I can only say to you from long experience that the highest offers come from the German or Scandinavian farmer just across the fence who has made an unqualified success with his existing farm. So, there you are; figure it out. The interurban has also helped in the

work of unification. It is distinctly a decentralizer, small farms and truck gardens inevitably following the opening of



AT THE STATE FAIR

WHICH, TOGETHER WITH THE WORK OF THE "BETTER FARMING" TRAINS, THE GOOD SEI MOVEMENT, THE "SHORT COURSE" IN AGRICULTURE INAUGURATED BY PROFESSOR HOL-DEN AND HIS ASSOCIATES AT THE COLLEGE OF AMES, HELPED MAKE IOWA'S SOIL AND LIVE STOCK PRODUCTS REACH THE ENORMOUS TOTAL OF 798 MILLION DOLLARS IN 1910 THE GOOD SEED

Prior to 1890 Iowa farms were slow of sale. Then a few Illinois farmers discovered they could sell their home farms for \$200 per acre and buy as good or better land in Iowa at \$50 plus the cost of drainage. The migration began and opened the eyes of the lowa farmer. He asked himself, "Are we to repeat Illinois' values here?" The incomers were also passionate " tilers." That was another hint. Iowa suddenly awoke to the consciousness that she was in the very heart of the "sure crop' country — the only great corn belt upon the continent. The inevitable happened.

these roads. Likewise here are found some of the large farms owned and operated by the lawyer, the physician, the banker, that are a marked and growing feature in the development of the state. Such farms are found in every county and are usually highly cultivated and improved. The late Senator Dolliver had one such in Webster County, to which he was passionately devoted. Ex-Governor Larrabee owns and occupies another near Clermont. President Brown of the New York Central Railroad has a 400 acre stock farm near Clarinda; President Trewin of the State



WHERE LAND HAS RIVEN TO \$100, \$125, \$150 AN ACRE AND IN SOME LOCALITIES EVEN HIGHER; WHERE THE BOTTOMS ARE TILE DRAINED, AND THE FARMS CULTIVATED WITH IMPROVED MACHINERY OF WHICH THERE WAS 95 MILLION DOLLARS WORTH IN IOWA IN 1910

Board of Education some 700 acres near Independence; Hon. Geo. W. Seevers, General Counsel for the Minneapolis and St. Louis Railroad, a dairy farm near Oskaloosa; Hon. H. C. Taylor, a large stock farm in Davis County; Mr. J. F. Deems, General Superintendent of Motive Power of the New York Central Railroad, a beautiful farm, "Forestdale," in Des Moines County; and so on, every county having a number of such "estates" that add to the dignity of agriculture as a calling. In Sac County is the famous Adams farm, 6160 acres in one continuous tract, and near Odebolt the Cook farm of 3500 acres. These latter are of course highly commercialized enterprises that would take a chapter to themselves to fitly describe.

In line with all this, and to encourage the farmer's pride in his estate, the farming organizations secured the passage, the past winter, of an act whereby the owner may register his farm at the county seat by a name of his choosing which the state will protect from infringement — all of which tends to better improvements, better cultivation, and pride of ownership.

The first factors, still potent in relieving the old isolation, were the telephone and rural free delivery. They were the

pioneer influences that have made easier all that have followed. Practically the entire state is now covered, serving owner and tenant alike. In short, all these influences: trolley, automobile, rural mail, telephone, advanced values, drainage, etc., are changing the complexion of farm life and arousing in the farmer and notably also in the farmer's wife, the normal human pride for better results in farming and better appearances and facilities about the home. The old farmers' institutes are being supplemented here and there by the social club. I attended a meeting recently of the Cosmopolitan Club, an organization solely of farmers' families near Ames. There was a talk by the writer in no wise relating to farming matters, music and recitations by the young folks, ending with light refresh-ments; the entire company of farmers, their wives and children joining heartily in active interest in the whole programme. I was met at the train by a farmer with his automobile. It was as if the best spirit of the town had been carried off into the wholesome air of the country. There was no suggestion of the old isolation — a far cry indeed from the days of the sod cabin and the stage-coach.

But one must stop somewhere. Let



A FIRST PRIZE IOWA SHIRE MARE THE LIVE STOCK IN IOWA IS WORTH MORE THAN 350 MILLION DOLLARS

IUWA'S FARMERS



AN OLD-FASHIONED ROAD AND THE REASON FOR ITS END "AS LONG AS THE FARMER DROVE HIS SHAGGY FOOTED CLYDE TO TOWN THROUGH THE MUD HE CARED LITTLE. BUT NOW THAT HE IS BUYING MOTOR CARS BY THE THOUSAND (IN PROPORTION TO POPULATION THERE ARE FIVE AUTOMOBILES IN IOWA TO ONE IN NEW YORK), HE IS HELPING TO LOCATE, DEVELOP, AND ADVERTISE GREAT INTERSECTING HIGHWAYS"

me conclude, therefore, with an instance of the kind of change of fortune effected by rural progress in lowa in scores of thousands of homes, as illustrated in the true tale of the rise of the house of Chris.

Short, thick, curly-haired, and largeeyed was Chris. He hailed from Denmark. But there was somehow a hitch in Chris's connections with the "land of opportunity"; for a year in America found Christina and "the three kids" in occupancy, in 1885, of a decidedly dilapidated cellar in Chicago, while Chris sought the wherewithal to sustain the family by odd jobs hard to find. Meagre as were their personal effects, off went one article after another in exchange for bread — many a day the meal was just one loaf with no embellishments. One day an American came to Chris promising for three dollars to find him work. Little by little the pennies were gathered and the sum paid. Off went Chris and his new found friend in the early morning to the top of a large office building where Chris was told to await his companion's return. He waited alone — until night! Thus once from darkness came light — the bitter knowledge that he had been defrauded. In desperation he wrote to an old acquaintance in lowa. Two railroad tickets came in the

mail and one Chicago basement was for The conductor looked at rent instanter. Chris, Christina, and the three kids, took the two tickets, made the sign of the cross and passed on down the aisle. They disembarked at a little village on the Chicago & Northwestern Railroad in Boone County, moved into the veriest shack, and Chris got a job "on the section" at a dollar ten per day. Here at least he could see the good brown earth and there was no Chicago basement air, but the sweet breath of the prairie. He had been a farmer at home as a boy, and wished to be here, but that dream seemed remote of realization as he faced life on the section in a strange land at a dollar ten per day. Then there was the language — a beastly language, not to be compared to the mellifluous tongue of the homeland. One thing - Chris would work. A certain housewife who knew him says, too, that in those days he never smiled. Come to think of it, in like case who would? Exile, disappointment, Chicago basement, dollar ten per day — the elements that beget mirth hardly plentiful, to say the least veritably and justifiably "a melancholy Dane." And still he dreamed of farming. This was in 1888. That year a farm in my care was involved in litigation that

THE WORLD'S WORK

finally ended, and a tenant was desired. The aforesaid housewife for whom Chris had done odd jobs urged her husband, my local representative, to put Chris on the farm. The man roared at so absurd a suggestion — no tools, no team, no lan-guage, no anything. The woman, of course, womanlike, insisted; and finally, as a kind of joke, Chris was interviewed. I happened to be present. Have you ever seen Hope take possession of the soul of a man and effect its transformation on his face? Well, I can tell you it is good to look upon. There was some Danish jabbering between Chris and a fellow countryman, the outcome of which was a collection among the Danes whereby Chris might assemble in one spot these veritable necessities of the farmer: a wife, children, an old mare, and a blind mule. All were assembled, exactly these things, and some borrowed tools, and Chris's barque, long tossed by fate, was at last anchored to the black muck of Boone County, two miles south of the village. Twelve years to a day she lay within that harbor. Everything grew - Chris, Christina, children, rents, pigs, calves, colts, crops, hopes, standing, influence, plans, everything - all the product of the crew of Chris, Muck & Co. One day in 1900



BACON IN THE ROUGH ONE MEANS OF TURNING CORN INTO MONEY AT A PREMIUM

a hundred-acre tract right across the road to the west was offered for sale. Chris bought at \$50 per acre, held a "sale," and from the proceeds built a house and barn and moved across. No more rent for Chris, no more anchoring to another's wharf. The whole crew, Chris, Christina, and progeny in great number now go ashore for good.

Prosperity inevitably continues. And



A SHIPMENT OF HOGS FROM ONE FARM AT ODEBOLT, JOWA

so we find them snugly settled, when one day in 1908 comes along the road a drilling outfit. Chris's large eyes open wider than ever now. Would he give an option to drill and, if found, sell the coal at \$50 per acre? Would he? Have his money all back and still keep the farm? He most certainly would. Result! Four feet of coal encountered and Chris pockets his five thousand dollars. Maybe it is the land of opportunity after all. Who cares now for memories of the Chicago basement?

The day Chris received his five thousand dollars he put it on deposit at the village



CHRIS, AN EXAMPLE OF THE ELEVA-TION OF MEN IN IOWA

WHO ROSE FROM SECTION HAND IN 1885 TO RENTER IN 1888, SAVED ENOUGH TO BUY A 100 ACRE FARM AT \$50 AN ACRE IN 1900, SOLD IT AGAIN FOR \$145 AN ACRE IN 1910, AND RETIRED TO CULTIVATE INTENSIVELY 25 ACRES ON THE EDGE OF TOWN

bank and returned home. As he approached his farm he was in a state of perfect, if mystified, content. He has sold something, that is certain. The certificate of deposit is tangible proof of that. And yet, as he drives up the road there is the farm — his farm; there is Christina feeding the chickens, and there are the cattle in the stock field — all his and all just as effective as ever. It seemed a case of "keep your cake and eat it too." The certificate of deposit is put away carefully in the base of the family clock and Chris takes a walk around the feed lots just by way of farther assurance. Land of opportunity? Surely.

Land values keep pace with the growth of the family and now Chris though no taller is immensely rotund, voluble, and happy. He is fifty-five years of age. In 1910 an Illinois farmer comes along and wishes to buy his farm, and Chris sells at - one hundred and forty-five dollars per acre! Fourteen thousand five hundred additional to make more secure the foundations of "The House of Chris!' The usual sale notices appear on the telephone poles, beginning: "Having Sold My Farm I Will Sell the Following Articles," etc. Among the stock at that sale are no reminders of the old mare and the blind mule, but scores of head of stock of which any man might be proud.

And now does Chris forget that the soil is the source of his independence and reverse the current of his life by removing to a five-room cottage in the near-by village? Not he. At the edge of town is a twenty-five acre tract of unsurpassed fertility. This he buys, and here he pursues the traditions of his race — keeping close to the earth; and he will bring to that twenty-five acre farm the petite culture of the old world. The land is tiled, the house remodeled, and Chris looks out to-day of an evening from his veranda directly upon the Chicago & Northwestern section, where, in 1888, with pick and shovel at a dollar and ten cents per day, he struggled with the problem of removing Christina and "the kids" to the free air of an lowa farm.

Late last fall I passed the door of that farm-house one early morning. There I saw hanging from the veranda just over the entrance a half dozen beautiful and perfect ears of corn. And why not? Here was the coat of arms of Chris and Christina — six golden ears of corn from, if not on, a black field of lowa muck. By this sign indeed, they have conquered. As I think of Chris, meet his cheery face, grasp his short, thick hand, and listen to his picturesque brogue, as 1 often do, 1 am delighted for Chris — even a little envious as I look at that twenty-five acre tiled farm at the margin of the village and contemplate the high cost of city living.



THE HOPE OF THE "LITTLE LANDERS"

THE STORY OF SAN YSIDRO, CAL., WHERE FAMILIES PROSPER ON TWO ACRES AND A QUARTER

BY

JOHN L. COWAN

OURTEEN miles south of San Diego, Cal., so close to the Mexican boundary line that bullets from the rifles of the opposing forces fell within the village limits during the battle of Tia Juana, in May, is the little town of San Ysidro, more commonly known as the home of the "Little Landers." It is a "back to the farm" experiment, adapted to the wants of people of limited means. It is hoped eventually to adapt it to the needs of people of no means at all.

The Little Landers wish to show to families with little money and with little or no farming experience just how they can get to the land without danger of going from bad to worse. The corporation owns about 400 acres, all of which will be sold to persons desirous of engaging in truck farming, flower gardening, poultry raising, and other occupations adapted to just a little land. The price is high, judged by land values in many Eastern communities, being from \$300 to \$400 per acre. There are now forty families "e colony, with a total membership of 140. The smallest farm consists of a quarter of an acre, and the largest of seven acres, the average being two-and-aquarter acres. From the experience so far gained, most of the colonists now think that one, two, or three acres (depending upon the size of the family) is sufficient. The ideal is just as much land as the family can bring under the highest cultivation without hiring help.

The problem of acquiring land is simplified by the smallness of the acreage required, and also by the fact that only part of the purchase price need be paid in cash. The balance can be made up largely from the colonist's earnings. The profits accruing to the corporation are used for public improvements, which otherwise would have to be provided for by taxation. To build a home adapted to the kindly climate of southern California costs very little. The dwellings of some of the Little Landers cost no more than \$100. Some, whether from choice or from necessity, live in tents, the cost of which was insignificant.

Similarly there is no need for a large



ONE OF THE MORE ELABORATE HOMES IN SAN YSIDRO WHICH CONSISTS OF FORTY FAMILIES ALL OF WHOM OWN THEIR SMALL PROPERTY, FROM WHICH THEY MAKE AN ADEQUATE LIVING WITH SOMETHING EACH YEAR TO SPARE

investment in live stock and farm machinery. The live stock is limited to poultry and a cow or a pig or perhaps both. The requisite implements are no more than a spade, a hoe, a garden rake, and a few other inexpensive tools. In the purchase of supplies and the marketing of surplus products, the coöperation of the colonists eliminates the middleman, with his sometimes exorbitant profits, and invariably disproportionate expenses. Even inexperience constitutes no bar to success. The president, the secretary, and other officers of the colony are experienced in all the mysteries of poultry raising and vegetable culture, and count it a pleasure as well as a duty to impart instruction to new arrivals. At the weekly meetings of the colonists, practical questions of any kind may be asked; and the knowledge and experience of all is at the command of each individual.

The Little Landers have steered clear of communal ownership and other fads that have wrecked so many experiments at social betterment. Every man owns his own house, which may be as humble or as pretentious as his means and his inclination direct. Every man owns his own land, plants upon it whatever he



THE SMAILEST OF THE HOUSES OF THE "LITTLE LANDERS" WHICH, OWING TO THE WEATHER CONDITIONS OF SOUTHERN CALIFORNIA, CAN BE BUILT VERY CHEAPLY, SOME COSTING ONLY \$100. MANY FAMILIES LIVE IN TENTS

THE WORLD'S WORK

pleases, and cultivates it according to his knowledge and ability. There are no restrictions upon the sale or the disposition of property.

Some of the Little Landers have been at San Ysidro for two years, and others for shorter periods. Some families have just arrived. All that have been established for six months or more are making a living, and most of them a better living than many a farmer of the East and Middle West with 160 acres of land or twice that. It is unfortunate that no one in the colony has kept an exact account of receipts and expenditures. "We made a living, paid for our improvements, Diego for marketing. It was found that sometimes the colonists received thirty-five per cent. of the retail prices, sometimes twenty-five per cent. and sometimes as low as ten per cent. Then a horse and wagon were bought, and a man was hired to sell the products of the colony direct to the consumers. When this plan was put into practice, the net returns to the colonists averaged seventy-five per cent. of the retail prices.

In all this, the one important point is that the Little Landers are making a living, and a little more. It seems evident that what these forty families are doing at San Ysidro millions of families



ONE OF THE "FARMS" OF SAN YSIDRO WHICH VARY IN SIZE FROM ONE QUARTER OF AN ACRE TO SEVEN ACRES, THE IDEAL BEING FOR EACH FAMILY TO HAVE JUST AS MUCH LAND AS IT CAN BRING TO THE HIGHEST STATE OF CULTIVATION WITHOUT OUTSIDE ASSISTANCE

and have money in the bank," is the usual reply to a request for a statement of the profits on a year's labor. That is satisfactory to them, but not to the searcher after exact information. Each family strives to raise its own food supplies, with the exception of wheat, sugar, and spices. Grain is purchased for feeding to poultry and live stock. Supplies of this kind are bought coöperatively, in car load lots, at minimum prices. For all surplus food supplies grown by the colonists there is a ready market in San Diego. In the early days of the colony, eggs, poultry, vegetables, and other products were sent to commission houses in San can do in America. There are exceptional people among them; but the most of them are average Americans, driven by ill health, or by advancing years, or by financial reverses, back to the warm bosom of Mother Earth.

Furthermore, each Little Lander is his own boss. He reads of the high cost of living, the encroachments of predatory wealth, tariff agitation, and other issues that are vital to nine tenths of the people of America with comparative indifference, and with growing wonder that his fellow citizens of the republic do not follow the path he has helped to blaze to industrial independence. Every Little Lander has

THE HOPE OF THE "LITTLE LANDERS"

a job, and no man living has power to discharge him, even in times of financial panic and industrial calamity. In the whole community there is not a landlord or a tenant, an employer or a hired man. The majority of the Little Landers live in the village of San Ysidro, raise vegetables, flowers, and poultry upon their lots, and cultivate whatever crops they desire upon their acres, located within easy walking distance. Others have built their homes upon their acres. In either case, the distance to the social centre of the community is so short that all enjoy the advantages of both town and country, with the inconveniences of neither. The deadly isolation of the farm is banished; but the and assembly room, with library, reading room, and general loafing place. Every Monday evening there is a meeting for the discussion of topics of interest to the colonists. Questions are asked and answered, experiences with crops and poultry are related; and reports are rendered by officers and committees. Then there are songs and stories, a discussion of current events, and a lecture upon some educational theme. On Sundays, Rev. Josiah Poeton, Secretary and Manager, preaches a non-sectarian sermon. He is a Congregational minister. He was driven by a nervous breakdown from his flock in old Vermont. The community of Little Landers at San Ysidro was



THE HOME OF MR. WILLIAM E. SMYTHE WHO FOUNDED THE COLONY OF THE "LITTLE LANDERS" FOR THE PURPOSE OF HELPING PEOPLE OF SMALL MEANS TO A LIFE OF FREEDOM AND INDEPENDENCE

delights of living close to nature, in the open air and sunshine, are preserved.

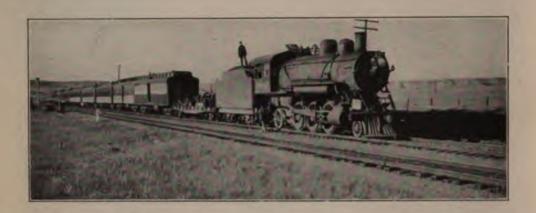
They have adopted the initiative, referendum, and recall. An irrigation district has been organized in accordance with the laws of the state; and bonds to the amount of \$25,000 will be sold to provide an adequate water supply, as the community grows in population. A very ambitious park system has been laid out. In fact, even now, although the village is only two years old, the park is a marvel of floral wealth and beauty, owing to the labors of George P. Hall, President of the Little Landers, and formerly President of the California State Horticultural Society. In the park is the club house founded by Mr. William E. Smythe, the well-known author and journalist.

Prof. H. Heath Bawden, formerly of Vassar College, who is one of the colonists, is working to show the possibilities that lie unsuspected and undeveloped in an acre of land. He aims to develop a oneacre garden to the utmost possible limit of productivity. He is studying the requirements of each of the important garden vegetables in the way of light, heat, moisture, and chemical constituents of the soil. He aims at vegetable perfection, and thinks it practicable to produce better vegetables and more of them than any one has ever produced before. When he has finished his experiments he will, as far

THE WORLD'S WORK

as possible, reduce the practice of the Little Landers to a series of mathematical formulæ, so that any one may know just what and how to grow the best vegetables in the largest possible quantities.

Such colonies may be multiplied indefinitely, provided only that they are established within easy reach of large cities, where a practically unlimited market may be had for fresh vegetables and fruits, poultry products, and other food supplies that can be profitably grown by hand labor upon small tracts of land. The advantage to the cities and to the colonists will be reciprocal. The people of the cities will get fresh fruits, vegetables, eggs and poultry at reasonable prices, and the colonists will enjoy the advantage of a steady market, at fair prices, for everything they can produce.



RAILROADING KNOWLEDGE TO THE FARMERS

SPECIAL TRAINLOADS OF DEMONSTRATIONS AND EXHIBITS THAT REACH MILLIONS OF FARMERS FROM OREGON TO GEORGIA

BY

OWEN WILSON

HE railroads have gone into a new phase of transportation — delivering ready-to-use knowledge to the farmers and they are carrying it free, because for every bit that they deliver into the right hands, a hundredfold profit comes back to them in freight. There has long been information enough at the agricultural colleges and at the state and federal departments of agriculture to increase the crop yields of the United States beyond computation. But except here and there — in Wisconsin, for example — the knowledge did not

reach the people who could use it. The man on the farm maintained the even tenor of his ancestral ways. That situation gave the railroads an opportunity and they have turned their great facilities to bringing science to the farm with such energy and success that they have become one of the chief agencies in the great awakening on the land, which is one of the most cheerful facts of the times.

This past summer Kensington, Kas., declared a special holiday. The children were given the free use of the merry-go-'round. There were two ball games, two band concerts, an automobile parade and

RAILROADING KNOWLEDGE TO THE FARMER

fireworks. During a part of the day the stores were closed: during the remainder they sold goods at cut prices. Normally Kensington's population is 600. On the special holiday 2,000 people were in town - all there to celebrate and profit by the arrival of the Wheat Special, the Rock Island Railroad's train loaded with the money crop of better farming knowledge. It was Kensington's one chance to get a



THE WORLD'S WORK



THE OREGON SHORT LINE'S BURLEY SPECIAL WHICH HELD MEETINGS IN EIGHTY-SIX DIFFERENT TOWNS IN NORTHERN UTAH AND IN THE RAPIDLY DEVELOPING IRRIGATION DISTRICTS ALONG THE SNAKE RIVER IN SOUTHERN IDAHO

large consignment of the profit-making information and it took the opportunity. This is one of the most hopeful facts of the whole situation. The farmers are eager for the improvement. The old scoffing at book learning and professors is fast disappearing.

is fast disappearing. Last summer eager audiences all over the country listened to the preaching of better methods and larger crops. Dozens of special trains traveled through the agricultural regions disseminating information. The Breakfast Bacon Special was run to encourage the lowa farmers to raise more hogs to take advantage of the high price of bacon. The Cotton Belt Route southwest from St. Louis ran the "Squeeler Special" to prove to the Arkansas and Panhandle farmers the moneymaking advantages of blooded hogs over the "razor-back" variety. Down the Mississippi Valley the Illinois Central



THE ILLINOIS CENTRAL'S RECLAMATION SPECIAL SUMADING FOR SWAMP LAND DRAINAGE IN ILLINOIS, RENTUCRY, TENNESSEE, MISSISSIPPI, ALADAMA, LOUISIANA, AND ARKANSAS: ONE OF FIVE SPECIALS SENT OUT BY THIS ROAD

RAILROADING KNOWLEDGE TO THE FARMERS



IN A DRY FARMING CAR ON ONE OF THE MANY AGRICULTURAL TRAINS WHICH ARE TEACHING THE IMMIGRANTS IN THE ARID REGIONS HOW TO COPE WITH THE NEW CONDITIONS

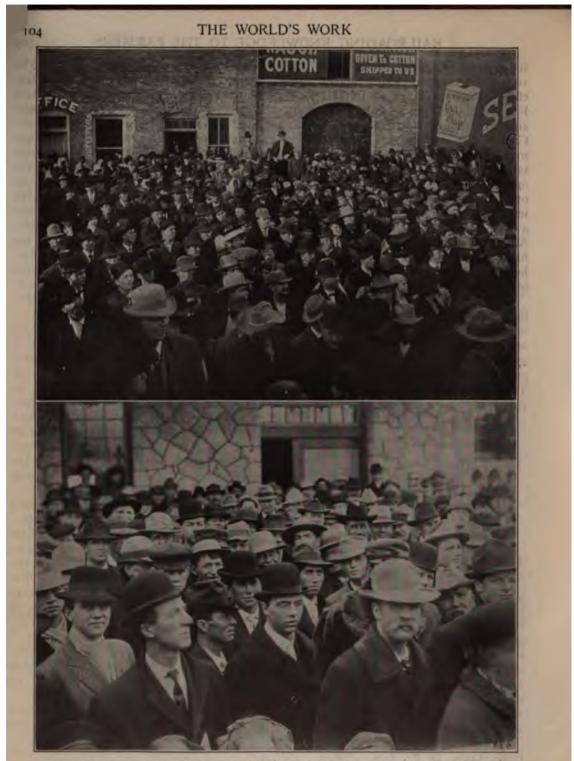
sent the Boll Weevil Special to conduct a campaign against that pest. The Harri-man lines have six trains operating in California every year. This year they were visited by more than 75,000 people. Better farming specials ran in practically every state south of the Ohio and Potomac and west of the Missouri. The New York Central also had two trains in operation in New York.

Originally the railroads, particularly

those in the West, bent all their energies toward getting settlers - Mr. James J. Hill alone among the big figures in the railroad world preaching the doctrine of better farming methods. The coloniza-tion work of the Southern Pacific is a good example. Its agents visit the older established farming sections of the country looking for settlers for its scantily populated lines. It spreads its literature broadcast over the land. In San Francisco it



IN THE WOMAN'S CAR ON A DEMONSTRATION TRAIN



FROM CORDELE, GA., (UPPER PICTURE) TO REXBURG, IDA. (LOWER PICTURE) FROM ONE END OF THE COUNTRY TO THE OTHER FAGER CROWDS AWAITED THE COMING OF THE TRAINS THAT BROUGHT BETTER FARMING KNOWLEDGE TO THE MEN ON THE SOIL THE SOUTHERN PACIFIC TRAINS WERE VISITED BY MORE THAN 76,000 PEOPLE THIS SUMMER. TEE PRISCO'S DAIRY SPECIAL REACHED 44,000 PEOPLE, THE WABASH'S TRAINS 38,000 AND SO ON UP AND DOWN THE LAND

supports a magazine with more then 100,000 circulation which makes every effort to attract American farmers to the Far West. It likewise publishes a magazine in London to attract English and Continental emigrants. Lecturers with moving pictures travel over the country talking of Western opportunities. It coöperates with the boards of trade and other organizations along its lines in sending out pamphlets, some of which have a circulation of more than 1,000,000 copies. As a result of these efforts 652,508 people have gone to California on the low-rate homeseekers' tickets of this one railroad in the last ten years.

By similar methods the Rock Island lines have taken 370,000 people into the Southwest in the last four years. Some are Americans, others foreigners who have spent a few years in this country, and others, foreigners direct from Europe. The Frisco Lines, for example, have foreign colonies located as follows:

Italian	Colony,	Knobview, Mo.
		Marshfield, Mo,
"	"	Tontitown, Ark.
Bohemia	n "	Bolivar, Mo.
Polish	"	Bricefield, Mo.
German	63	Freistat, Mo.
French	**	Dillon, Mo.
Swedish	64	Swedeborg, Mo.
"	(1	Verona, Mo.
**	"	Brady, Mo.

German and Swiss Colony, Brandsville, Mo.

This is the back to the land movement in fact.

But of late the railroads have come to realize that there is more tonnage in a contented, permanent, and prosperous community than there is in mere numbers of doubtful sticking capacity. The Rock Island's 370,000 newcomers, for example, were confronted with conditions which would have been too much for many of them if left entirely to their own devices. They all, no matter where they were from. came to a "new country" with knowledge only of farming in the older sections of America, or in Europe. Practically none knew anything except how to farm in regions having ample rainfall. Some came from timbered countries; they settled upon prairies. Some

were from sections where the land had to be drained of water and they came to a section that has no running streams, where water flows in the water courses only after a summer storm, or a winter thaw. Under normal conditions these people fared well; they made a living and some did even better. But when a lean year came — and they are frequent in the territory west of the one hundredth meredian — they could not meet the conditions. Their crops were unsuitable. They did not know how to handle the soil so as to conserve the scant moisture, and they did not know which crops were drouth resistant and which were not, Their knowledge was inherited from different conditions and it did not apply.

The railroad saw in this condition both an opportunity and a responsibility, a chance to do a good deed that would pay. It engaged Professor H. M. Cottrell of the Colorado Agricultural College as agricultural commissioner. His instructions were to teach these 370,000 and their predecessors to succeed. He has been at work now for a little more than a year, reaching the people chiefly through institute trains. Last winter there were twelve of them in operation.

A special draws into a station. Farmers are there from all the surrounding country, for its arrival has been heralded abroad by handbills and in the papers, in some cases. the townspeople even telephoned the farmers and went for them in automobiles, In a minute or two the first two cars are filled with men, the next two with school children, and the fifth with women. The lectures begin immediately with useful information. These people have come to learn, not to be amused. A man who has walked fifteen miles to hear an hour's talk and to ask a few questions, as one New Mexico farmer did, does not care for jokes or oratory. The talks are practical and the audiences deeply appreciative. At many places the scenes approach in fervor and enthusiasm the oldfashioned religious revivals. After the train has gone a car with several experts often spends a day at the more important points. to work the field intensively after the farmer's interest has been keenly aroused,

How thoroughly the railroads are contributing to the great awakening on the land can be seen by a glance at their activities in the State of Missouri. The Frisco's Dairy and Agricultural Special went all across the state by one route and returned by another. Its lecturers About 9,000 reached 44,473 people. packages of improved seed corn and 16,000 packages of cow pea-seed were sold at cost by the state authorities who made up the corps of lecturers; for most of the experts on the agricultural specials are members of the faculties of the various state agricultural colleges. From this train, along with the lecturers, was given out information about the Frisco's offer of a fourteen weeks' scholarship at the State College to the winners of the corn contests in the forty-five counties through which the road runs.

Further north on the Wabash the "Josephine Special," another train preaching good farming and dairying drew large crowds at its many stops from Marysville in the northwestern corner of the state to Jonesburg near the eastern border, then as far north as Kirksville on another branch, and back almost to Kansas City. Nearly 38,000 people came to hear the lectures and to see Josephine, the world's champion cow, that formed part of the exhibit. The Wabash also gave a \$50 scholarship to the State Agricultural College for each of the counties through which its lines run.

At the same time along the lines of the Missouri Pacific, the Rock Island, and the Burlington in Missouri many different methods were in operation to spread the gospel of better farming. The Burlington ran a "seed special" in Missouri as far back as 1904. The Missouri Pacific, in common with many other roads carries many men engaged in promoting better agriculture free of charge. Its agricultural department helps the farmers to find markets and its freight department has made low rates on manure to encourage the farmers to build up their soil — and to increase the roads' traffic.

With the railroads acting as distributing agents for farming knowledge, with trains, lectures, demonstration farms, farmers' institutes, literature without end, and with many other means, the science of farming is within the reach of practically every Missouri farmer. Not only that, but when 75,000 or 80,000 people visit the trains and thousands more attend the farmers' institutes it means that they are interested, that they want to be shown.

In other states the railroads are doing similar work. The Great Northern conducts forty-five experiment farms in cooperation with the owners in Montana; and at Chester it owns and operates a farm of its own. From time to time, also, it furnishes the newspapers along its lines with authoritative articles upon timely agricultural subjects.

Parallel to and south of the Great Northern, the Northern Pacific conducts experiment farms (as does, also, the Chicago, Milwaukee, and St. Paul), runs "better farming" trains and maintains an active staff of agricultural expirits. Meeting these efforts, from the south are those of the Oregon Short Line and the Burlington. So it continues to the southernmost transcontinentals, the Sante Fé and the Southern Pacific. In the Missisand the Southern Pacific. sippi Valley the Illinois Central with its Reclamation Special and half a dozen other trains, and the Harriman roads in Louisiana with a special train carry the spread of information as far as the old South where it is taken up by the railroads of that section, particularly in Georgia, where President Soule of the State College has used the trains to great advantage. Through Florida, Mississippi, Alabama, Georgia, North Carolina, and Tennessee the Southern Railway in connection with the Office of Public Roads of the Department of Agriculture has run its Good Roads train.

This railroad effort is not altruism. The more the farmer produces the more the railroad hauls to market; and the more income he has the more dresses and automobiles it hauls to him. It is business — the best kind of business in which both parties profit by the transaction. In doing this the railroads have, also, done the country a great service, for they have put a vast amount of much needed knowledge in the hands of the men on the land.

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A LABÓR LEADER'S OWN STORY

LAST ARTICLE

THE NATIONAL LEADERS — THE BOSS SYSTEM IN UNION POLITICS — THE IRREPRESSIBLE CONFLICT

ΒY

HENRY WHITE

(FORMERLY PRESIDENT OF THE GARMENT WORKERS' UNION OF THE AMERICAN FEDERATION OF LABOR)

A full and frank account of the way in which the unions fight their battles, of their aims and of the means used to gain them has never before been told by one whose opportunities for knowing these facts were as good as Mr. White's; for he organized, built up, and led the National Garment Workers' Union. His articles are a distinct and authoritative addition to the literature of unionism, told in a most interesting way from a wealth of personal experience — THE EDITORS.

Y ACTIVITIES as the leader of the garment workers brought me into close contact with the leaders in other trades. These men, rne chiefs of the union labor legions, had begun to attract the serious interest of the nation. Their immense power and their influence on the nation's future was becoming recognized. The question of the kind of men they were, was asked with increasing anxiety.

In personal qualities they could hardly be characterized as a class. They had not, as far as I could see, any abilities to mark them out from others. They had, however, the advantage of rare experience in first-hand grappling with the problems of capital and labor which gave them a bearing, an assurance, and a keenness that made them individually formidable. What there was common to them was an outlook, limited to the union, and an intense spirit of class militancy.

Samuel Gompers, the head and recognized spokesman of union labor, usually admonished his colleagues, "Claim everything, concede nothing. What we do is right." Having had occasion to remonstrate with him as to the wisdom of this policy, contending that it shook public confidence in the responsibility of the leaders, he answered, "What outsiders think doesn't matter." In his utterances

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this man invariably depicted union labor as fighting alone the battle of humanity, justice, and progress.

At public meetings this leader, who possessed no mean powers of oratory, was never known even in the face of flagrant cases of union excesses and of ill advised action to acknowledge any base motive or mistaken policy on the part of union workmen. He could be counted on to make a defense where it seemed none could be offered. When in New York, Sam Parks, a walking delegate of prominence, was charged with using his office to exact tribute from employers, and was tried and convicted, there was none more vehement in denouncing the prosecution of this delegate than Mr. Gompers. The delegate ended his career in state's prison and his guilt was afterward generally admitted in the labor ranks.

The other leaders drew their inspiration mostly from Mr. Gompers. In their exaltation of the worker, in their hostility to capital, and distrust of society, they were alike. Differences in economic beliefs mattered little. The socialist and non socialist in this attitude were in striking accord. So extreme was their partisanship, that often there arose a question as to the leaders' sincerity. Their attitude was to me most natural. It was an easy one for a leader to cultivate. There was more than a grain of justification for is. The laborer is commonly thought to be at a disadvantage, and the weight of society is presumed to rest heaviest upon him. Against this imposition he is compelled to struggle. It is a condition that arouses on the laborer's side intense feeling and strong convictions. To the one who conceives himself fighting against great odds there is only one issue and that his The leader's partisanship, too, in own. the union's early stage had been effective. Excessive claims and exaggerated hopes had been a great stimulus to organization. Where, however, the union has grown to a point at which a strong check is needed to keep it from going beyond the line of prudence this partisanship becomes a serious matter.

That personal expediency has also been an element in this partisanship, can hardly be doubted. It was the easy road to the workers' favor, and in the leader's struggle for place and power the tempta-tion to play upon the members' weaknesses was pretty strong. It is not difficult to justify conduct in line with self-interest. Privately, the leaders showed little of this partisan spirit. They were critical of the members, broad in their grasp of business conditions and the public wants. The capitalists were spoken of as the industrial engineers, deserving of their profits as wages of risk and enterprise. On the platform, capitalists were always oppressors and the laborers the only producers of wealth. The grievance of the national leaders

against the courts overshadowed even their grievance against capital. The courts, it was felt, were an obstacle to be overcome before the conquest of capital could be consummated. Capital could be temporized with, could be made to submit to principles however distasteful - the closed shop even — it could be persuaded to join with the union against the consumer; politicians, too, could be awed by so potent a voting power as the union; but the courts standing upon precedent and interpreting rights in the light of all the people presented an impassable barrier. The courts indeed refused to see in the "group rights," rights above the individual person.

The point of contact with the courts

was the injunction. There, the concentrated effort of the leaders was directed. The injunction was denounced as an usurpation of judicial power and the means of striking at union labor through the law. "The right arm of capital" the injunction was dubbed. The Federation's head, Mr. Gompers, said of it:

"The issuance of an injunction in labor disputes is not based on law but is a species of judicial usurpation in the interest of the money power, against workmen innocent of any unlawful or criminal act. The writ of injunction was intended to be exercised for the protection of property rights only. . . It must never be used to curtail personal rights; it must not be used ever to punish crime."

In every state legislature, in every session of Congress, determined attempts were made to secure the abrogation of the injunction in labor disputes. In the Presidential campaign of 1908 a frenzied attempt was made to secure the election of the Democratic candidate pledged to the union's injunction plank. The proposition fared no better at the hands of the electorate than in the "capitalistic" legislatures.

The temper of the leaders on the injunction and their habit of mind on legal issues may be inferred from this deliberate utterance of John Mitchell, a leader much in the public mind and having a reputation for conservatism:

"When an injunction whether temporary or permanent forbids • the doing of a thing which is lawful, I believe that it is the duty of all patriots and lawabiding citizens, to resist, or at least to disregard the injunction. It is better that half of the working men of the country remain constantly in jail than that trial by jury and other inalienable and essential rights of the citizens of the United States be abridged, impaired, or nullified by injunctions of the courts."

What is lawful and what are rights, it is seen, are what the leader asserts them to be. It is seriously proposed that "lawabiding citizens" "resist" or "disregard" an order from a court for reasons sufficient to the ones against whom it is directed. An example of how close to actual sedition

union labor would go in opposing the injunction is afforded by this resolution, adopted at a recent convention of the American Federation of Labor, the highest council of union labor, and in anticipation of the two decisions of the Federal Supreme Court lately rendered, respecting the boycott:

When therefore any court assumes powers not delegated to it by the constitution, it invades the rights specifically reserved by the document to the States and the people; its action becomes void from lack of jurisdiction and should not be obeyed. Until some change has been secured in the practices of the courts, either through Supreme Court decisions or legislative enactment, we recommend that every answer to a writ of injunction or a citation for contempt shall insist upon our constitutional rights of free speech, free press, peaceful association, and freedom from interference with our personal rights by the equity courts and the denial to assume that anyone has a property right in a man, his good will or his patronage.

To give the strongest emphasis to the resolution it was adopted by a unanimous rising vote. As yet the great labor body has evinced no special haste to carry out the threat made, though the highest court decisions are condemnatory of the principle expounded in the resolution.

The national leaders set up certain principles which they adhered to with rigid consistency and with strange indifference to consequences. Their position This was, first, was clear and positive. that the worker as an individual had no rights save as one of his group; second that the group was sovereign over the It was in truth substituting worker. group rights for individual rights and the union for the state. The criticism of union policies has been on the grounds of the public interest. The union, however, recognized no such standard and so was never disturbed by this criticism. Said Mr. Gompers, in replying recently to the declaration of a convention of Methodist Episcopal ministers, that it stood for justice for the laborer and without discrimination as to union affiliation:

"The condition of justice or injustice here has to do with the welfare of a class as a whole. If an individual of a class 'seeks the control of his own labor to the extent of becoming a strike breaker his action is intended by his employer to result and sometimes does result in defeating the union. . . This he has no moral right to do. Nor under the principle of group justice has he the right to take the place of the union man who is striving to maintain the objects of labor unions, the welfare of a group."

It was most natural for organized workmen to reach out for the closed shop. If the goal of the union, the exclusive employment of members, can be had by forcing the boss at some opportune time to enter into an agreement to that end, why not? But the proposition was not so simple. The boss would only concede that condition when overpowered and then only to await the chance to strike back. What the boss resented most was the encroachment upon what he deemed his indispensable authority. With the closed shop gained the union's struggle had just begun. The struggle indeed was transferred to itself, to keep the members from taking excessive advantage of their position. I found that it was comparatively easy to better conditions when the closed shop was not insisted upon and that the object of the closed shop could be gained in substance by not making an issue of it, and by proceeding quietly to get the non-members into the fold. For many years during the union's early stage it struggled for simple recognition, the right of workmen to combine and be represented in treating with the employer. During that long period while it was weakest the union managed to hold its ground and make headway without shop monopoly. The mistake of the leaders was, as I argued in my official paper, in presuming that the convenience of the union was the public's concern and that it would in consequence overlook the dangers inherent in the closed shop; that the closed shop embodied a revolutionary principle which industry was far from accepting as yet. Besides I declared the issue provoked an organized hostility to union labor that jeopardized its existence. The union was not treated as a

collection of laborers seeking to make the best terms for themselves, but a combination to seize the employer by the throat.

My attitude for the open shop provoked strong dissent from union leaders who warned me against my views. When my associates on the executive board of the body of which I was the head decided upon a far reaching strike for the closed shop, I found it inconsistent for me to retain my office and so retired.

That the closed shop and coerced memberships are not essential to union success is shown by the splendid examples of the These unions are anorailway unions. malies in unionism. They have succeeded phenomenally along lines declared im-The railway practical by the labor chiefs. unions have made membership absolutely voluntary, the members working side by side with non-members and in the best spirit. Still these unions have managed to enroll the great mass of railway workers. They have, moreover, made it good policy for the companies to treat with them and have succeeded again where other unions have conspicuously failed - in settling disputes by arbitration. A refreshing example of this was offered within the year past, when the wage disputes on the leading Eastern systems was adjusted by submission to third parties and with the result of a uniform increase in pay which brought the standard up to the rate prevailing in other parts of the country.

This achievement was made possible by the elimination of the issue which had rendered all attempts at arbitration elsewhere futile — the closed shop and all questions of union authority. This was accomplished at a time when nation wide strikes were thought unavoidable. One strike did occur and that on the leading Canadian line, but again arbitration intervened and an adjustment was reached.

The railway unionists are not free from the criticism of unionists generally. They have been accused of treating lightly their responsibility as employees in a vital public service, of having pressed their advantage unduly in seeking concessions; but they stand conspicuously free from criticism in the essential respect of violating individual rights and public sentiment.

But the issues arising from the question of rights, have long been settled in the public mind and the judiciary has taken a positive and perhaps an irrevocable stand. The unions too will continue to These issues may be assert their claims. important as they disclose the viewpoint of the union leaders and the temper of union labor. They are important also as they indicate the consequences of union dominance. What is of graver moment at present is union labor's issue with the courts in the matter of strike violence. Here the issue is a concrete one, with no room for academic difference. Does union labor stand for violence, does it really seek its ends by methods of terrorism?

The record of crimes committed during labor troubles and imputed to union labor is startling. In the one industry of iron moulding the published compilation of the National Founders Association shows more than 400 affidavits and statements reciting murders, assaults, and coercions during disputes from the years 1904 to 1907 inclusive. In the teamsters' strike in Chicago, in 1905, twenty-one non-union men were killed and 1011 persons were seriously injured. The mining strikes in the Rocky Mountain region during 1903-1904 will be long remembered for their sanguin-The remarkable series of ary character. explosions in the iron construction trades against open shop jobs and the amazing developments are sufficiently familiar.

The historic Anthracite Strike Commission of 1902 comprising men of unquestioned honor and impartiality, whose selection by President Roosevelt was approved by the union heads, found in its investigation that, "the strike was characterized by riot and bloodshed culminating in three murders, unprovoked, save by the fact that two of the victims were asserting their right to work, and another as an officer of the law was performing his duty in attempting to preserve the peace. Men who chose to be impartial or who remained at work were assailed and threatened and their families terrorized or intimidated. In several instances the houses of such workmen were dynamited or assaulted and the lives of unoffending women and children were put

in jeopardy. The practices we are condemning would be outside the pale of civilized warfare."

The immense body of miners did nothing to vindicate itself from the serious indictment of the Anthracite Commission, though presided over at the time by Mr. Mitchell who was foremost in avowing his devotion to lawful methods. "Unions that can't win by peaceful means should be defeated," was his familiar declaration.

A singular thing about the union officials was that, while protesting their peaceful intentions, they would at the same time assail bitterly public officials for activity in putting down disorder. The enmity of the unions followed Grover Cleveland to the grave because of his single act while President in sending troops to quell the menacing riots attending the Pullman railway strike of 1894. Governor Harmon of Ohio had to meet the opposition of the unions of the state when a candidate for reëlection last fall, because of his efforts to put down rioting during the street car strike in Columbus. The harshest epithet applied to President Taft is that he is the "Father of the Injunction.

When I remonstrated with leaders on the inconsistency of this attitude, they evasively answered that the soldiers or special police, brought to the scene of a strike; tended to "overawe" the strikers and provoke trouble. When pressed on this point and asked how this could be if the strikers were peacefully bent, they replied with astonishing frankness that the presence of soldiers and police tended to encourage "scabism" by the protection Then 1 observed that given the "scabs." the union could not win on its merits, and they, with equal frankness, answered that capital would be too strong for labor in the existing stage of the movement if the "fear of God" was no timplanted in would-be "scabs." I then suggested that, if force was really necessary to uphold unionism and if it was desirable that it be so upheld, they would do well to make the union more effective in that respect; the reply was that it was up to each union to do what was best, and the leaders need not bother how it was done.

The great cloak strike in New York last

summer was marked by great turbulence. The employers appealed to the District Attorney but without result. The Grand Jury was appealed to next and a long list of assaults some culminating in death was submitted. An application in the meantime had been made to Justice Goff for an injunction. The Justice in granting a very sweeping order, restraining especially demonstrations of large crowds before the shops where resumption of work was attempted, cited that agents, attorneys and, bondsmen were stationed by the union at the Police courts for the benefit of arrested This legal protection of memunionists. bers, charged with attacking non-unionists, was a common practice of labor unions. It mattered not what the nature of the crimes charged, or how patent the unionist's guilt so long as the acts were for the ' 'good of the cause."

Political influence was brought to bear also in behalf of union offenders. I was often importuned by labor men to see this or that political leader regarding some follower who was "in bad." The readiness of the political leaders to "please labor" was inspiring. The growth and aggressiveness of the unions had made their impression on political managers, and the union leaders despite their public denunciations of "capitalistic parties' were not loath to improve on the opportunity. From my experience in handling large strikes, l_found a marked reluctance of the police and local magistrates in arresting and punishing strikers-activity in this regard not being considered good politics. This practical immunity from punishment of union offenders 1 considered the strongest incentive to violence. And the disapproval of public opinion never worried the leaders. Though they did not court it, and even tried to allay it, when inside union circles their contempt for this opinion was not concealed.

The contrast in the character of union violence a decade or more ago and at the present time is exceedingly significant. Then it was of the spontaneous sort. It was the sort resulting from inflamed passion, such as rioting, brow-beating, and the like. The participants took large chances and were readily handled by the

police or in extreme cases by the militia. Now this violence has the marks of premeditation and direction. It occurs between strikes as well as during strikes. A systematic terrorism prevails in many organized trades. It is manifested in attacks under conditions of comparative safety to the assailants, by explosions, by isolated assaults with special weapons, principally the blackjack. It was repeatedly charged that professional gangs were engaged for this purpose. In Chicago lately there were sensational revelations of this kind involving many murders. It was within my knowledge that regular toughs were retained by certain union leaders for "special committee work" and that the facts in one case were submitted to the prosecuting officials and However the conditions magistrates. that existed were the best evidence of this fact. Last spring there was a general strike in the baking trade in New York. The employers sent a committee to the Mayor to request police protection, alleging that their shops were being regularly raided. This protection not materializing, the employing bakers capitulated. The head of the employers' association told me that his associates surrendered rather than see their places wrecked and their lives jeopardized.

The organization and government of union labor presents a situation as remarkable as its industrial and social attitudes. The American Federation of Labor was the reaction against the centralized and despotic system of the Knights of Labor. The central idea of the Federation was that of an alliance of independent and self-governing bodies. Affiliation was even made voluntary differing in that important respect from that of the federation of states. The democratic principle, always a force in unionism, was thought to be effectually safeguarded.

In form the decentralized principle still remains. Nominally the only powers possessed by the general body are those conceded to it and limited to organization and educational work. The function of the yearly conventions is still presumed to be chiefly that of defining union policies and adopting means for the common defense. Various conditions, however, served to revolutionize in practice the original conception of the Federation.

The first condition was the voting system which enabled a baker's dozen of national unions, out of the hundred and more represented, to cast the preponderating vote. From these unions the governing council was chosen. Another condition was the increasing dependence of the individual unions upon the support of the Federation. Its ability to give or withhold support became the whip over the constituent unions. Another condition and perhaps the most important to bring about the overthrow of the prin-ciple on which the Federation was founded, was the devotion to the solidarity idea. By this, all considerations, even those of independence, decency, and justice were made subordinate to unity. Regularity became the one test of standing.

The Executive Council consisted of eleven members, most of these having held office from ten to twenty-five years. The Council's existence was practically continuous. It had suffered less change than takes place in the Federal Supreme Court. A "self perpetuating hierarchy of labor" it was commonly called. This coterie of labor chiefs held undisturbed dominion over all organized labor, excepting as stated — the railway federation and a few minor bodies.

The expansion of union labor about ten years ago and the alarming disputes that took place so impressed the public that men of affairs began to consider earnestly the problems presented and to assist in their solution. Civic committees arose in the large centres to grapple with these The union leaders acquired problems. a remarkable importance. Their presence was solicited at the most prominent public and social functions. From "dangerous agitators" they became the associates of eminent men, confidential advisors of Governors and Presidents, special guests at swell dinners, star speakers at imposing gatherings, whose utterances found eager listeners. I, like my associates, was bewildered at these attentions. A revolution in the relations of labor and capital seemed to impend.

The most prominent of these committees was made up of equal representatives of employers, labor officials, and public men. This committee had elaborate machinery for the carrying out of its purpose. The leading men of the nation were enlisted. Yet, this meeting on "common ground" brought peace no nearer. If "getting together" and "mutual understandings" were a solution, that solution surely would have been had. A public committeeman remarked: "The trouble lies in too much understanding. Each side knows just what the other wants and won't take chances."

The attitude of the employers and labor officials toward each other was very gracious. The employers spoke of the labor men as "labor's statesmen." And the labor men greeted the other as the "industrial captains." There was a refreshing agreement as to the evils of strikes and lockouts. They were treated as forms of barbarism. If justice and reason prevailed, they argued there would be no need of either. Conciliation and arbitration were what was wanted, and the committee stood ready to supply that need in abundance.

"Cooperation" between employer and unions found great favor, and became the keynote of the peace meetings. Capital and Labor each with "legs under a table" adjusting terms in a brotherly spirit was a figure that was applauded most. The confabs that were held around the festive board (with Capital always standing treat) was made symbolic of that devoutly wished for relationship. But I could not observe that these talks influenced in any way the outside relations of the two. The enthusiasm of the participants, too, never filtered down through the ranks of either workers or employers.

Whatever chances there might have been for the adjustment of differences were shattered when the dreaded and inevitable issue of the closed shop arose. The employers would not yield a bit on this point, holding as a principle that to bind themselves to exclude non-union workers from their shops meant giving over the control of their business to the union and the unionists were equally firm in maintaining as a principle that to permit non-members in the shops rendered the union impotent to control working conditions. A condition of inaction followed.

An attempt was made to narrow down the members' views to an agreement on some concrete proposition. If this could be done, it was thought, a great stride would have been made toward the object of the committee. After sundry national conferences in which many men of note participated, the trade agreement was accepted as offering the most promise. A special committee to promote trade agreements was appointed and later a commissioner at a generous salary to give his whole time to the undertaking. This commissioner was one of the most prominent of the labor men. Years passed, yet the first agreement of this sort was to be adopted through the committee's efforts.

Trade agreements, it turned out, were possible only between strong combinations of employers and workmen, were in themselves the results of war, and were entered into as a matter of hard necessity. Employers wherever they could avoid it refused to have contracts with the union. They wanted them only when menaced by the union and in order to hold it down to fixed terms for a given period. Unions, too, were as reluctant to treat with associated employers and sought wherever they could to deal with them separately. With the individual employer, however, contracts were insisted upon. The trade agreement not being a voluntary arrangement of course failed as a basis of harmony between organized capital and labor. The idea proved wholly Utopian.

The rank and file of the unions obstinately refused to appreciate the work of the peace committee. Its advances were keenly distrusted and its mission looked upon as a scheme to beguile the workers. The leaders hobnobbing with millionaires were treated with equal distrust, and passing resolutions of vain did we tell them unions kept censure. In that we were using the big bosses for the good of the cause. It was all we could do to keep the important unions from openly condemning the peace committee. The matter was studiously kept out of the Federation of Labor meetings because we feared the issue. Nevertheless the largest of the labor unions, that of the mine workers, finally gave its distinguished member on the committee — the trade agreement commissioner — the choice of expulsion from the union or resignation from the committee. He chose the latter.

Employers charged on the other hand that the labor men had their thumb upon the civic committee; that it was used by them for their own purposes and unknown to the philanthropically disposed members. Though the committee was of no value to the labor men in the matter of adjust-, ing disputes, as indeed it could not very well take sides on matters of principle, this charge was not without basis. The life of the committee rested at all times upon the will of the labor men. Their withdrawal would end it. The promoter and moving spirit of this committee remarked to me, "We can get along without any one employer or public member, but we can't do without certain labor men as they could smash the whole thing." And

the labor men were not over modest in making the most of the chance.

The distrust of the rank and file of the unionists of the committee, though to be expected, was hardly justified, as, however much the leaders may have profited by their connection with the committee, their mere association with it certainly gave their cause a special dignity and importance. Besides, the personal help of influential committee-men was used in emergencies where a union was hard pressed.

The enforced withdrawal of the miners' leader snuffed out whatever flickering hope there remained in the committee's mission. The committee, brought into being to put an end to labor strife, has in recent years turned its attention to industrial and civic welfare work. All private organized effort at pacifying the relations of capital and labor appears now to have been abandoned. It has been found that the labor conflict implies more than a quarrelling over pay, to be met by a splitting of differences — that it has to do in fact with underlying human nature. The question still remains open and acute.

FROM A LAW OFFICE TO A COTTON FARM

A PERSONAL EXPERIENCE OF GOING BACK TO THE FREEDOM OF THE LAND. THE OPPORTUNITY OF THE NEW PLANTATION

BY

RALPH W. PAGE

HERE was exactly two months during the transition from the debility of a law office on Rector Street in New York to satisfaction in Moore County, North Carolina.

I had followed the conventional parade down the Avenue of Success through Harvard College, and the Harvard Law School. From a term of service as a genteel office boy of a New York law baron, I went to a cubby-hole of my own commanding a beautiful prospect of the Ninth Avenue Elevated Road. On the 1st of July, 1910, I stopped to take stock. It was eleven o'clock in the morning, and I was in bed. I had no catalogued disease. I was just run down as a clock might be. It took more courage than I had to get on the street cars and go to my law office. I became slowly convinced that I was miserable — all the time driving my headache from one unfinished law case to another house party — work and play alike were tiresome.

There is, of course, a great deal more

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to say if I should tell the whole story. New York and social pleasures and country clubs don't square the account. I've heard the complaint and seen it in the eye of many a fellow at the down-town club where I lunched. These poor weary slaves haven't found a way to freedom. But I quit — quit then and there. The only value that this story has, is a possible encouragement to others.

I had just one thousand dollars which I had saved. But I had no idea what I was going to do. I decided thenceforth to live as I chose, in surroundings that were pleasing to me, where I could breathe, and be under no obligations to the clock. Maybe I should read, and commune with nature, and emulate Sir Roger de Coverly. Maybe I should vegetate and grow chin whiskers. But I should do in peace whatever I chose to do.

I gave up the practice of law at which my friends thought I had made a successful beginning, and I went to a small town in Vermont, and spread a picture of the bucolic life — of peaches, a private swimming hole, and a Sabine farm to an old college chum of mine. He was a mining engineer.

The idea was already in his mind. He had almost resolved to get an apple orchard in the Shenandoah Valley in Virginia, and to practise and to enjoy a bit of Southern hospitality. My proposition was this: "Here we are," I said, "free and inde-

"Here we are," I said, "free and independent and young. There is nothing on earth to prevent our creating our own world and living our lives as we wish, and let's go and do it. Mr. James J. Hill says the farmer can both live and make a living. The papers are full of fairy stories about onions in Texas and olives in California and Angora goats in the Green Mountains, sermons in stones and the promise of the soil. Let us see."

We played with the plan in a gay mood, hinting of freedom, but we went about the business in a way that would have satisfied a bank examiner. We discarded all preconceived ideas, all advertisements, and even the special articles on irrigation and the Yakima Valley written by our college contemporaries, and went in a straight line to the inner office of the only real prophet that 1 ever saw — the late Dr. S. A. Knapp, of the Farmers' Cooperative Demonstration Bureau at Washington. He greeted us in a spirit of fun and pleasure and help that has kept us going and singing ever since. There was no long palaver, or great weighing of chances or rigmarole.

We told him frankly and gayly that we had never farmed a straw, that Goldsmith was the only authority we had ever read on the dairy, and that we had no money, and only an academic education, and we wished to be told accurately and definitely whether we two amateurs — one trained in cosines, and the other in legal forms could go anywhere and make money farming. "If so, please tell us where, what to grow, and how to grow it."

This may seem to you a very foolish procedure. But, do you know, that is just what that great, kindly old gentleman did, as he had done for thousands of others. Other men may know how to give such directions — but they have land to sell or they are in the fruit commission business. There is generally something besides expert advice behind an irrigation company, or an engraved map of a new farming district.

But Dr. Knapp was the head of all the government experts in the fields of the South. He fetched in charts of every state, showing his stations, and the innumerable monthly reports of his agents, one to a county, whose law is the law of facts and figures, and who do not deal in futures. He showed what men had done, and were doing; and that was enough for us. Then to our further astonishment he said:

"This is the wisest and best thing you could do. Moreover, if you will follow the simple rules of husbandry and attend to the details, you cannot possibly fail. Grow cotton and corn and cow-peas. Raise your own horses. And later on as you learn the game, branch out into every kind of diversified farming."

He took a map of the South. On this he drew a line. "Almost any land in this big area will grow cotton. Don't go to the famous districts. Go anywhere else. Scientific cultivation cares nothing for superstition or precedents. Find a tract of land that is cheap — not more than \$20 an acre — and that is flat, and in an upland country where there are no malarial mosquitoes; and be sure there is at least some land cleared and a shelter and a stable on the place, for a beginning."

We were in North Carolina the next morning. Our idea was to get a place as far north as possible — still looking back, like Lot's wife, to the class day spreads and the Cinderella. (I've never been to the Cinderella, but you know what I mean.)

The next week was perhaps the happiest l ever spent. We rode across the country Pinehurst — famous for from golf through a region of sand and little streams and the remnants of a mighty pine forest. At the first cross roads - called West End — we found some acres of corn that we have since seen measured, yielding 1371/2 bushels to the acre. That may seem a mere bit of arithmetic to you. But to the agriculturist it sounds like a big stock dividend. It was grown under the superintendence of Thaddeus McLain, Dr. Knapp's man thereabout, and by the childishly simple method of following instructions, less complex and shorter than blanks that you must sign for tickets to the Harvard-Yale boat race.

We drove across country for a week or two, stopping at every patch and corner to estimate the possible yield of the cotton there and to discover how it was grown. We spent our evenings here and there in the main, reading that fascinating literature dispensed by the Agricultural Department on specific subjects of farm management.

From this section we went into the old and famous cotton districts — along the Peedee River, where the last half-century has left no mark — on down to Marlboro County, S. C., perhaps the most successful cotton country in the world. We talked to everybody we saw for nearly a month. And then one day we foregathered on the porch of the Jackson Springs Hotel, near Pinehurst, and gravely concluded —

 That land right there in the pine belt was as productive as land anywhere.
 That the region was high and healthy.

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3. That land there cost nothing, that is, in comparison. Cotton land in Mariboro County, S. C., cost \$200 an acre bid, and none offered; land in Moore County, N. C., \$10 offered, and few purchasers.

4. That here we could buy a large acreage, and build the whole place to suit our fancy, and the fancy of our friends, who "hanker" for quail to shoot and a fancy breeze.

We so informed Dr. Knapp. One of his men, Mr. Mercier of the Department, went over the whole field with us. His answer was that we couldn't possibly make a mistake at that figure. So he fired the pistol and the game was on.

We employed Mr. Emery Smith, whose knowledge of native land boundaries and eccentricities of the owners was complete, to ride the country and find us a tract with land that was flat and a barn that was usable. And meantime we figured it out that land can be cleared for \$10 an acre, l now know, because since then I have cleared many an acre. My neighbors have it cleared by contract for \$8.50, but I am not as clever as they. It will grow in unlimited measure corn and peas and sweet potatoes and watermelons and peaches and a large catalogue of other things. All this has been adequately demonstrated. You can see for yourself at the proper season, if you will go to West End and Jackson Springs, to Van Lindley's orchard and McLain's place. The cotton farmers of Marlboro County, who study cotton as a religion, have since bought big tracts here to enlarge their area of operations. I'll tell you the names of some of them -Everitt and Crossland, McColl, and Sheriff Green. McColl says it costs him five and one-half cents a pound to grow cotton. Experience varies. The pessimists say eight cents. Mine will cost twelve cents, but I am a greenhorn, and it is my first year, and there came a cyclone, and it is new ground.

I am not writing a prospectus. I am narrating the facts as we told them to the member of our company who plays the part of banker, humorist, and friend. He sent us the money. It is the safest money. on earth — money bet on the future of cheap cotton land, and the Knapp system of farming. There was only one other item to mention. We agreed to stay on the job for ten years — personally.

I wouldn't swap the experience of this year for any picture 1 ever saw of the millennium. Since the whole purpose of this piece is to persuade other fellows to leave Nassau Street and Rector Street and all the other streets and win their release, 1 am going into specific details.

We bought 800 acres, with a weedy, tangled, run-down corn field of 200 acres, and half a dozen shanties, and a remnant of a barn, for \$8,000. It was on the railroad, and is still called the old Chisholm place. This was in November last year. From then until March first we kept eight negroes and a dozen miscellaneous white hands burning stumps, grubbing up blackjacks, plowing, and building shanties. We plowed all the clear land with a twohorse-plow — this is the first and greatest commandment — and sowed it in rye.

Lumber was cut in the vicinity and delivered at \$11 a thousand feet. Carpenters cost \$1.50 to \$2.00 a day, farm labor \$1.00. We built three shanties, very sumptuous and elaborate for that vicinity, at about \$250 apiece - upstairs and all. The barn, 80 by 40 feet, with 16 big stalls cost \$610, under contract. An engineer from Wilmington drained a bottom we had with tiles, about 40 acres at a total cost of \$417. We bought horses also according to Knapp. We sent our invaluable Smith to Virginia, and at Woodstock he bought three pair of mares, three-fourths Percheron, 1,500 pounds each, five years old, for \$510 a pair. We bought a young pair of mules for \$500.

On March first we were ready to farm. The tenant houses were finished; the station and store was ready; the fertilizer warehouse was ready. Stumps were out, the land dry and clear. The books showed that 800 acres of land, shanties, barns, residence, fertilizer house, 12 horses and mules, clearing 40 acres, "stumping" 230 acres, a complete equipment of machinery and tools, tile-draining, a dam, a tank, and a water supply had all cost \$20,905.

This does not represent our total expense. But it is all that is essential to this farm. We bought 3,000 acres of adjoining land and are renting now another farm. But this is not the main proposition.

We hired a cotton-foreman from South Carolina, bought our cotton seed from the Agricultural College at Raleigh, our seed corn from a neighbor whose yield was big and we had a congress of authorities to comment on our proceedings. Our 140 acres of cotton and our 40 acres of corn grew well, and the rest of the land was overrun with canteloupes and watermelons, and we still have some of the money in the bank that we estimated we should need.

It is too soon to say what the corn and cotton cost us. It is too soon to tell you what it will yield. And the price of cotton is as uncertain as ever. But this I know - every morning I can spring out of bed at sunrise with a song (because I don't bave to spring or sing - do you see?) and rejoice at the cheerful ringing of the plantation bell. And I can call Tobe to saddle my mare Dixie, and ride as a master of the earth, down long green rows of my own, and put my hands to the new cultivator that runs like a sewing machine, and direct the building of a dam, just as though I were a real man, and was already successful. And I get my fun going to seed-corn meetings, and investigating Mr. Price's cotton picker, and in doing what l please.

All this is to no purpose, unless I can in some small measure pass along Dr. Knapp's good advice. But few people believe such statements. Still the fact is that I have quit trying to please myself by any future Elysium; but 1 am now happy and independent and on the way to make all the money I need, and I have all the time in the world to tell anybody who wishes to try such a life all I have learned about it — you or anybody else. Get off the Seaboard Train at Aberdeen, N. C., ask anybody — (it is a small world down here) and anybody will tell you the way to my farm, and I will show you the whole story, and point the way to any number of similar experiences from North Carolina to Texas.

THE MARCH OF THE CITIES

DULUTH AND ITS HINTERLAND

Following Mr. Henry Oyen's comprehensive series "The Awakening of the Chies" which showed how they are meeting the problems that twentieth century civiligation thrusts upon them — how far-seeing municipalities are the hope of an efficient democracy — the WORLD'S WORK has decided to publish a series of city achievements as encouragement to one of the most important movements of progress of this time — the physical, moral, and social improvement of American cities.— THE EDITORS.

ULUTH was a port of first magnitude before its surrounding country was anything but a wilderness; but it found that even a "whale" of a port does not make a city.

To meet that condition the Duluth Commercial Club four years ago set up its agricultural propaganda, engaged Mr. A. B. Hostetter, a skilled Illinois farmer with experience in institute work, and turned him loose in the field as the city's agricultural missionary. Settlers on the land tributary to the city were not making the progress that could be wished. He showed them how to better their oppor-He organized clubs of farmers, tunities. persuaded them to unite on standard breeds of dairy cows and standard varieties of potatoes and sweet corn. He gathered their best specimens for prize-winning exhibits at the state fair. He explained to one group that the problems that perplexed them had been solved in another settlement. A "cutover" country has all sorts of conditions that a farmer from another section must learn.

Because there were no local supplies in former years the produce market had been organized on the basis of carload shipments from distant points. Green vegetables that could be raised in Duluth's backyards were brought from one hundred to five hundred miles. When local supplies began to arrive, there was nobody who cared to bother with them or, because they came in small and irregular volume, there was nobody who dared to depend on them.

The Commercial Club decided that this would not do. After all the effort to

settle the country, the job must not be left incomplete for want of a market for local produce. It needed some agency to receive the green stuff that the farmers near by could ship in.

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The farmers were invited to form a coöperative marketing association. They meet at the Commercial Club's rooms. They work in cooperation with the Club. Two members of the Club belong to the board of directors of their association, which consists otherwise of representatives of the farmers' clubs, from the immediate vicinity and from as far as a hundred miles The market association engaged awav. a competent manager and hired quarters in Commission Row. It helped to assemble produce in carload lots; it instructed members in shipping and grading and packing, and it found the best market for them and kept them informed of the market demands.

The Commercial Club saw the association through the troubles of the first and experimental year and helped to establish its credit when it lacked working capital.

Having this agency, a number of settlers have doubled and trebled their planting this year. Many have undertaken commercial crops who had been raising just enough for their own subsistence because they had no outlet for their surplus.

Duluth is thoroughly inoculated with the idea that the city's best growth is to be obtained by promoting the prosperity of the whole region.

It has found that a city that confines itself to what lies within the municipal limits is going to suffer from ingrowing tentacles and impoverished circulation. The modern community is a larger unit.

DOES ANYBODY REALLY WANT A FARM?

HE value of farm-land has more than doubled during the last ten years; the farmers were never before so prosperous; good farming is sure to yield even more in the future than it yields now — more money and a larger independence; and the old isolation of farm-life has passed in most sections of the country. Yet there's no rush to the land. The town continues to outgrow the country.

Well, then, do people really wish to get on the land? Do those that have poor farms wish to get better ones? Do salaried men and the like whose careers are limited in towns really wish to win the independence that the country offers?

Is the trouble the lack of information about good farm land and a lack of ways and means of getting back to the soil?

and means of getting back to the soil? Or is "back-to-the-land" all cry and no wool? Do people prefer to remain in town and to keep flocking to town?

What is the fact of the matter?

This article is an effort to find out. This magazine has, with some trouble and expense, undertaken to get accurate information about the chances offered to farmers in every great section of the country. For examples: there are new drainage districts in Arkansas and Missouri, and new irrigation projects farther west. There are good chances in the state of New York. There are good chances in the states — excellent chances as the experiences told in this number of THE WORLD'S WORK indicate.

Where is land for sale at a fair price? What is a fair price? On what terms can it be bought? Who are responsible persons to seek information from? What success have men had in this particular neighborhood or in that? How much capital is required to start?

Such questions and others that these

suggest will be answered for a time for any reader of this magazine. Ask precisely what you wish to know, and as detailed answers as possible will be made. The magazine cannot, of course, report on individual farms. It answers questions about different sections of the country and puts its readers in communication with trustworthy sources of full information.

The response to this suggestion will, it is believed, show whether there be a real demand for farm-lands, and whether any considerable number of men who are not on farms really wish to till the earth.

There is one fact that is certain.

If you are ever going to the land, or are ever going to better land, you had better go as soon as you can. You can buy good land cheap — yet, in several sections of the Union, and you will not much longer be able to do so. It is probable that the value of much good land, in intelligent communities, will double again during the next ten years.

If, therefore, a vision of independence ever rise before you, and if you have the common sense and managing ability and the stomach for work that good farming requires, you can get a farm with a moderate amount of capital or credit; and the information at the command of this magazine will for a time be freely at your service in the quest. Write and ask for such information as you want. And the WORLD's WORK will find out, perhaps, whether there be really any serious land hunger among the intelligent persons who read it.

Tell as precisely as possible what you want, what and where you want it, and what you wish to do, how much money you can command and what your experience has been. Address THE WORLD'S WORK, and mark your letter "Land Inquiry."

A PAGE FROM READERS

HE WORLD'S WORK aims to be a magazine for real men about helpful activities and it considers itself successful in proportion to the results that it accomplishes. Such a fact as the following letter reports, therefore, is interesting. Mr. Frank Lawrence Glynn, Superintendent of the Public I rade School at Albany, N. Y., lately wrote an article about this school; and he says in a recent letter:

I have received numerous letters of commendation. In some cases the interest has developed an effort on the part of the community leaders to open similar institutions.

In other words when a good school or any other good institution or idea is ripe for imitation or duplication, a description of it in THE WORLD'S WORK will bring such a result. That's one test of the magazine's usefulness and power.

There are, of course, other tests. The most fundamental test of all is that it pleases and stimulates men who are bringing things to pass, as the following letters show. About a thousand such letters have been received during the last six months

After reading each number of The Horld's Hork I want to tell you what a splendid true prophet clock at the world it gives one Your work is so splend a court struke of the tool kestrung accurate and cost costs medical that it makes the critic rost of us mit exactly readed but scheduling is critic for a cost He Cycle Neu-York C

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For ten years 1 have been reading The World's Work, and much of my thinking for this period has related to the activities with which the magazine has concerned itself. These studies have led to an abiding conviction that the work which you are doing is the most pregnant patriotic work that is going on in our land.—Robert Frazer, Labore, Orange Co., Va.

All numbers of *The World's Work* are good, but the present August number is superb. Nothing better ever traveled from New York to the Rio Grande Valley, and we just want to reach a comrade hand across all the hills and valleys and say — shake! — J. W. Skinner, Brownsville, Tex. — just a plain Texan.

Your magazine as it is, is clean, is positive, is practical, and is highly instructive. Its reading matter and character are such as will make for good citizenship, and through this, for good government. In fact, your magazine is throughout easily the best in the field. I wish you long life and good health, as well as a realization, in life, of the great reputation you are earning. -1. B. Cobb, New York.

For some time past I have read quite regularly and with the very greatest pleasure and profit your admirable magazine, *The HorkE's Hork*. A dozen others are at my desk regularly, but I am going to say to you frankly that with me *The World's Work* easily holds first place. *Ret.*) Charles S. Medbury, *Des Merrico La.*

I have been a constant reader of *The World's Book* for the past three years and consider to not sheld the finest and best. I want you to know that you are doing a heavy stuff of missionary work or keeping us men out here in touch with the line of the world. It is a real stomeles month by month to get in touch with though through you on the magazine.— New Second Machine Sacaing, Burma.

Learning resistance involve to send you my success thems reacted maximal editorial on ou give them? When this with forceful and time's are a service as these - needed! The recoveress and writts of The World's Worgews as time existing for the sake of poo homas to keep that he magazine.— Prof. W A short a contents of Westerstrin Madiser West

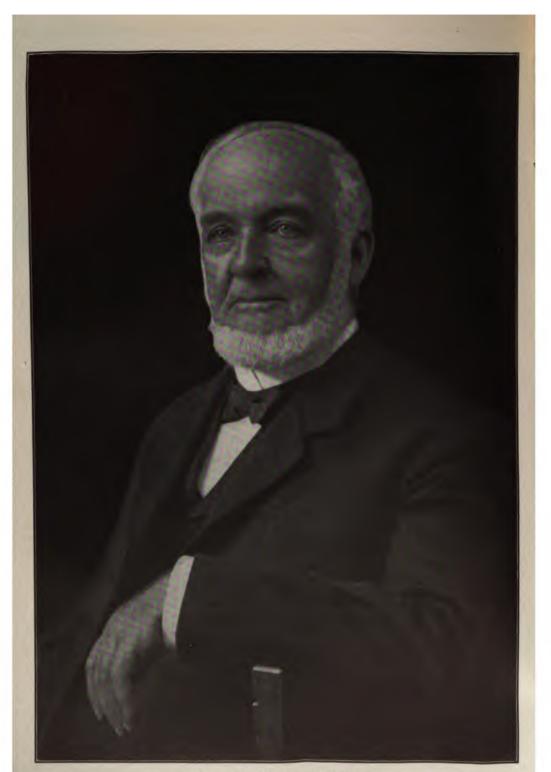
The World's Work

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F. N. DOUBLEDAY, President WALTER H. PAGE, Vice-Presidents H. W. LANTER, Socretary S. A. EVERITT, Treasures

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MR. ALBERT K. SMILEY whose peace conferences at lake mohonk have been for many years one of the steady and strong influences in shaping public opinion

THE WORLD'S WORK

DECEMBER, 1911

VOLUME XXIII



NUMBER 2

THE MARCH OF EVENTS

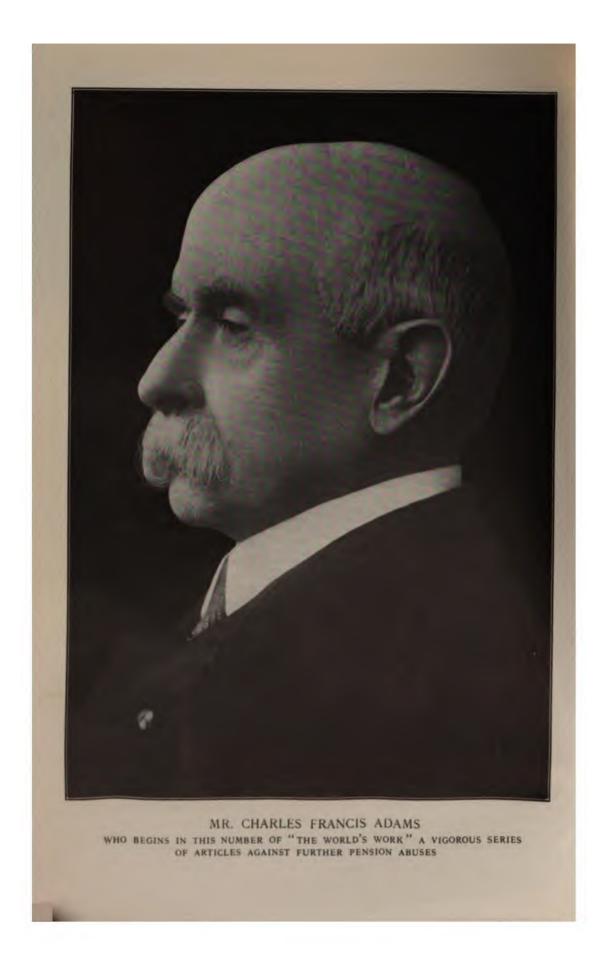
O THE man who takes a sympathetic interest in world events and conditions, the coming Christmas may not seem as cheerful as many a Christmas has been. In spite of the prodigious effort to make war impossible, Italy and Turkey have been fighting, China is in civil conflict, Mexico has not been at peace with herself, and the danger of a graver clash among the great Powers is not removed beyond possibility. The nations are not disarming nor is any lessening of war burdens in sight.

Fortunately no war cloud darkens our own horizon nor is it likely to. But we have financial and commercial troubles that for the moment worry many men, and the unsettled political world and the uncertainty in business affairs mar the calm of Christmas.

Yet that is only part of the story and the smaller part. We have gathered great harvests; even in a time of business hesitation we have a more widely diffused prosperity than any hundred millions of the human race ever before had; and the economic basis of American life is essentially sound. There is going on among the people an advance of practical knowledge that has never been matched — about good government, about good schools, about good roads, about sanitation, about good food. Beneath the political and financial unrest is a clear purpose to find a way to greater stability; the political boss does not flourish everywhere as he once did; our towns and cities are coming into a more healthful and beautiful era; country life gains every year in profit and charm, by increasing knowledge and by physical improvements and better methods. Most of all, improvement in living and health and thrift is constant.

It is well to think of Turkey and Italy and China and of the Sherman law and of the distressing problems of the rich; but it is better, as Christmas comes, to forget the burdens of the world and to be thankful for your own friends and home and family and for the incalculable good luck you have in not having been born a Chinaman or a Turk, and in not having achieved the troublesome eminence of a "trust magnate."

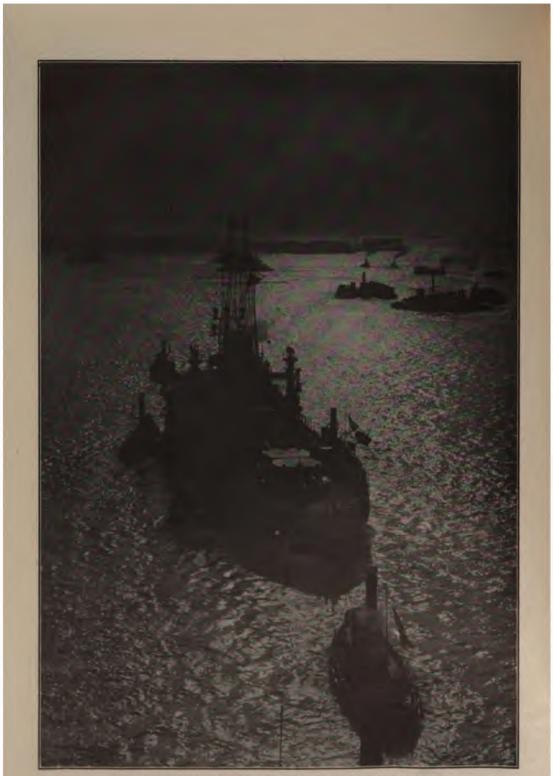
ore had; and the The American who is neither rich nor ican life is essen- poor is the most fortunate of men, going on among especially if he own his own home.







MISS GRACE C. STRACHAN THE LEADER IN THE MOVEMENT WHICH FINALLY OBTAINED A LAW IN NEW YORK FOR PAYING WOMEN TEACHERS AS MUCH AS MEN — A LAW WHICH AFFECTS I4,000 WOMEN



THE FLORIDA, THE BIGGEST BATTLESHIP AFLOAT JOINING THE GREAT FLOTILLA OF 100 SHIPS INCLUDING 24 BATTLESHIPS, THE STRONGEST AMERICAN FLEET EVER ASSEMBLED, WHICH CAME TOGETHER IN THE HUDSON RIVER ON THIRTY DAYS' NOTICE

CORPORATIONS AND PUBLIC CONFIDENCE

HE Government's suit to dissolve the United States Steel Corporation was expected. The investigation of its history by the Department of Commerce and Labor and especially by the Stanley Committee of the House took such hold on the public mind that there was no longer a chance to escape the judgment of the courts on the legality of its existence and its methods. This is not the same as to say that the Administration yielded to popular clamor or to a wish to forestall the effect of further investigation by the Democratic House Committee. Nevertheless, after the decisions in the Oil and Tobacco cases. the largest "trust" of all had little chance to escape an opportunity to show that its methods are lawful. The Administration once firmly committed to the energetic enforcement of the Sherman law is driven by its own momentum to such an action. What the result will be we shall see in due time. If this great combination is not in restraint of trade it will emerge stronger in public confidence than it is now and with suspicion removed. Incidentally, of course, its indictment will prolong the financial hesitation; and to that extent it is unfortunate.

But, it is well to remember, the depressing influence on business and the political effect of these indictments are A larger matter is at stake, incidents. namely, the question whether the Sherman law is a remedy for the industrial evils that it was aimed at. This is yet by no means certain. The dissolution of the combinations thus far made under it have been few, and the most instructive ones have not yet taken effect. We shall not know for some time precisely what the enforcement of the law can do. From a superficial or partisan view it may seem successful because the dissolution of corporations has been brought about. But the real test will come later when we can see whether they have given men greater liberty and have prevented abuses of sheer financial power and trade piracy. In the mean time we must accept political results,

and temporary financial results are incidents — unfortunate incidents, no doubt; but no change of industrial or financial or trade abuses could ever be made without incidental troubles.

It is hardly profitable to speculate on the political effect of this indictment; for there may be political effects of so many kinds that it is impossible to foresee the total result. If "big business" turn its whole influence against the renomination and the reëlection of the President, this opposition may help him. In spite of the danger of continued business depression, the bringing of the great corporations into court is sure to be popular. The policy of testing the power of the Sherman law is now inevitable. The fate of administrations and of parties may depend on the discretion and success with which it is done.

11

It is inevitable but unfortunate that the few great corporations that have been convicted or indicted hold so large a share of the public attention. Too great emphasis on them and on their sins and misfortunes has a certain tendency to question if not to discredit all great corporations, and to cause us to forget, for the moment at least, the great benefits that most of them confer on society. Everybody who has a business acquaintance will call such to mind. As this is written there comes, for instance, to this desk two brief addresses made by officers of the National Biscuit Company at a meeting in Kansas City.

Mr. A. W. Green, the President of the corporation from its beginning, declared that every officer of every corporation "should feel in his heart, in his very soul, that he has a responsibility, not merely to make dividends for his stockholders, but to enhance the material prosperity and the moral sentiment of the United States. . . . I feel in the conduct of this corporation the same responsibility to my country and to my God as I do in my conduct to my own family."

Mr. Francis L. Hine, who is president of the First National Bank of New York, and has been associated with this corporation since its beginning, said on the same occasion:

It has not sought to buy out any competitor nor to take away the business of any competitor by under-selling him. . . . To my mind this is a model corporation, national not only in name but in the scope of its operations; fair and honorable in its relations with its employees, its customers and the consuming public. . . Never so far as I know have the company's methods been questioned and in no place has it been charged with an infraction of the law.

By common repute these statements are true. But the point is, similar statements could truthfully be made about a great many other corporations. Those that have been used as machinery for stock speculations and for exaggerated valuations and those that have prospered by the destruction of their competitors are after all a small percentage of the whole number. Most of these chief sinners are large and, therefore, conspicuous. But the business done by most corporations is done as fairly as the business done by most individuals - a fact just now worth recalling as a method of keeping a proper perspective. The benefits of great cor-porations that are not under indictment ought to go far to mitigate the disturbance caused by those that are on trial.

BUSINESS IS WAITING

I NDUSTRY and commerce are waiting. The railroads are waiting before they place orders in the market for new rails, new equipment, and new buildings. The great industrial companies are waiting before they carry out their plans for building new mills, or for buying out competitors. The big electrical industry is waiting before it goes ahead with big new undertakings planned many months ago.

Further down the line, almost every manufacturing business making staple articles of trade and commerce is waiting before it enlarges its plants, takes on new burdens of selling expense, or spends money in any direction to expand its business. In the mercantile world, commercial houses have been unwilling to order their usual supplies, for they too would sooner wait for possible future developments which will lower the cost of goods.

What are they waiting for? If one asks the railroad heads, they are waiting until they are quite sure that industry is going to be carried on in this country for the next year or two on something like a normal basis. Turning then to the industrial leaders of the ccuntry, one finds them waiting, according to their own statements, for definite news from Washington as to the scope of governmental investigation into the way business is carried on. The merchants tell the same story, but add in some instances that they are also waiting to see what the tariff programme is in the next session of Congress.

Through the whole business world the question what the Government is going to do in its campaign to enforce the Sherman law, looms up as the biggest and most The vital business question of the day. President, on his journey through the West, seemed to answer the question with his reiterated statements that the Government intends to enforce the Sherman law with all possible vigor. So far the policy is well defined; but there is no criterion so far established by which any single industry may determine for itself whether or not it comes within the prohibition of the law. Therefore, in the lack of any definite statement as to the com-panies under suspicion, all branches of highly organized industry hesitate and wait, fearing the worst, but hoping for the best.

So long as this uncertainty continues, there can be no big business revival in this country. The Standard Oil and Tobacco cases appear to have been merely preliminary experiments. Will the United States Government follow up these prosecutions by wholesale prosecutions such as are indicated in the speeches of President Taft?

П

Through this whole problem there runs another question, namely, the question of the attitude of labor. When a big group of employees on the Harriman lines went on a strike a few weeks ago, it seemed as though that might be the be-

ginning of a widespread labor war. Ostensibly the dispute was about wages; but in reality the strike aimed at forcing the railroads to recognize a labor union federation which would be as complete a monopoly as, for instance, the Amalgamated Society of Railroad Servants in England.

At just about the same time that the Harriman men went out, a big strike in the building trade was narrowly averted, another dangerous strike seemed likely on the railroads of the Middle West, and still another on one of the trunk lines of the East.

Underneath this unrest there lies the same trouble which oppressed the wage earners of the country in 1909 and has, indeed, become one of the basic economic questions of the country — namely, how to fit an ever rising cost of living into a wage income that is either stationary or that grows very slowly indeed. The cost of living has not yet been solved; and unluckily all the remedies that are proposed look forward for a solution far into the future; while the bills must be paid in the present.

Ш

There are two factors in the situation that give us hope. The first is that we do not face in any section of the country anything remotely resembling an agricultural depression. The farming communities continue to go forward at about a normal rate. Booms have flattened out in places, but that is not by any means an unfavorable sign. The agri-cultural South in particular advances steadily and firmly without artificial stimulants. The West, on its crops this year, will not be recklessly extravagant, but will probably resist any tendency at all toward panic and will help to hold the industrial East steady in the face of unhappy circumstances.

The other factor is money. There is nothing in this situation to parallel the conditions of 1892, or of 1907. Money for legitimate demand is plenty. Money for conservative investment piles up in banks. There is not a single legitimate activity of the country that cannot at the present time command this legitimate supply of cash and credit. Therefore one of the dangers of our commercial system is lacking in the present situation, and this may play a very important part indeed in solving the whole problem.

WHY AMERICAN MONEY IS GOING ABROAD

ROM the time of the Morocco disturbance up to the end of October, bankers in New York and Chicago loaned to banks or other borrowers in Europe more than \$120,000,000. This is apparently a complete reversal of the usual state of affairs; for it is recog-nized and always has been recognized, that the normal condition between Europe and America is that the old countries should be heavy lenders of money to the new, and that American trade and industry should draw upon the piled-up resources of England, Germany, and France for money to finance the expanding commercial requirements of the United States.

The reversal, however, is not so complete as it looks at first glance. Our real call upon foreign wealth is a call for investment money, and not for current funds. Just as in a former era the builders of the Union Pacific, the Pennsylvania, the Great Northern railroads, and many of our great industrial companies called upon Europe for permanent funds to finance these undertakings, so to-day we are still calling upon the European investor to buy the bonds of the Telephone "Trust," the Puget Sound extension of the Milwaukee road, the new terminal expenditures of the Pennsylvania and of the New York Central. This underlying condition is not upset or turned backward by the present extraordinary movement of American funds into the money markets of Europe.

For our loans abroad are temporary loans. A loan of \$20,000,000 made to Prussia late in October, for instance, was simply the purchase of that amount of Prussian treasury bills, due and payable April 15, 1912—in effect, a six months' loan at 4¹/₄ per cent. Lending of this sort is very far removed from the long term investment of funds in foreign enterprises. What it really is, is an effort on the part of our bankers to find an outlet in short term loans abroad for funds which American industry does not want at the present time and is not likely to want for the next six months or so, to finance current requirements. It is not the kind of money that ever would go into permanent investments here in the form of bonds or stocks, and it is not, therefore, a factor in the investment market.

Nevertheless, though the phenomenon is simply the result of a temporary condition, it is extremely interesting for many reasons. First of all, it reveals in a concrete form the extent of the let-up in our own manufacturing demand for current cash. Business has slowed down to such an extent that we are able to spare from our working capital as a commercial nation these enormous sums of money without injuring in the least our own money market. In the second place, the fact that the greatest bankers in the country are willing to countenance these loans, seems to indicate that they do not expect American business to revive in the next six months or a year to an extent that will strain the resources of the bankers, and, therefore, they are willing to make loans in the foreign markets for that length of time.

Capital is confessedly growing timid under the strain and stress of Govern-ment prosecutions, of impending tariff legislation, of an election year impending, and of the generally disturbed and radical appearance of industrial conditions in the country. Nevertheless, the time has not yet arrived when one can say that American investment capital is moving into other lands by preference. There has, for instance, been very little tendency on the part of American investment capital to move over into Canada and take any large part in the boom that is going on in that country; nor has there been any great exodus of investment capital into Europe, Africa, South America, Mexico, or any other foreign section of the world. That there has been a slacking of the desire, on the part of our investment lenders, to build new enterprises and to expand in an industrial and commercial way, cannot be denied; but one is forced to the conclusion that this capital, while it is frightened and afraid to go on into its natural channels, has not yet been diverted into alien channels. The country could probably stand a year or two of present conditions without any such diversion on a large scale. In all probability, before any general tendency of this sort develops, our own standard investment securities would have been bid up to very much higher prices than now prevail.

SAFE AND UNSAFE PRESIDENTS

This inquiry has come to the World's Work:

The great advantage that the regular Republicans have, looking to next year's campaign, is that Mr. Taft is a safe man for the Presidency. We know him. He will do nothing revolutionary. On the other hand Senator La Follette is not safe. He is an extreme radical. In the other party, Governor Wilson has aroused the same fears. He seems to be courting radical support. The Democrats will do best to find a conservative like Governor Harmon or Mr. Underwood. Don't you think that the steady people of the land ought to seek safety first in their candidates, as in their investments?

Certainly. But what is the measure of safety? What seems radical to one man seems conservative to another. Senator La Senator La Follette, as Governor of Wisconsin, caused the statute books of that commonwealth to be rewritten. But they seem to have been rewritten with safety; for Wisconsin is to-day regarded as the most instructive state in the Union. There was a great outcry when he proposed to tax corporate property as private property was taxed, and when he other so-called progressive But Wisconsin is so safe toproposed measures. day that a very large number of the former enemies of his measures now approve of them. It seems somewhat illogical, then, to say that a man is unsafe who was so successful as Governor that his state is now studied with more interest than almost any other.

So, too, with Governor Wilson. The new laws that were enacted in New Jersey last winter have not overturned anything in New Jersey but certain

s of long standing. Life and propre at least as safe as they were before. talk about "unsafeness," as far relates to Governor Wilson or Sena Follette, when you run it down, ully means that some privileged st fears them. It means that they favor of doing something to uproot old abuse or to give the people more power in government. Any new

sal is "unsafe" to a certain kind ids.

v let us shift the point of view. Go g the people in the towns and r cities of the country — among little business" people, and find out idea of safe men for the Presidency. ese large circles of citizens you will er that they listen with some eagero learn whom the big interests reus unsafe; for the men thus branded afe are for that very reason regarded ese masses as safe. The unsafeness nator La Follette and of Governor n are their best assets.

iny man in public life stood for an nd currency, as Mr. Bryan once did, would be another matter. But the ndum and the recall and the regulaf corporations and good primary laws in the same category as the free ge of silver at 16 to 1.

is reasonably clear, then, that no who is now seriously thought of for Presidential nomination by either will lose anything by the cry that "unsafe." There are no doubt

"unsafe." There are no doubt people whose political memories ng enough to recall that the same 'as raised against Mr. Roosevelt. 'as the unsafe man seven years nd Mr. Alton B. Parker was the nan. Somewhat earlier, Mr. Clevewas unsafe. Yet the structure of epublic survived eight years of his ency.

he "unsafeness" of Governor Wilson Senator La Follette be strongly h emphasized, they are much more to gain than to lose by it. Since the ming of the American voter during last eight or ten years began, he has a growing fondness for men with ve programmes. About that there cannot be the slightest doubt. It is the man without a programme who is now at a disadvantage. Any Presidential candidate who should stand on the platform of "Let us alone" would be very severely let alone himself.

Yet the people are not radical nor destructive in their mood. They are themselves seeking safety from the domination of politics by any privileged class. No doubt they are sometimes too quickly suspicious. But they have been fooled by this same cry of safety; and a little "unsafeness" attracts them. This is not a humdrum time.

THE CALIFORNIA "REVOLUTION"

HE adoption by the state of California of the initiative, the referen-

dum, and the recall of all elective officers, including judges, has given the advocates of direct government great satisfaction and stirred them to new enthusiasm; and those who fear the "revolution" and regard representative government as the very anchor of our liberties are correspondingly depressed, especially by the recall of judges.

But the millennium is not yet within sight nor is the crack of doom within hearing. Our very brief experience in a limited area shows that the initiative and the referendum have given the mass of voters a new interest in elections and in public affairs and have restrained public servants, members of legislatures in particular, from the easy granting of privileges to any class. The experiments so far have been hopeful and the results justify further experiments. This is the least and the most that can yet be said.

As to the recall of judges, about which President Taft wrote his most impassioned public document — that is carrying the principle of direct responsibility to the people to its limit; and its general application would probably more or less often make a judge a victim of a passing public mood or bring pressure on him to consult popular feeling. But that is only one side of the argument.

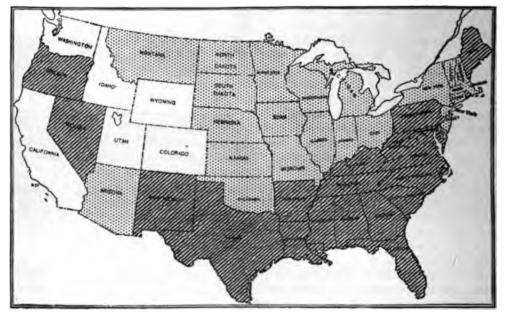
On the other side, take the case of California. For a long generation the people there have not had self-government. Representative government has been government by the Southern Pacific Railroad Company and its allied interests. Representative government has failed there, even in some instances on the bench. The situation called for a "revolution," and this surely is the gentlest form that a revolution could take. The servitude of California's government has been obvious and humiliating. It has been definite, too, and continuous.

Ought the fear, then, that at some time, under some conditions, the recall of a judge

of public servants as sacred above all other things, that moment we stop possible progress in that direction. Thoughtful men in other states, whatever their hopes or fears about the recall of judges, ought to be grateful to California for having the courage to try the experiment. For it will be instructive whether it meet their expectations or not.

11

And equal suffrage won its most noteworthy victory in California and doubled



THE WOMAN SUFFRAGE MAP

THE STATES SHOWN IN WHITE ALLOW WOMEN FULL SUFFRAGE, THOSE SHOWN WITH DOTS ALLOW THEM TO VOTE ON SCHOOL MATTERS. IN THE STATES SHOWN WITH BLACK LINES, SUFFRAGE IS RESTRICTED TO MEN

might be a mistake — ought such an indefinite fear to cause free men in such a commonwealth as this indefinitely to submit to a servile government, including some judges? In most states where the judiciary has been generally free the people will not care for a recall of judges properly; but, if the citizens of California think it advisable, they surely are entitled to try it, and they may find it beneficial.

For after all the main point is this we make progress in government, as in other activities, only by experiments. The moment we come to regard one method of the election or of the ejection the number of women who may now vote, on an equality with men. Six states now have equal suffrage. In twenty-three other states women have some privileges at the polls. The most remarkable feature of the movement is the slow and steady progress it has made. Wyoming was the first government in the world in which women won equal rights. That was forty-two years ago, and neighboring states have taken it up one by one, Utah in 1870, Colorado in 1893, Idaho in 1896, then Washington, the state next westward, in 1910, and now California.

That those communities which have

the best opportunity to watch the cings of woman suffrage have adopted a better argument for it than any ment in advance from theories of ernment. It is noteworthy, too, that the triumphs of woman suffrage in country as well as in Australia, New and, and Norway have been won out the slapping of policemen, the ling of speakers, or any similar deures from the conventional standards eminine decorum.

A NEW CHINA

W HY do not the cable dispatches plainly tell the truth about the cause of the civil war in China? cause — let us be carefully accurate only say, the occasion — of the upg was the national feeling against recent loans forced on the Chinese ernment by the four Powers, Great ain, France, Germany, and the United es — against the "selling of the coun-(so patriotic Chinese regard it) to

gn bond-buyers.

nis is, so far, the chief result of the llar Diplomacy" in the Far East. tever may be the merits of this new smanship, it has not worked out well hina, has not brought us any trade; it not even brought J. P. Morgan & Co., n, Loeb & Co., the First National s, and the National City Bank, any est; and it has not won for the ed States Government any right to cipate in the reforms to be carried in China. But it has precipitated volution; cost a good many thousand ; overthrown the Ministry; humili-, if it has not destroyed the Emperor put in jeopardy all the good will we won in China by our previous refusals oin the schemes of the plundering pean Powers, and especially by our n of the Boxer indemnity.

is difficult not to sympathize with patriotic Chinese (for the belief that Chinaman is not patriotic rests on the basis of facts as that he eats rats) is desire to keep the hand of the gner off his railroads and his mines. Chinese themselves built and they age the railroad from Shanghai to Hankow, and that from Peking to Kalgan, and the people have subscribed large sums to buy back concessions already given over to foreigners. There was no necessity for the borrowing of \$50,000,000 of the bankers of foreign nations and the hypothecating of the national revenues to those nations, all eager for an excuse to take part in China's internal affairs — that was the declared purpose of the State Department of the United States in backing up the American bankers.

It is difficult to withhold sympathy for another object of the outbreak. Another item in the revolution's indictment of Peking's Government is its failure immediately to terminate the opium trade. Any one who has read the story of the Opium War, one of the most disgraceful chapters in the history of England, knows that the Chinese Imperial Government struggled manfully against the introduction of opium into China by the East India Company until borne down by British armies; and everyone who knows anything about modern China is aware that the moral sense of the nation has ever since battled heroically against the "white dragon of the treaty ports." Within the past four years the Govern-ment has conducted a most energetic campaign, and a very largely successful one, against the vice. Under an arrangement with the British Government, a period of six years more is to elapse before the last poppy has bloomed on China's soil and the last tin of opium paste has been admitted into a Chinese port. This programme, probably a wise one, is unsatisfactory to the revolutionists, and one of their demands is the immediate total extirpation of the traffic. It may be necessary to remark that there is in China no question of prohibition not prohibiting. The mind and conscience of the whole nation is definitely resolved upon it that the land shall be delivered from the opium curse; its victims are among the most determined of all, and the scenes of voluntary renunciation, voluntary destruction of millions of dollars worth of the drug, and voluntary sub-mission to medical treatment and to surveillance, which have been lately witnessed everywhere, have revealed a moral and physical energy which puts the Chinese character into a light astonishingly new.

New, too, is the aspect in which the self restraint of the revolutionists shows the Chinese character. Thus far their conquests have been marred by no molestation of foreigners; it seems hardly possible that these can be the same people as those that broke into the insane excesses of the Taiping and the Boxer rebellions. The behavior of the several provincial assemblies and of the National Assembly has been amazing in its decorum, restraint, and practical wisdom.

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Underneath the disaffection undoubtedly lies the hatred which the Chinese feel for the Manchu emperors and officials who have wielded the power for nearly three centuries. The recent quite general abandonment of the queue is, of course, a sort of declaration of independence, the pig tail having been forced on the Chinese by their Manchu conquerors. Undoubtedly, too, the country looks with dislike upon another infant emperor and a regency. Yet it would probably be inaccurate to say that the expulsion of the Manchus is an absolute aim of the revolution. Anything may happen, anything may have happened before this page is off the press; but the temporizing behavior of Yuan Shi-kai suggests that he, the greatest single personal force in the Empire, believes that the dynasty can still be saved if it speedily bows to the national will.

It would be folly to attempt to prognosticate to-day what may happen in China to-morrow. It is clear, however, that the revolution is successful, no matter what the fate of the armed uprising, no matter whether the revolutionists proceed to overthrow the reigning dynasty or rest satisfied with having forced it to accept the revolutionists' policies and to acknowledge the dominant authority of a national parliament.

All this is, if the imagination be awake to it, a spectacle of prodigious interest. China in revolution! The most ancient and populous empire on earth in the throes of Civil War! What will be the outcome? What will China be when it is over? What we are witnessing is the birth of a new world on the continent of Asia.

WHY ITALY WENT TO WAR

***HE** sudden expansion of Italy to five times her area startled the world, and the manner of it roused general condemnation. There was nothing in her published list of grievances so serious or immediate as to warrant a war. The explanation is that Turkey had checked Italy in her efforts to carry out her cherished plans for the peaceful penetration and gradual absorption of Tripoli. Long ago Tripoli was by the tacit agreement of the Powers earmarked for Italy. So, for that matter, were Tunis and Abyssinia; but General Boulanger in 1881 stole a march on the Italians and acquired Tunis for France, and the disastrous defeat at Adowa in 1895 checked Italy's ambitions in Abyssinia. Her hopes then concentrated on the nearest and only unappropriated portion of Africa, and it is no wonder that, seeing the partition of the continent about to be completed by the French occupation of Morocco, Italy should conclude that her last chance had come and should determine to take advantage of it with or without a plausible excuse.

In reality, Italy's action does not differ from that of the other countries which now are criticizing her. Great Britain declared that her occupation of the Nile Valley would be temporary; France protested that she had no intention of occupying Algeria, Tunis, or Morocco; Spain is trying to get hold of such Moroccan soil as is within her reach; and German warships are anchored in the harbor of Agadir. For that matter the Turks themselves have but shadowy rights in Tripoli, and it is only in the last ten or twelve years that the Ottoman authorities have taken any active interest in its administration.

But the most important view of the matter is to consider the act of Italy as part of the general movement for the

reclamation of the arid places of the world. The justification for the seizure of Tripoli must be found in the future rather than in the past. England can show an orderly and prosperous Egypt and Sudan with a cotton crop doubled by irrigation. The French administration of Algeria and the Sahara, though so far less profitable commercially, has been peaceful, efficient and progressive. What can Italy make of Tripoli? Once it rivaled the Nile Valley in fertility. To-day it is desolate; of its rivers are dried up; its oases are shrinking; its caravan commerce is dwindling; its inhabitants are chiefly cave-dwellers, cliff dwellers, or nomads. The slave trade, which here has found its last outlet to the sea, has been abolished by proclamation of the Italian Governor of Tripoli.

The same question arises here as in Mesopotamia, Palestine, and other lands of the Turkish Empire --- formerly centres of civilization but now stretches of aridity. Is the change due to a change of climate or of religion? The question is now going toward settlement. Germany and Great Britain are quarreling which shall restore the rivers of Babylon; the Zionists are anxious to reclaim Palestine, and now Italy has a chance to see what she can do with Tripoli. In the Cyreniac portion of the coast, at least, there is no lack of water, though now it comes and goes too quickly to be of use. But the experience of the English on the east and of the French on the west show what irrigation can do. In the Aures Mountains of Algeria, where the native population is dense, garden plots are valued at more than a thousand dollars an acre. Land which cannot be irrigated may perhaps be cultivated by dry farming or be planted with new species of useful plants that resist drought. The King of Italy has taken a deep interest in our agricultural methods. It is quite likely that our success in wiping off the map the bare space marked "Great American Desert,' has encouraged him to undertake the reclamation of the Sahara. If it is success-ful, the 200,000 Italians who annually emigrate to the United States and the 100,000 who annually emigrate to Argentina may find homes in a Greater Italy on the opposite shore of the Mediterranean. Such at least, is the Italian hope.

GOOD LITERATURE FOR THE MILLION - FREE

N SPITE of the incalculable overproduction of books and the summaries

of them (which many persons read instead of reading the books themselves), there is one branch of contemporary literature of vast interest and importance that the public of the bookshops hears little about. The following publications for instance, happen at this moment to be on this desk:

"Housekeeping and Household Arts: a Manual for Work with the Girls in the Elementary Schools of the Philippine Islands, by Alice M. Fuller, Being Bulletin No. 35 of the Bureau of Education, Manila." To a layman this seems one of the most helpful and practical books for the purpose that can be conceived of. No book of this kind so direct and excellent was ever made till within a few years. And it is for young Filipino girls.

years. And it is for young Filipino girls. "A Statement of the Rural School Problem in South Carolina, by W. K. Tate, State Supervisor of Elementary Rural Schools, Being a Bulletin of the University of South Carolina" — patriotic, practical, philosophical and as good reading (being sound in doctrine and clearly written) as you will find in a day's looking.

day's looking. "Plays and Games for Schools, Issued by C. P. Cary, State Superintendent of the Schools of Wisconsin." As complete an illustrated manual as you could ever want, with this new feature — instruction to teachers how to teach and to organize the play of their pupils.

"School Architecture Plans and Suggestions for Building One, Two, Three and Four-room Schoolhouses, Issued by the Department of Education of the State of Georgia, by M. L. Brittain, Superintendent." It describes proper sites and grounds as well as architectural plans, the tints of walls, the cost of material and work, and the construction of proper sanitary outhouses — all clearly illustrated. "It is almost as cheap to build an attractive schoolhouse as an ugly one." The sanitary information in this pamphlet was not accessible to the public in any shape five years ago.

"Farm Arithmetic Contains Nothing about Longitude and Time and Cube Root, English Money or the Binomial Theorem, but Devotes its Time to the Sort of Arithmetic that the Farm Boy or Girl Will Use Every Day in Actual Life. A Book of Real Problems for Farm Boys and Girls. By Miss Jessie Field, County Superintendent of Schools, Page County, Iowa." This is a course in mathematics packed into twenty pages of a small pamphlet.

These are samples of a very large number of such books and pamphlets that, all together, have a circulation far beyond the best-selling novels. They carry, in practical, helpful form, sanitary, architectural, decorative, household, and educational information to the millions, especially to the millions of country children. You must emphasize especially the sanitary value of these pamphlets in your mind if you would form a right measure of their meaning.

No preceding era of human history ever had a match for this mass of beneficial literature. If you become weary of novels, send for a dozen or two of these pamphlets. You will get much useful information and a new and firmer grip on your pride in your country and on your hope for the coming generation. As school reports used to be the dullest things on earth, these bulletins are among the most interesting.

CHRISTMAS AS A TEST OF US

R ATHER than have preparations for Christmas bother you, recall the most original and successful simple kindness that you did or that you received or that you heard of last Christmas, and repeat it. For human nature hasn't changed much these twelve months even in our rushing time. And Christmas, you know, is a state of character, and its enjoyment comes from such kindly acts as this state of character spontaneously suggests. If you approach it with worry or find yourself bothered about it, then there'll be no real Christmas for you. Now will you help others; for the state of mind out of which your own acts spring flavors the acts. A present that has worried you is likely to carry a dull message.

There are thrifty souls who did all their Christmas preparations last July — poor souls, for the matter thus done took on the nature of a task. The task is accomplished, of course; but was it worth doing? What did the doers get out of it? There were no stockings nor green trees nor playful moods nor jingle of Santa Claus's bells within six months of them. Such dutiful thrift is a poor substitute for the joy of doing the thing right with some spontaneity.

It is a good rule to spend a little happy thought to make every remembrance fit, rather than much money to make it impressive. The spirit of Christmas doesn't cling to presents in proportion to their cost — unless you are very rich; and, if you are very rich, you will not follow these suggestions anyhow; for the voice of the jeweler and of the furrier and of the motor-car maker will seem to you as wise as the word of a happy poor man, though he were a philosopher.

Simple and genuine and glad — strike these notes and the chimes will ring very melodiously for you and for those whom you try to make happy. And remember, you can't feign Christmas without being caught as an impostor both by your own conscience and by the feelings of those about you. The very value of Christmas is that it puts the genuineness of everybody to an unerring test.

A CORRECTION

IN A list of so-called "Holding Companies," published in the article "Insurance Stock and a Gullible Public" in the September number of the WORLD'S WORK, the name of the Mid-Continent Life Insurance Company of Oklahoma was included.

This is an error. We have learned, from the company and from independent sources, that this company is a legal reserve company and has been writing standard policies since its inception. It is therefore not liable to the criticism directed against holding companies, and should be judged purely as an insurance company.

In the same article, we used a list compiled by *Best's Life Insurance News* showing the amount of dividends paid by new insurance companies in the past five years. Messrs. A. M. Best & Co. inform us that several minor errors occurred in that list, notably a failure to credit the Scranton Life with \$5,388 paid in 1909. This change, however, does not alter the general conclusion, which is that the stocks of new life insurance companies have paid in the past five years average dividends of only about thirteen-hundredths of one per cent. a year.

IS IT A TIME TO INVEST?

MINISTER living in Pennsylvania and in charge of a relatively small parish, inherited about \$6,000 last summer. The money came to him early in October. He wrote to the WORLD's WORK seeking advice about the use of it. He said that, ever since he had heard that he was going to get it, he had been figuring out a way to use it and he had concluded late in August that he would put it away in safe bonds and mortgages to yield him 5 per cent. and afford the largest possible degree of safety and ease of mind.

In September he heard of the big decline in the Wall Street market, and he wrote in October to find out whether or not it would be a good thing for him, instead of making his permanent investment at this time, to buy some stock, in the hope of largely increasing his money and then making a permanent investment later on. The stocks he had picked out for this dubious experiment were Pennsylvania, United States Steel, Rock Island, and Wabash. He thought that the first two named were high class stocks and that the others must be good bargains because they seemed to be selling very cheap.

He had in his mind one fairly sensible notion, namely, that if an investor is going to take a chance at all for the sake of big profit or very large revenue, he ought to take his riskt with only a part of his investment funds, and keep the rest of the fund in solid substantial securities. That is a sound principle in all speculation. The theory is that the half of the fund in which a very large chance is taken may decline a great deal, in which case the solid half is available as a reserve with which to buy more of the speculative security at very low prices.

His application of this theory was, of course, very faulty, as the layman's application of any financial theory nearly always is. He thought that the Steel stock was a solid security because it pays dividends; whereas, as a matter of fact, it is just as likely to decline as either of the last two stocks in his list.

His situation is typical of the situation of thousands of investors at the present time. I think that there has never been a time when more people were writing to this magazine to know what to do with stocks which they hold at a very big loss or to know something about the prospects in the stock market. Occasionally somebody suggests going to the length of selling good investment securities for the sake of buying speculative stock.

It is timely, therefore, to answer this inquiry in an article and to try to discover as well as one may whether the present is a time when the average investor, for whom this article is written, should go into the stock market and make a temporary investment such as all men contemplate when they patronize this department of the market, or to put their money to work in conservative securities along the line of safety rather than of profit.

The lure of the open market is always strong immediately after a period in

which the best known stocks of the country have declined to relatively low prices. Possibly the best known stocks in this country are Pennsylvania, United States Steel, Union Pacific, and American Telephone and Telegraph. Early in the year, Pennsylvania sold at 130, United States Steel at 82, Union Pacific at 192, and American Telephone and Telegraph at 153. In August and September, Pennsylvania sold as low as 119, United States Steel as low as 52, Union Pacific as low as 154 and American Telephone and Telegraph at 132 — an average decline of about 25 points. It is little wonder, therefore, that, in the mind of the layman, the question arises whether these stocks, and consequently all other stocks, are not selling at extremely low prices.

If the stock market ran all by itself, and bore no relationship whatever to the rest of the United States, the question would be easy to answer. It is somewhat combe easy to answer. plicated, however, by the fact that the stock market is the most complex piece of mechanism in the whole world of commerce. It is closely related and is extremely sensitive to almost every branch of human endeavor. A war in Africa, a strike in Nebraska, a political upheaval at Washington, an earthquake in San Francisco, a crop failure in Dakota, a bank smash in New York, a trade war at Pittsburgh, or any one of a hundred other circumstances may make or mar the future of the stock market - not for a day or a week, but for long protracted periods. As the years have gone by, and power has centred more and more in the hands of a few men and institutions, the welfare of the market, like the welfare of the country itself - indeed they are synonymous so far as results are concerned — has become more sensitive than ever to sudden shifts and changes.

Therefore, the argument from relative prices alone is a treacherous and dangerous argument. There is a kind of men who earn their daily living at a very good rate indeed by studying the intrinsic value of stocks and gauging for the benefit of the public the trend of the market, months and years in advance. To-day, no two of these gentlemen agree upon the future of the

stock market, taking that phrase to mean a period of twelve months or more. One of the leaders of the profession has, in fact, lost his fortune and his hold upon the public by being hopelessly wrong for the past six months; and he has only recently reversed his judgment. According to many others of his trade he is now as hopelessly wrong on the other side.

If these men, who spend their lives and their money in a deep and painstaking study of financial reports, of economic tendencies, and of trade conditions are as wide apart as the poles in their estimate of the coming months, of what possible use can it be for a layman to compile his little quota of figures and draw his lightweight conclusions as to the aspect of things the day after to-morrow?

While it is quite possible that stock market purchases to-day are a reasonable business venture, I think that the consensus of intelligent opinion in the stock market itself is that, in a period so uncertain from every point of view, the wisest investor is he who either abstains from the purchase of speculative stocks in large quantities, or at any rate puts but a relatively small part of his money to work in the field of stock market endeavor. lt is probably correct to say that, while a man of large wealth, not in any sense dependent upon his investments either for a living or for his peace of mind, might very well regard the present time as one suitable for stock market buying, the really conservative investor, particularly if he is not versed and trained in financial business, will do very well to leave the stock market alone.

On the positive side, the situation is far different. Let us approach it from the same angle. Since we have used four of the best known stocks to illustrate the present position of that market let us cite four distributed and well known bonds of different classes to illustrate the status of the bond market. In order to make it a perfect parallel, bonds of the properties whose stocks were cited in the preceding paragraph may serve the purpose best. The Pennsylvania $3\frac{1}{2}$ per cent. bonds of 1915 sold at $97\frac{1}{2}$ early in the year and at $96\frac{1}{2}$ at the time this article is written.

The United States Steel second 5 per cent. bonds sold at $106\frac{1}{4}$ and now at 102. The Union Pacific Refunding 4's sold at $102\frac{1}{4}$ and now at $101\frac{1}{4}$. The American Telephone and Telegraph Collateral 4's sold at $92\frac{1}{6}$, now $90\frac{1}{4}$. The decline is a little more than 2 per cent.

In other words, while the investor in the stocks of these corporations has seen a decline of 25 per cent. in his investment, the holder of bonds of the same companies has seen a decline of 2 per cent. during the same period. Obviously, so small a change in the price of representative bonds has not put this group of four bonds on the bargain counter; but it is only once in a very long time that standard bonds of this class are really marked down to a bargain basis.

The decline in price is not the point of this calculation at all. The point is that the economic conditions which struck so hard at the stocks of these great corporations and which may or may not strike still harder in the future, have not shaken the bonds of these same companies. If this study were made to cover the entire bond market, the same conclusions would be reached. One may count on the fingers of a hand the well known bonds of well known corporations which have been materially affected by these economic Those that have been so conditions. affected are the bonds of properties so weak in themselves that the present conditions have practically wiped out the stockholders altogether and struck down deep into the very heart of the enterprise.

The first obvious conclusion, then, is that, if a man seeks to escape in his investments the uncertainties and vicissitudes of industrial, railroad, and commercial fortune during the coming period, he may turn with confidence toward the solid and established bonds which are sold every day in the market place. It remains a fact that the very heart and centre of the investment market to-day is found in the trading in these standard bonds; and this is probably the safest ground upon which a cautious man seeking to use his money profitably may take a stand.

The second point is perhaps equally im-

portant. To-day the man who seeks 5 per cent. or more together with safety, turns away from the standard listed securities that are dealt in every day on the market, toward that very large class of public utility and industrial bonds which are dealt in outside the Stock Exchange. In this department there has been a time of test, not by any means so severe as in 1907, but yet severe enough to establish certain sign posts and marks along the way. The road to safe investments of this class has been marked a little more clearly.

Here it has been demonstrated that one class of banking houses, dealing in securities of very high yield and of a new variety, is unsafe. In another place, four or five bankers selling public utility bonds of a construction company by means of misrepresentation and fraud have been wiped out. In every department of this market the banking fraternity has taken warning from these episodes; and to-day more than at any other time since I have known this market, the careful banker leans backward in his effort to abstain from misrepresenting facts, from coloring too highly his picture of conditions, and from endorsing too warmly the securities he sells.

To put it briefly, the conditions of the past three or four years, marking the transition from the rather lax and happygo-lucky investment code of 1906 to the beginning of a new era in the investment world, have put a premium on honesty and truthfulness in this market place and a very heavy discount indeed upon dishonesty, misrepresentation, and fraud.

The average investor, seeking at this time to put his money away in safety and solidity, may with perfect propriety demand and obtain an average yield of 5 per cent. on his investment funds and may, at the same time, have more than half of those funds available for use in any personal contingency that may arise. If he is sure that no such contingency may arise, he may seek an even higher rate than this; but it is good judgment to lay emphasis rather upon safety and assured income than upon the maximum of revenue on a minimum of investment—C. M. K.

AN INTERNATIONAL PEACE NUMBER

T MAY seem a queer time to issue an International Peace Number or, it may seem a time when the issuing of a Peace Number is peculiarly needed — as you please.

With a state of war existing between Italy and Turkey; with China on revolution; with France and Germany retired only a few steps from conflict, it seems an inappropriate moment to celebrate the coming of a day of universal harmony.

In devoting some pages, nevertheless, to the movement for the doing away with armed conflict, the WORLD'S WORK is the victim of no such delusion as that the earth has seen the last of war's woe, no such hope as that to-morrow all governments will confess their allegiance to the enlightened principles of justice and reason to which men have individually come to yield. It will take longer to abolish duels between nations than it took to make duels between individuals a confessed disgrace.

But he is blind who fails to see, spite of all contrary appearances, that the international duel is bound to go as certainly as the duel of individuals has gone. This confidence rests on no mere general faith that the onward sweep of reason must efface such a monstrous folly as war, but on definite evidence that the abandonment of battle is already contemplated by a swiftly-growing public opinion. The cost of war has grown almost prohibitive; its destructiveness has become so horrible that it is bound to destroy itself; the chief reason for it has been done away, for the financial interdependence of modern nations makes it impossible for a victor to get away with spoils.

Consider the views set forth in the pages that follow. It is a simple fact that such an exhibition of reason and conscience on the subject, from sources so high, or indeed from any source whatsoever, would have been unthinkable a generation or even a decade ago. Here is a President of the United States arguing

in favor of treaties which bind our Government — bind it, not sentimentally, but practically, actually — to abandon the principle of war for the principle of arbitration; and expressing his hope and belief that the nations of the future will submit all their quarrels to a World-Court.

Here are a dozen men from various walks of life, but all conversant with public affairs and influential in them. who look forward to "the sure coming" of the day of peace. True, a dozen more are of faint hope, and two or three frankly without either hope or desire. Mr. Hudson Maxim, naturally enough, looks upon battle as a necessary and indeed benificent institution. Bishop Tuttle is an orthodox cleric who believes in vengeance by the sword and quotes Scripture to prove it. Mr. John Bigelow, on the other hand, writes in unregenerate spirit to put the responsibility for war, not (like the good Bishop) on the Savior, but on the total depravity of man — a doctrine in which he believes, as he was taught to believe eighty years ago, and which he insists that men should still live up to. Lord Northcliffe, Senator Lodge, Governor Wilson, Cardinal Gibbons, and Congressman Underwood warn us not to be too sanguine.

But it is difficult not to be sanguine when we ponder the sober facts set forth by Professor Patten, or the apparently unanswerable argument of Mr. Norman Angell (who deserves the Nobel Peace Prize this year); when we follow the incisive argument of Judge Grosscup, or allow our minds to partake of the large historic vision of Dr. Eliot. Mr. Straus says truly that more progress in providing for the maintenance of peace among nations has been made during the past twelve years than in all the rest of the ages from the dawn of history. That is true; and it is a truth the magnitude of which, the colossal importance of which, ought to stagger the mind and fire the imagination.

WORLD-PEACE AND THE GENERAL ARBITRATION TREATIES

SWIFTLY-GATHERING SENTIMENT ENCOURAGES HOPE FOR AN AREOPAGITIC COURT OF THE NATIONS — THE TREATIES AWAITING RATIFICATION A LONG ADVANCE IN CIVILIZATION — ARE WE IN FAVOR

OF ARBITRATION OR WAR?

BY

WILLIAM HOWARD TAFT

(REPORTED BY WILLIAM BAYARD HALE)

was an autumn day at Beverly-bythe-Sea. The cold wind that swept up the bill made the log that crackled in the study fire-place a pleasure to the eye and a comfort to the back. The last detail of a long journey through twenty-four states of the Union, to be entered upon on the morrow, was completed. A last official act — the exchanging of adieux with the late ambassador of Japan, just called bome to become bis Emperor's Minister of Foreign Affairs — was over. A loyal delegation of New England's business men bad come, offered their stirrup-cup of cheer, and departed, and the President bad an bour all bis own. He sat back in bis chair, and talked — talked of a thing that lies perhaps nearer his heart than anything else in the world — talked of peace on earth among the nations of the earth, and the prospect of it. The sun was going down in a particularly fine exhibition of its best colors.

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When a President relaxes before bis study fire late on a fine autumn afternoon, be is pretty certain to say something interesting. Mr. Taft said a great many things interesting. Some of them discretion scarcely suggests the advisability of printing. But some other things which the President said so manifestly ought to be printed ought to be heard not by a solitary listener but by the nation and the world, both on account of their intrinsic interest and of their significance coming from the occupant of so exalted an office — that I asked permission to write them out. And obtained it, with the qualification that I should make it clear I was recording an unpremeditated, informal conversation.

Thus, then, the President, to the best of bis interlocutor's recollection:

Do you know that one of the most notable phenomena of the day is the swiftness with which belief in permanent international peace is growing?

Yes, this sentiment, comparatively new in the world, has made enormous strides within the past few years. Wherever 1 go I find the most eager interest in anything I say on the subject of war and peace. Crowds grow silent as I approach that theme; men put a hand behind the ear and stand on tiptoe leaning forward so as not to miss a word. There is astir a profound revolution in the popular thought on the subject of war, a moral awakening to the hideous wickedness of armed combat between man and man, and an economic perception of the wastefulness and folly not only of war but of the great armaments which the present jealousy of the Powers makes it necessary to maintain.

Workingmen have brought it home to me as I have seen and talked with them in all parts of the country that they are against war. They have to pay the bills, and what do they gain? What interest have they in the common run of disputes between governments — matters of boundary, matters of dynasty, matters of socalled "honor"? And if they feel any interest in the dispute, they want to know why it can't be settled in some way less archaic, less barbarous, less wasteful, than the marching out of armies of men bent on killing one another.

It is indeed a barbarous thing, a thing worthy of the Stone Age, that men with common interests, a common destiny, with all the great common causes, common battles to fight against nature, common marches to make up the ascent of civilization — a barbarous thing that men should cease from their common war to engage in mutual slaughter and destruction, should batter and disfigure and maim and slay one another.

With this feeling in the mind of the workingman, war to-day does not afford the glittering prospects it once did. It is, for instance, no longer advisable to resort to conflict with another country as a means of reuniting a country distracted by internal problems. On the contrary, war is distinctly dangerous to a country torn by internal dissensions. The increased burden of taxation, the tightness of money, the inconvenience of living, the unpopularity of war, the absence of troops, abnormal conditions generally, and especially the vivid realization that the interests of the rulers are not the interests of the people — these things are likely to provoke and encourage domestic disaffection.

The birth and growth of this peace sentiment (and I tell you it is acquiring amazing strength) is not to be wondered at; it would have been a cause of wonder if it had not been born. We have advanced in everything else; we have lagged far behind in this serious and terrible matter of international disputes, allowing them to settle themselves according to the rude and savage methods of days long past. Now we have at last taken up that matter, I am inclined to think that we shall advance with it much more swiftly than some will believe.

The exening papers on the table bad cables from Peking telling of the gravity of the insurrection in a Chinese province; cables from Paris. Berlin, and Rome agreeing in pessimistic views of the outcome of the European crisis. But the President talked on of permanent peace among the nations. I say boldly that what I look forward to is nothing less than a court of the nations — an Areopagitic court, to whose conscientious and impartial judgment peoples shall submit their disputes, to be decided according to the eternal principles of law and equity.

Civilization demands that, and it is coming. The treaties with Great Britain and France lately negotiated, will, if ratified by the Senate, mark a long step into the path along which the world must now advance.

Everyone recognizes that our existing treaties with England and France --- which agree to arbitrate all questions except those which affect the vital interests or the national honor of the Powers concerned -make an advance in international relations. Yet, of course, when any question comes up, either nation might convince itself that its vital interests or its national honor were involved, and There are very few refuse to arbitrate. questions which might not be so construed in the opinion of one or the other nation. I mean to say that the exception in the present treaties is so phrased that it really leaves very little to be arbitrated; it leaves us definitely committed to very little indeed. In effect, we merely declare that we are in favor of arbitration, and that, when a question arises which we are willing to arbitrate, we will arbitrate it — if the other nation also is willing.

Now, that is all very well — but it doesn't go very far toward permanent peace — toward providing a means for the settling of those serious questions which lead to wars.

The new treaties do provide that means; the new treaties do really commit us, and the nations which sign with us, to seek a settlement of all disputes, even the most serious, without armed conflict. The new treaties do not leave it to the excited, momentary opinion of the countries involved to decide whether or not the question which has arisen is one that may honorably be arbitrated. The new treaties provide a judicial means of settling that initial question. They es-



tablish a Joint High Commission to pass on that question.

This device of the Joint High Commission is the centre and the point of the whole plan. I repeat there is nothing gained for the cause of peace by agreeing to arbitrate what and when we feel inclined. There is everything gained for it by agreeing to arbitrate whatever an impartial tribunal says is arbitrable. These treaties establish such a tribunal; under the plan it will always be constituted of an equal number of citizens of the United States and of the other country involved - three of each. It is a mistake to say that the Joint High Commission might be made up of foreigners. That could not possibly be; there must always be in it three American citizens and three citizens or subjects of the other nation;

and unless five of the six agree that the issue is an international one which may be settled by the just application of the principles of law and equity in which the whole civilized world agree arbitration may not be had. If five of the six members agree that it is capable of just settlement by the impartial principles of law and equity, then the Ex-



IN BALTIMORE ON MAY 3, 1911 PRESIDENT TAFT, THE OFFICIAL HEAD OF THE ARMY AND NAVY, AND SECRETARY OF WAR DICKINSON ARRIVING AT THE PEACE CONFERENCE

ecutive and the Senate are bound to take the steps necessary to submit the question to a board of arbitration.

We should not be forced to arbitrate anything, and, of course, on the other hand, we should not be able to secure arbitration for anything, unless two of our own three members agree on it.

The treaties themselves naturally do not state how the members of the Joint High Commission are to be selected. Each nation will name them as it sees fit. The Senate can, if it like, reserve to itself the right to confirm nominations made by the President. I see no objection to that. There is another feature which has not been appreciated, as much as it deserves. In the first place, under these treaties, before we come to actual arbitration or even to reference to the Joint High Commission for a decision as to whether arbitration is or is not to be had, it is provided that either party to a dispute may postpone action for one year, in order to afford an opportunity for diplomatic discussion and adjustment.

Now, that year's delay would prevent almost any possible war. Wars almost invariably spring from the swift passions of a moment. Almost invariably governments are hurried into some belligerent act by the sudden passion of a people aroused by an accident, a misunderstanding, or an error, which a few days' delay would cure, and a few months'

time would erase from the memory. The necessity for a very little delay, the making it impossible for two Powers to rush into hostilities, would remove far more than half the peril of war.

Objection has been made, you know, that the ratification of these treaties would obligate us to submit to outsiders questions so vital as,

for instance, the restriction of immigration, the Monroe Doctrine, and the payment of Confederate bonds. Senator Root has proposed to put into the resolution ratifying the treaties a qualification to the effect that they do not authorize the submission to arbitration of "any questions which depend upon or involve the maintenance of the traditional attitude of the United States concerning American questions or other purely Governmental policy."

Senator Root's resolution does no harm, but the subjects which it excepts from those which may be arbitrated were never among them. The treaties as they now

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stand do not contemplate the arbitration of any questions connected with immigration or the Monroe Doctrine. These are all domestic matters, matters of internal policy, which no other power could bring into question.

What is the good of such a qualification? It is already implicit in the treaties as they stand. All of us in our daily lives are fully subject to the courts of the land. We are responsible for our every act, and we may be haled before the court viding that we shall be free to restrict immigration and to enforce the Monroe Doctrine. Those are national matters — not international. They would never be arbitrated, Root resolution or no Root resolution. As to immigration, there can't be an instant's doubt that it is a purely domestic matter. As to the Monroe Doctrine, I believe that the study of that subject will demonstrate that it, too, is by all the world recognized and accepted as a settled national policy of the United



THE PRESIDENT ON HIS FAVORITE SUBJECT "CROWDS GROW SILENT AS I APPROACH THAT THEME; MEN PUT A HAND BEHIND THE EAR AND STAND ON TIP-TOE LEANING FORWARD SO AS NOT TO MISS A WORD"

and our acts questioned, and the decision of the court pronounced. Yet people do not worry lest they have to submit to the judge the internal conduct of their own households. They don't deem it necessary to draft a bill of rights guaranteeing that a man shall be secure in his inalienable privilege of marrying either a blonde or a brunette as his taste and the opinions of the girls decide. That would be no more absurd than is the amendment proStates. A policy which has been continually adhered to for a century, publicly and in the eyes and ears of the whole world, without challenge by any Power, has ceased to be open to question. Prof. John Bassett Moore, than whom there is no higher authority, takes the position that it is a strictly national policy. Sir Edward Grey, Great Britain's Minister of Foreign Affairs, has in words so described it — which makes it probable that. both the French and British governments would acquiesce in that view.

While I am expressing my own views, I may as well say that personally I would go further than these treaties go in the matter of deciding what questions are justiceable. I should be willing to leave the question of whether or not an issue arising between two nations is arbitrable to the decision — not of a Joint High Commission whose finding is practically controlled by a majority of our own representatives upon it — but of the Board of Arbitration itself, which is ultimately Now, those who object to these treaties in their hearts object to any arbitration; that is all there is about it. They do not realize it themselves, but that is the truth. They will agree to arbitrate everything — which they may themselves see fit to arbitrate. That will not go very far.

Either we are in favor of arbitration of issues which are likely to lead to war or we are not.

If we are in favor of war as the only means of settling questions of importance between countries, then let us recognize



A PROUD MOMENT FOR THE PRESIDENT THE SIGNING OF THE ARBITRATION TREATY, AUGUST 3, 1911, BETWEEN ENGLAND AND THE UNITED STATES BY AMBASSADOR BRYCE. SECRETARY KNOX, AT THE OTHER END OF THE TABLE IS PUTTING HIS NAME TO THE TREATY BETWEEN FRANCE AND THE UNITED STATES. THESE TREATIES ARE NOW AWAITING CONFIRMATION BY THE SENATE

to decide the issue, if it be arbitrable. I should be willing to have that board pass not only upon the merits of the question, but also upon the jurisdiction. In time I have no doubt we shall come to that, but these treaties do not go that far. They do take away from the Executive and the Senate the absolute power to withhold a question from arbitration just because they do not choose to arbitrate it, and yet they do leave the question of arbitration in the hands of a Commission practically controlled by our own members. it as a principle and decline all arbitration. But if we are really in favor of arbitration as a means of avoiding war, then why should we not be willing to submit to impartial men the decision upon a question rather than leave it to the result of a bloody battle, in which, with the fair cause, we may be beaten, or with an unjust cause, we may conquer? If we are going to substitute reason for force, law for clashing individual wills, the court for the duel, the reign of right for the rule of might — well, we shall just

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have to substitute them. lt won't do to say we believe in arbitration, and then refuse to arbitrate anything but minor questions about which we care nothing, which we are certain of winning, or which we are willing to lose. You can't have a court on such terms. You can't enforce international law and equity over the affairs of nations by playing fast and loose like that. It is no good talking about the grand principle of international arbitration - and then excepting from the application of that principle all that makes it of any significance.

Of course, a man who in his heart of hearts believes in war and likes it, who is convinced that it is a noble game, strengthening the body and elevating the soul of course, that man can not be expected to support real arbitration treaties. There are those who were born with this spirit in their breast and who probably do sincerely regard as invertebrate milksops us who are opposed to war.

Some of us really believe in arbitration believe not only in talking about it, but also in practising it. Some of us so hate war, while we so love the peace of righteousness, that we are willing to submit all our disputes to disinterested judges. We believe that the method of judicial determination is as much juster, wiser, more righteous, more advantageous than war, as the day is clearer, more revealing, more beautiful than the night.

President Taft is a man profoundly, religiously impressed with the wickedness of war. He is, furthermore, through all his veins, a believer in the processes of legal judgment. He does not believe that it is necessary to be a man of Berseker soul in order to understand the glory of conflict. He holds that in the battle against disease and ignorance, the battle to win the truths of science and to subjugate nature, man, the man of the future, will find, in a nobler fashion of fighting, a "moral equivalent for war." He does not believe that the gallant soldierly virtues will die out because fields are no longer strewn with dead and widows left weeping in smoldering cities. He believes that finer courage, nobler beroism, will bave its opportunity when the leaders of the nations have found wisdom to "guide our feet into the way of peace."

RECENT INTERNATIONAL EVENTS AND "THE GREAT ILLUSION"

WHAT HAPPENED THE OTHER DAY WHEN GERMANY THREATENED THE WORLD'S PEACE — STRIKING ILLUSTRATION OF THE FUTILITY OF WAR AMONG MODERN INTERDEPENDENT NATIONS

BY

NORMAN ANGELL

(AUTHOR OF " THE GREAT ILLUSION")

HE series of Bourse crises on the Berlin Stock Exchange by which German bankers, merchants, and manufacturers suffered heavily as a direct result of an act of political aggression on the part of the German Government is a fact which illustrates and confirms in a sufficiently striking fashion the thesis which I have attempted to outline in "The Great Illusion." What, in two words, is this thesis? It is this: that it has in the modern world become impossible, by successful war between civilized nations, to derive any profit whatsoever. This involves, of course, a complete repudiation of the axioms which have heretofore dominated and still to a large extent dominate European statecraft. The action of, for instance, Germany during the last decade or so has been founded upon a quitc definite set of political principles, which were enunciated by the Chancellor when he declined to associate Germany in any movement for limitation of armament, as frankly and as honestly as diplomatic usage allows. He urged this: The condition of national prosperity is national strength, and a nation that is not politically (i.e., militarily) strong must play a secondary and effaced rôle in the affairs of the world; must live on the sufferance and good will of others, unable to make its due weight felt in the councils of nations, or ensure respect for its legitimate interests; and, when it comes to the pinch, be shouldered out by the more lusty. "When a people will not or cannot continue to spend enough on its armaments to be able to make its way (sich durchqusetzen) in the world, then it falls back into the second rank and sinks down to the rôle of super on the world's stage. There will always be another and stronger which is ready to take its place."

Even more concretely was this view expressed more than a decade since by the German delegate to the first Hague Peace Conference, Baron Karl Von Stengel. This authority says in his book that

Every great power must employ his efforts towards exercising the largest influence possible not only in European but in world politics, and this mainly because economic power depends in the last resort on political power, and because the largest participation possible in the trade of the world is a vital question for every nation.

Moreover, the foregoing is not a view in any way peculiar to German statesmen; it has the heartiest endorsement of our own great authorities. Admiral Mahan, whose work on the Influence of Sea Power gives him, on his side of the question, an authority second to none, is still more emphatic and still more definite. In his latest book, he writes:

The supremacy of Great Britain in European seas means a perpetually latent control of German commerce . . . The world has long been accustomed to the idea of a predominant naval power, coupling it with the name of Great Britain, and it has been noted that such power when achieved is commonly associated with commercial and industrial predominance, the struggle for which is now in progress between Great Britain and Germany. Such predominance forces a nation to seek markets and, where possible, control them to its own advantage by predonderant force.

There you have it quite clearly from the greatest Anglo-Saxon exponent of the old political creed. The naval rivalry between Great Britain and Germany is part of that struggle for commercial and industrial predominance which is going on between two countries, and moreover the Mahans, von Stengels, Homer, Leas, and Roosevelts defend these "axioms" by what is presumed to be a very profound philosophy. It is all, we are told, in keeping with the great laws of life in the world - with all that we know of the evolutionary process; throughout nature, the law of fight and struggle is supreme; so must it be with nations.

Well, it's all wrong. It considers only one half of the facts, and the other half, perhaps the larger, certainly the dominating half in the general process of human development, is left out. And the evolutionary analogy at which I have hinted, and which is accepted almost universally as a true analogy, is an absolutely false one, and there again the dominating factor, as we shall see presently, has not been considered.

The illusion is a double one. Struggle is only one half of the law of life. The other half, without which life would be impossible, is known as the law of mutual This process, which aid, cooperation. throughout all the higher forms of life runs parallel with the law of struggle, is seen even in the earliest organism. Its simplest form is the cooperation of male and female. If struggle in its completest form prevented that coöperation, life would never have developed beyond the first organism that possessed a sex; and it will be found that in the process of development every added factor of cooperation diminishes the proportional importance of the factor of conflict. For this reason in the domain of sociology the relative rôles of these two factors are constantly changing. Let us illustrate as concretely as possible.

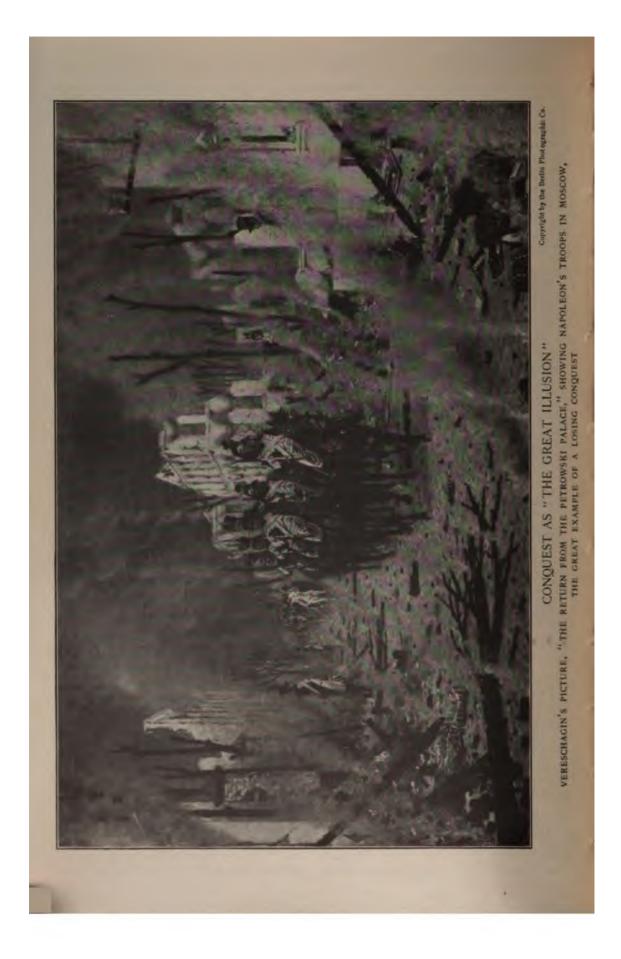
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When Olaf, the Viking king, descended on the coast of Northumbria, he hammered his way into a Saxon stronghold, seized all the gold and silver and hides and corn and cattle and women and slaves that he could lay hand on, sailed back home, and was the richer by just the amount of loot he could safely land on his own shores. As against the profit of such an expedition he had to set on the debit side of the account practically nothing at all. in this way, German merchants would probably pay a hundred. Every time that he brought an English bank or insurance company or commercial house to ruin he would know with absolute and mathematical certainty that he would, by the same blow, bring a German bank, a German insurance company, and a German house to ruin also. Can we pretend therefore, that conditions have not altered? Of course, they have altered. The factor of coöperation which



A UNANIMOUS VOTE FOR PEACE AT THE MASS MEETING BY THE GERMAN SOCIAL DEMOCRATS HELD TO DISCUSS THE THREATENED WAR WITH FRANCE IN TREPTOW PARK, BERLIN

But imagine a modern Olaf landed in London at the head of a victorious army making straight for the cellars of the Bank of England and looting them in the fashion in which one distressed correspondent of a London paper foresees would the position be the same? The position would be absolutely different; for the day that he looted the Bank of England, the Bank of Germany would suspend payment, and his own balance therein disappear. For every sovereign that he took from English merchants our credit system every day and every hour is intensifying has modified profoundly the weight of the factor of conflict; to such a degree indeed that confiscation, in the rude form in which the nervous correspondent I have cited suggests, has become a practical impossibility. The series of recent financial crises in Berlin have given thus abundant illustration. What happened? The German Government took an action which threatened the peace of Europe and which was aimed specifically at France. The



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first tangible result of such an action was that German industrial securities lost value to the extent of some scores of millions, and the whole incident has cost German commerce and industry a great deal more than it has cost any of the other nations, although they too, have, of course, suffered badly. It will not take many more "black Saturdays" to show even the German public that to disorganize the trade of some hundreds of millions for the purpose of securing a dubious exclusive advantage in a territory which at present provides a market of something less than half a million, is not to throw away a sprat in order to catch a whale, but to throw away a whale in order to catch a sprat—and then not catch it!

The old notion that, as between nations or large communities, A can use military force to obtain from B advantages which he could not obtain otherwise, that military force can be used in a modern world as a means of predatory exploitation, that by means of military force a people can live as parasites by the exaction of tribute in some form from other peoples, is at last being recognized as not justified by the facts of the case. The commercial and financial operations of the modern world are essentially mutual. If a nation is to find a market, that market must be a trading and producing people, which means that the market must be a competitor in some sense. If a nation is to have sound credit it must not disturb the credit of other nations. If it is to exact its own half of the economic contract, it must fulfil its own half. If it is to have a field for its investments, it must not place the territories in which it hopes to find that investment at any financial or economic disadvantage.

These propositions are not new. They have always represented the ideal conditions of human society. But they were never practically operative while distance and difficulties of communication and ideas shut off one people from another. But the conditions to-day differ from the conditions even as we knew them thirty years ago by this fact, that the telegraph has made us financially one, and that what was originally merely a moral fact — that we are all members one of another — has become a very patent and intrusive financial fact, demonstrated to the densest of us by the simple figures of the bank rate.

Never was it so possible to present this truth in the simple and dramatic form as now, when every time that a loan is contracted, every time that a German industrial concern sells its debentures in London or establishes a factory in South America, there is an intensification of it. My claim is not that these facts are new, so much as that they have reached a condition of weight in the practical daily affairs of our life which can no longer be ignored in our practical politics, as the recent Berlin crisis so abundantly shows. When they are realized, a diplomatic revolution to the advantage of all becomes inevitable.

The need for expressing a thing in headlines has, of course, distorted the principles which I have attempted to elaborate: "'War Now Impossible.' Says the Author of 'The Great Illusion,'" is the sort of headline that is turning my hair gray. I have never said, of course, that war is impossible. On the contrary, given the prevailing condition of ignorance concerning the elementary economic facts of the world, war is even likely.

But, it will be asked, why, if victory can be of no possible advantage, do we stand in danger of war, since in every war some one must be the aggressor, and aggression will be committed only in the hope of obtaining advantage thereby? For this reason: not necessarily his real interest, but what, with all the distortion of short sight and temper, he deems his interest, is where we must look for the motives of a man's conduct. The futility of war will not stop war until general opinion has recognized the futility. And European statecraft, still mumbling the obsolete formulæ that have come down to us from conditions that long since ceased to exist, seems still to be in sublime ignorance of even the very simple facts which make the conclusion just indicated inevitable. So long as European public. opinion as a whole is thus ignorant, war is quite possible. Europe may make the enormous, the all but incalculable sacrifices she would certainly have to make in order — not for the first time, be it said — to fight for an illusion.

So far 1 am in cordial agreement with my critics. But note where we part company. Most of the criticism levelled at "The Great Illusion" has taken this form: "It is true the economic case is proved. War cannot pay, but men have not been guided by, they have not seen, their best interests in the past; they will not be in the future." In other words, Europe will never realize the facts of international relationship. Well, I deny that, for the reasons I have just indicated. The bank rate and the Stock Exchange crises open our eyes to the real facts as perhaps nothing else could.

Indeed the revolution in political ideas has already begun, for the project of an Anglo-American general arbitration treaty has only been possible by an intellect-ual revolution, however little we may That treaty is realize such revolution. even more popular in England than it is in America and far surer of ratification; and yet the United States is the most portentous industrial and political rival Great Britain possesses. Just think: it represents a homogeneous political entity of ninety millions; to-day the greatest and most powerful in the world, when we consider the high average of activity and efficiency of the people; to-morrow perhaps dominating - by virtue of closer relations with Canada on the north, Mexico on the south, and the control of the Panama Canal — half a hemisphere and populations running into one hundred and fifty millions, with resources immeasurably greater than those at the disposal of any other single government — a government with which England has been twice at war in the past, a people comprising elements deeply hostile to the English people. This incalculable political force is able to harass England at fifty points — navigation through the Panama Canal, the relation of British colonies in the Antilles with the Continent, Eastern trade as it affects the Philippines, transcontinental transit to Australia, to mention only a few. As

a matter of fact, the points of contact and of difference of England with European rivals are trifling in comparison. Surely all this, as much on the economic as on the political side, constitutes a competitor immeasurably more portentous than any which has disturbed England's sleep within the last few decades — France, Russia, Germany. Yet it is precisely with the greatest of all her rivals, the one most able to challenge her position industrially, and the one who, at this moment, is in the process perhaps of absorbing, industrially at least, and with her virtual assent, the greatest of her colonies, with whom she proposes to make the first binding and complete treaty of arbitration and — what is more significant — with whom such a treaty seems the most natural thing in the world!

But the English and Americans, subconsciously - unknowingly it may behave in fact repudiated the philosophy of the Leas, von Stengels and Mahans and Roosevelts; have realized that, in their own case at least, military force in the conditions of the modern world is The English have economically futile. The English have realized that, if America is to be a rival in the economic field, Dreadnoughts are not going to prevent it; that, whether Canada accepts or refuses closer relationship with the United States, it would be futile to raise a voice in the matter; that our whole phraseology about the "ownership" of colonies and the notion that nations can fight about such "ownership" ignores nearly all the facts. England does not "own" Canada. America does not and never will "own" Canada. Canada is owned by the people who live upon her territory and by those who exploit it, and whether the relations between Ottowa and Washington do or do not become more intimate is not going to alter material facts. England will continue to trade with her, to send her children there, to remain good friends with her, to cooperate with her where any real interest is to be advanced by so doing. These are the essential facts, and we have passed out of that stage of development in the world in which military force could permanently alter them.

THE WORLD'S PEACE IN THE MAKING

HOW THE DAY OF LOCAL PASSION HAS PASSED, AND ECONOMIC INTERESTS ARE COMING TO DOMINATE THE WAR-MAKING EMOTIONS — THE CALCULATING MAN DOES NOT WANT TO FIGHT

BY

PROFESSOR SIMON N. PATTEN (AUTHOR OF "THE NEW BASIS OF CIVILIZATION ")

F ONE watches from day to day the statements of newspapers, or estimates the expenditures made on national armaments, he is inclined to the view that the world has not changed, that the passions of men are as strong as ever, and that wars will always remain objects of dread and a menace to The reasoning back of social progress. this view is often stated, and has become so familiar that it is a part of our historical heritage. The opposing view is seldom clearly expressed, and seems to lack force because there is no emotional background to give it vividness. I have no desire to imply that the older view has no validity. The arguments for it are plain and clear. What I wish to impress is that we are in an age of transition in which the new and the old exist side by side, and thus are confused. The new is steadily coming more clearly into view, while the old yields but slowly because it is made vivid by tradition and emotion.

This contrast is made more vivid when we realize the radical difference between the appeal which war and peace make to us. The appeal of war comes through our emotions and national traditions. The nearer we can put ourselves in the attitude of primitive men in a fierce struggle for local advantage, the more clearly does the proposition of nations come out, and the more vivid is the appeal that war makes.

Religion, race, language, and local advantage have given the basis of past conflicts, and have separated men into opposing groups, which struggled in hopeless endeavors to suppress each other. These antagonisms have not ceased, but they have lost their force as means of

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arousing modern nations, because the grouping of nations, now necessary to carry on a successful war, must extend over such large areas that men of opposing religions, races, and languages must be on the same side. An emotional, local war is now impossible, for it would be quickly suppressed by the larger nations whose interests are jeopardized.

interests are jeopardized. Emotion is intense only as it is local and vivid. It has no means of propagating itself except by personal contact. Α large assembly might be emotionally aroused, but the extreme limit of such an assembly would be five thousand persons. Fifty million people could not be aroused by any such means. As a result, the orator is displaced by the editor; for only books and papers can reach so large a number located in so many places and living under such different conditions. 1 do not mean to imply that editors and authors are better than orators, but their actions are conditioned by the medium they use. Successful papers must appeal to a large audience, and hence local appeals fail to arouse, or more often arouse antagonisms that destroy the paper's influence. There is, therefore, a constant tendency to appeal to broader motives, and to base the appeal on statistical and historical evidence that has but slight emotional value. Orators appeal to passions, while editors appeal to facts. This states concisely a notable difference between the means used by these two dominant social forces. The change from listening to reading carries with it a change from local intense appeals to those that are general and mild. Larger areas are thus united and a check is put upon local antagonisms and upheavals.

This change is made emphatic by like alterations brought about by commerce and industry. The food of our ancestors was raised on their farms, their clothing was made in their homes, and their houses and tools had a local origin. Each community was thus locally independent, and did not feel the evils that befell other communities or nations. War stood for the conquest of the stranger and the appropriation of his goods. Ancient wars had plunder as their end — your neighbor's prosperity was thus your temptation and his loss brought home to you no felt evil. Modern industry has changed all this. The stoppage of commerce means the loss of customary articles from your table and a failure, on your part, to dispose of some of the articles you have produced. War thus means conscious deprivation to all in industrial contact with the warring nations. The losses are not confined to those engaged in it, but are felt by the whole world. The capital destroyed is taken from the world's market, and the labor displaced is felt by every industrial The evil most dreaded by workworker. men is unemployment, and this is one of the most readily perceived results of great wars. First war, then industrial depression, and then a lack of work and decreased wages is a sequence so obvious that even the dullest worker can comprehend.

It is, therefore, no wonder that 250,000 workmen assembled in Berlin to protest against a recent menace of war. To them. war would mean a burden with no compensation in glory. Lower wages, less work, and a lower standard of life could be the only result of a clash of arms. Facing these evils, how could the workmen of Berlin do other than they did? It is lt is also important to note that for once the interests of capitalists and laborers in Germany became identical. The financiers opposed war with the same vigor as did the socialists, thus showing the fundamental unity of the social parties which, on minor matters, oppose each other so bitterly. The great gain of socialism is that it has made workmen calculate what is for their advantage. An economic viewpoint has disadvantages, in that

it prompts people to be over-zealous for their economic rights, but it sweeps away the emotional background that has controlled the world for ages. No calculating man wants to fight. The very things that seemed on the credit side of war, thus become its greatest debits. Glory becomes misery when it is represented by a column of figures. To both capitalist and laborer this is becoming plain, with the result that their united forces will oppose war.

Calculation and emotion are the great forces that determine history. Emotion is local and intense, and has its maximum effect in private life. It loses force as the size of social units grows. Public matters must, thus, become matters of calculation in which emotion plays a subordinate part. The distant evil makes itself felt, not on our emotions, but in dollars and cents, in poorer meals and less work. These are the forces that oppose war, and their growing control over our conscious acts means the repression of the emotional outbursts that lead to war. The growth of commerce, the increase of capital, the rise in the standard of life, the greater use of magazines and papers, the spread of art and literature - all augment the forces of peace and increase the difficulty of arousing the warlike feelings that wrought such havoc in the past.

War has not gone from us, but its forces are held in check by the interests and sentiments of modern industry. It will go when men live in the present and let their present contact with other men govern their acts. War is within us made active by tradition and emotion. Peace is without — and has its bases in the harmony of interests and the welfare of mankind. Slowly but surely, economic interests dominate the emotions, and the growth of nations unites men of different faith, emotion, and education into one social unit. The larger the nation, and the higher the standard of life, the more do We may the forces of peace dominate. not live to see the day when war is no more, but we may be sure that each decade will strengthen economic interests and put conciliation in the place of struggle as a means of national advance.

PROSPECTS FOR PERMANENT PEACE **A SYMPOSIUM**

WIDE DIVERGENCE IN THE OPINIONS CONTRIBUTED BY A SCORE OF LEADERS OF THOUGHT HERE AND ABROAD

N answer to letters inquiring their judgments whether there is promise of the dawning of a day of universal peace, the editor of the WORLD'S WORK has received the following expressions from the eminent gentlemen under whose names they appear.

By VISCOUNT UCHIDA JAPANESE MINISTER OF FOREIGN AFFAIRS

We ought to congratulate ourselves that the age for glory of arms is fast passing into history and that the world is to-day building up a record as a staunch fighter for the cause of international peace and harmony. In spite of all seeming difference and prejudice we are all one at heart in love of peace. May that universal spirit of mutual toleration and esteem on which our love of peace must be founded ever guide us in attaining our common destiny - true brotherhood of men!

By HENRY CABOT LODGE

MEMBER OF THE SENATE COMMITTEE ON FOREIGN RELATIONS The question is one which it is very difficult to answer, for it is impossible to make predictions of any value in regard to it; the conditions are all so uncertain. There can be no question that great advances have been made toward the maintenance of peace by the spread of arbitration for the settlement of international disputes, and especially by the establishment of The Hague Court and the agreement of the nations of the world to The Hague Convention.

By LORD AVEBURY CHAIRMAN OF THE LONDON BANKERS

I fear we must not be too sanguine. The enormous increase of armaments is as dangerous as it is discreditable, and the corresponding increase in taxation which it involves will, I think, lead to overtures for a reduction of armaments, and it seems to me that in refusing them Germany has incurred a fearful responsibility.

By Woodrow Wilson GOVERNOR OF NEW JERSEY

The cause of international peace is happily becoming more and more prominent in the counsels of all civilized nations. Fortunately many powerful influences are at work which unquestionably make for peace. Opinion is slowly but irresistibly gathering, and the hope of every thoughtful man rises to greet the prospect of what may be accomplished. I think it is important that we should not be impatient, that we should not be too easily disappointed, that we should not expect too rapid progress, but that steadfastly, earnestly, vigilantly, we should devote ourselves to increasing the momentum of these forces and the volume of that opinion.

By CARDINAL GIBBONS ARCHBISHOP OF BALTIMORE

I am not prepared to say that there is yet any actual promise of universal peace. However, I may say that on account of the universal peace movements, there has been a continuous decrease in the number of wars; and such wars as have taken place, have been, on account of it, much more humanely conducted. The present arbitration movement will undoubtedly have a good effect, and will afford, if not an actual bulwark, at least a firm breakwater in times when peace is endangered.

By LORD NORTHCLIFFE OWNER OF THE (LONDON) TIMES

Your letter asking me whether in my opinion there is any actual promise of the dawn of the day of universal peace reaches me shortly after the declaration of war by Italy against Turkey, and before the conclusion of negotiations by which Germany has apparently taken from France a very valuable slice of the world, more than equal in size to many of the United States.

A glance at the American newspapers also reveals the fact that universal peace does not seem to be reigning between Capital and Labor on your Continent.

I should be a hypocrite, therefore, if I pretended that I saw any actual promise of the dawn of the day of universal peace. One had hoped in the most optimistic moments prior to the declaration of war between Italy and Turkey that the immense amount of peace talking and peace writing of the last few years would at any rate secure some little time for consideration before nations declared war upon each other. This happy state has not apparently yet been reached.

One is considerably puzzled by the fact that peace writers and peace talkers appear to deal with generalities, not with actualities, such for example as the growth of the German navy, the aspirations of Oriental Powers toward the domination of the Pacific, the arming of the Panama Canal, and other matters which your readers can find by the dozen by looking through the scare-heads any morning on their way to business.

I have heard your American critics refer to a species of mental hallucination known as a "pipe-dream," and l imagine that the hallucination that human nature is to be suddenly and violently changed by means of talk, shows that the world is not any wiser than it was a thousand years ago. Is it not also a subject for the sport of cynics that some of the pacifists, whilst most ardent peace talkers, built up their business fortunes by the most drastic and militant methods?

Since dictating the foregoing a few minutes ago I have had a look at this morning's paper, and I find that in three parts of the world there are civil wars, i. e. strikes, and a revolution.

By CHARLES W. ELIOT PRESIDENT EMERITUS OF BARVARD UNIVERSITY

During the past hundred years many political, industrial, and social changes which count for peace and against war have taken place in the civilized countries. Dynastic and religious wars have ceased. Religious toleration has become the rule in civilized states. Arbitration has become a well-recognized method of settling disputes and averting quarrels. Diplomacy no longer represents the arbitrary will of a sovereign, but the commercial and industrial interests of a nation.

Conquest has lost many of its original attractions. When the conqueror could sweep the conquered into slavery or serfdom and carry off all their movable property, and soldiers and arms were cheap and pensions unheard of, conquest might have been considered profitable; but now that slavery has disappeared, "looting" is forbidden, and war has become enormously costly, conquest is no longer profitable in the old sense, and indemnities cannot make it so.

Moreover, the rush of conquering armies has ceased to be the chief mode of migration. Peoples still migrate in hordes, but peacefully. The earth is now pretty well divided among the strong nations. There are no more habitable regions in weak hands to be seized upon by European Powers as colonies or "spheres of influence." It has become the custom for two or more Powers to guarantee the territory of a feeble government, or to warn off another Power which is manifesting an aggressive selfishness. The "open door" policy, more and more adopted in the East, is capable of giving the manufacturing nations the foreign markets they so sorely need, quicker and better than any colony or "sphere of influence" policy has ever done. Wars on a large scale no longer "pay" as means of procuring commercial advantages. Buccaneering and piracy have been suppressed. Negotiations, with purchase or leasing of seaports, river-rights, and canal-ways, and even of forts, answer the commercial purposes much better.

Finally, the great increase of intercourse among the nations and the manifest community of interest among the working classes all over the world are abiding influences in favor of peace. Many jealousies, distrusts, and terrors remain to be abated, but even these causes of war have diminished in intensity during the past sixty years.

ing the past sixty years. All these recent changes seem to me to indicate the sure coming of a time when civilized man will no longer regard fighting to the death as the only means of resenting insults, redressing wrongs, exhibiting courage and power, and defending his living as primitive man did. These changes speak, however, not of broad daylight, but of dawn.

By John Bigelow

FORMERLY UNITED STATES MINISTER TO FRANCE

You ask me whether in my opinion there is any actual promise of the dawning of a day of universal peace. I answer you promptly Not in this world; not even for a day. Hobbes was right for once, when he said that a state of war was natural to the human race. The fact that all the most civilized nations of the world are waging flagrant war against each other by tariffs upon imports - which lacks no single attribute of war - and the fact that the United States, in which every native-born citizen, to a man, will claim it to be the least barbarous nation in the world, has by far the highest tariff against foreign commerce that was ever imposed by any nation, and, therefore, is at the present moment waging against every commercial nation a destructive warthese things discourage any hope of peace in this would except such peace as man giveth.

Man is prone to do evil as the sparks fly upward, and, but for the checks to the grat-

ion of his natural propensities, appetites, passions, interposed by the mercy of our enly Father, would rush headlong down 1eol. No saint was ever so completely erated during his life in this world as to tirely divested of his proprium; as in-bly to do to others as he would be done nd just so far as he comes short of that he ins predatory and hostile to his neighbors. e increasing cost and destructiveness of may make wars less frequent, but they Iso make them, when they do occur, proonately more destructive and costly. the infant born to-day requires as much change of heart, or what is commonly d regeneration, as an infant required was born in the days of Moses or of ham. I have as yet seen no evidence man's proprium, which is a predatory ict, will ever be sufficiently subdued in ife to make it safe for the lion to lie down the lamb, or even possible for a standrotectionist to approve of any reduction e tariff, so long as he is one of its beneies.

By OSCAR UNDERWOOD AN OF THE COMMITTEE ON WAYS AND MEANS IN THE HOUSE OF REPRESENTATIVES

ere is no short road to the accomplishof any great result in the world. Agrees entered into by the great nations will step and a long step toward the accomnent of universal peace; but in the end eople of the world must be educated to nize that war always results in great ens to the victor as well as the vanquished, that preparation for war delays the proof civilization, before paper agreements revent war when the prejudices and pasof alien peoples are aroused.

e advancement of the world along all of endeavor is a matter of evolution. present sentiment for universal peace is he dawn of a new day; the consummation e desired result will probably rest with her generation of people.

By George H. Gray

OF THE UNITED STATES CIRCUIT COURT; MEMBER OF THE BAGUE COURT OF ARBITRATION

blic opinion has at last been swung in ight direction, and what has merely been brated in the dreams of philanthropists idvanced thinkers, and scoffed at by the ical world, has at last taken substantial and shape in the great peace movement e last decade. I am not so enthusiastic believe that the possibility of war is to minated in the near future, if at all; but I think we must feel that much has been already accomplished in making war more difficult and arbitration more easy, when diplomatic negotiations have failed.

It may be that realization will fall short of the extreme hopes of enthusiasts, but the advance of civilization is not by leaps and bounds, and we have reason for encouragement if we make a measurable advance in the right direction. What civil government has done to bring about the settlement of private controversies by judicial procedure, we may hope will be in the end measurably accomplished in respect to international differences, by introducing legality into international relations and substituting the judicial settle-ment of international differences for the arbitrament of the sword. The energies which lie back of the fighting spirit have been turned in other and beneficent directions, in the case of individuals in civilized states, and we aim to bring into international relations the same reign of law, and turn the energies which have wasted themselves in fruitless war and bloodshed toward the betterment of conditions that make for the happiness of mankind. We may all rationally look forward to an approximation to this end, and may feel a just pride in the leading part our own country has taken in this great movement.

By PETER S. GROSSCUP FORMER JUDGE OF THE UNITED STATES CLICUIT COURT

If by "actual dawning" you mean that light is beginning to show, my answer is: Yes. A fist fight on the streets is now a rare thing; a duel in America or England a vanished thing. Why? Because there is no longer any personal honor or credit in being the victor in a fist fight or the survivor of a duel; and for all purposes of redress *the law* is sufficient. In other words, now that the law *is* sufficient, in the field of individual dispute, the element of personal glory has been taken out of taking the law into one's own hands.

Nations are individuals multiplied — the British, the Briton; the French, the Frenchman; America, the American — the national characteristic, the individual characteristic. The world brought together, as modern civilization has brought it together, is a community now — the Briton, the Frenchman, the German, the Italian, the American, the Jap, living side by side in this larger community as individuals live side by side in smaller communities each nation the individual in the community of nations. And the "fight" as a means of settling disputes between these larger individuals is getting less frequent because there is no longer the credit or glory there once was in the mere fact of being the victor in a fight. It is not the new big gun that is putting away war; it is the growing clearness of moral vision — the same clearing up of moral vision that put away fights between individuals as a means of settling individual disputes. Internal revolutions will still come — but not in lands where no real cause for revolution exists. A diminutive Napoleon is still possible — but only against nations where local conditions make him a *deliverer*. The glory of war for the sake of war is nearly gone.

The period of wanton insult by one nation to another for the sake of war is perhaps past. But *fuel* for war still remains — the injustice of a nation to its own subjects for instance, as in the case of Cuba; or the inadequacy of a nation to meet modern conditions within its own limits, as the Turkish control of Tripoli. The cause of universal peace involves the destruction of this fuel by a better system of universal justice. And this, in turn, means that there can be no universal peace until among nations, as among individuals, universal law takes the place of the fight as a means of redress and of local justice. A means of settling disputes between nations is not the only need; there must be found also a means of settling disputes between the ideals of civilization and the powers that trample those ideals under foot, even though to do so means intervention in what is called "domestic affairs." Undoubtwhat is called "domestic affairs." Undoubt-edly the "fuel" is disappearing, and undoubt-edly the "universal remedial law" is coming. The midnight is behind us. But it is many hours yet - hours measured by generations to the meridian.

By Oscar Straus

FORMERLY UNITED STATES AMBASSADOR TO TURKEY

Not all forms of peace are desirable, only righteous peace, the peace that is founded on justice. The peace that plants its iron heels upon the unalienable rights and the justified grievances of the masses makes war preferable because it is a lesser evil. A nation that makes war upon its own people, crushes them under despotic rule, and hounds them to emigration, desperation, and death — however much she may try to promote peace abroad so long as she does not govern with righteousness at home, is a menace to the world's peace. The sooner the family of nations recognize this important fact the brighter will become the hope for the world's peace.

Lord Lytton in his Rectorial Address, some twenty years ago before St. Andrews University, maintained with much learning that

history of nations shows that their the relations were controlled not by moral laws but by expediency, not by right but by might. At that time there had never existed, excepting between the small city-states of a single nation, ancient Greece, any machinery for maintaining peace among nations. More progress has been made in providing for the maintenance of peace among nations in the past twelve years than in all the ages from the dawn of history until 1899, when the leading nations of the world assembled at The Hague and agreed upon the "Convention for the Pacific Settlement of International Disputes," and established a permanent tribunal for the ad-justment of international differences. This was the crowning act not only of the nineteenth century, but of all the ages. When President Roosevelt sent to The Hague Tribunal the Pious Fund case and the Venezuela controversy, and when he initiated the call for the second Conference, he set the permanent machinery of the world's peace in motion, which the enlightened sentiment of civilized nations will never suffer to rust. The second Hague Conference of 1907 enlarged upon the first, and in its wake has come, under the leadership of President Taft, the all inclusive arbitration treaties between the United States and Great Britain and with France. These treaties either as at present signed, or slightly modified to make them more enduring, the aroused public conscience of the American people will not permit to fail.

The prospects for universal peace are moving forward with giant steps. Though wars may come, they will be far less frequent, and each conflict will accentuate as never before in the history of man the majesty of the law, and the approaching era for the peaceful settlement of international differences, the secure, enduring, and hopeful basis for universal peace.

By DANIEL SYLVESTER TUTTLE PRESIDING BISHOP OF THE PROTESTANT EPISCOPAL CHURCH

It seems to me that steam and electricity and commerce and industry are forces making for brotherhood and unity in the one great family of nations. Surely Christianity, the religion of the Prince of Peace, is helping in the blessed work.

Yet the Prince of Peace Himself said He came to send a sword on earth as well as peace. And His apostle says the earthly ruler is the minister of God who beareth the sword not in vain.

If the individual ruler is a minister of God, the nation, which is simply the individual ruler

writ large, is a minister of God and beareth the sword and not in vain.

To extend the field and authority of arbitration and to reduce the temptations and provocations to war are surely things in order.

But it seems to me unwarranted to say that there need be nothing which a sovereign nation may not submit to arbitration; and that it is in any and every case un-Christian for one nation to take the sword against another nation for avenging rights or redressing wrongs.

I am of the opinion that the sword belongs to rulership, and that war cannot be utterly counted out from the economy of national sovereignty.

By HARRY PRATT JUDSON President of the University of Chicago

It does not seem to me that the promise of universal peace is so secure that we can place on it much reliance. It is true that wars are becoming more destructive and more enormously expensive in their money cost than ever before. It is true that there is a growing perception of the wasteful nature of the settlement of international disputes by physical force instead of by some form of adjudication. At the same time the lack of any one authority which can enforce its mandates leaves the world in such a position that each nation believes it necessary to defend its own rights and interests as best it can. It is further, rightly or wrongly, believed that the ambitions of some nations are such as to be capable of restraint only by physical force, whether actual or potential.

Moreover, a great part of the earth as yet is not subject to the control of civilized methods. Such control is in the interest, not of the regions themselves only, but also of all the world. The exercise of authority to this end is essentially a matter of police. In the absence again of some one world authority for maintaining order and justice, evidently such police must be exercised by the several nations. Inasmuch as this involves also the extension of national sovereignty, again, evidently, national interests and ambitions are likely to come into collision. This is at present the great danger centre for the peace of the world, and so long as the task remains incomplete it cannot be said that the peace of the world is assured. Of course it is a great cause of encouragement that much of this work has been done within the last generation without international collision. The extension of European sovereignty over the Americas was a slow process, and involved a long series of internat[;] al wars. The extension of European authority over Africa has been on the whole rather a rapid process, and has thus far involved no European wars. This is hopeful. Still, on the whole, it seems to me the best that one can say on this head is that it is an encouragement to those who hope for the substitution of reason for physical force in the settlement of international differences.

By HARRY DE WINDT

Were a ballot taken throughout the civilized world, it would probably "esult in an overwhelming verdict in favor of international peace; but that the latter can ever be permanently established is, in my opinion, almost an impossibility so long as the spirit of emulation and lust of power and wealth exists amongst the nations. International arbitration would certainly be a stepping-stone in the right direction; but, seeing that, during recent commercial crises in England, this method has practically failed, is it likely to be more successful in questions of grave dispute, involving immeasurably greater risks and responsibilities between the various races?

But, in my humble opinion, universal peace can never exist; so long as poor humanity is endowed (or cursed) with inherent combative qualities which can only be subdued by conquest or defeat, and the use of arms.

By JAMES M. BECK

FORMER ASSISTANT ATTORNEY-GENERAL OF THE UNITED STATES

With the leading countries actively engaged in appropriating other nations' territory and in this way practically manifesting, in the teeth of their hypocritical professions, that the rule of Rob Roy still prevails — "Let him take who hath the power and let him keep who can" — the era of permanent pacification seems remote.

This, however, may be a superficial view, for substantial progress is apparently being made toward the ultimate goal of international peace through powerful agencies, among which may be mentioned —

1. The increasing disposition of organized labor to protest against war, of which the recent organized protests made in France, Germany, and Italy are notable illustrations.

2. Modern chemistry has made war so appalling that the martial spirit, which we have inherited from countless generations, stands aghast at the possibility of a conflict between civilized nations.

3. The economic interdependence of nations is a great factor for peace. The recent Moroccan incident, now apparently ended for the time being, might have resulted in war had not the financial exchanges of Europe shown that any dislocation of international finance would bring certain disaster even to the possible victor.

4. Mankind is to-day wiser and better than ever before in the history of the world, and it is increasingly true that no war can be lightly undertaken in defiance of international public opinion.

5. The agreements to arbitrate, and The Hague Tribunal furnish the mechanism for preserving peace and reconciling differences of opinion and thus narrow the occasions of war just as the civil courts lessen, without altogether destroying, physical strife between individuals.

By JACOB H. SCHIFF BANKER

I am of the opinion that considerable progress is being made toward the attainment of lasting peace among the nations.

It is quite evident that the spirit so long prevalent, particularly among monarchical governments - the spirit that demands recourse to the sword in order to obtain the fulfilment of justified or unjustified demands upon other nations, or to punish the resentment of such - has given way to the careful considdemands eration of any arising differences, with the view of settlement by peaceful means. It is, for instance, not unlikely that even so recently as two or three decades ago, the controversy which has arisen this summer between France and Germany would have led to the breaking out of war between the two nations in less than a month after the controversy had come up; whereas now, with the great responsibility that both governments no doubt feel for making the utmost concessions to each other in order to avoid an armed conflict, there is every likelihood that a peaceful solution of the vexed and difficult Moroccan situation will be found.

There can be little doubt that the constant and energetic agitation for the settlement of international disputes by arbitration and other peaceful means has gradually built up a public opinion throughout the world, in favor of the maintenance of peace, which is having its strong effect upon the governments of the nations and is destined in the course of time to lead to universal peace.

By WILLIAM J. GAYNOR MAYOR OF NEW YORK

After more than a thousand years of warlike spirit and arrogance the European nations are now calling for peace. Some say that slow development along the lines of Christianity has brought this about. Others say that selfinterest has brought it about, for the reason that particular emphasis is being laid upon the desirability of peace between the West and the East — between the European nations and Asia. We have to ask ourselves in a sober Christian spirit whether this can ever come about until the civilized West first recognizes that the East has a civilization also, and does her justice for past wrongs. We shall never establish peace with the East by persisting in the unkindness of calling her uncivilized. No universal peace can be based on a bigoted or uncharitable conception by our civilization of hers.

Let us do our part toward seeing that charity and justice be done to the East by the West, so that the peaceful spirit of a thousand years in the East may be retained in conjunction with the same growing spirit in the West, to the end that around the world there shall be a universal peace, founded on the universal brotherhood of all men and all nations, West and East, undisturbed by the acrimony of religious tenet or national or racial arrogance. Though Christianity has done much it has been a slow growth. It took nearly 2000 years of Christianity to strike the shackle from the slave. When it examines its own slow history, no reason will be found to view other civilizations otherwise than in the spirit of toleration and peace. This spirit alone can bring unjversal peace on earth.

By JOHN W. FOSTER

FORMER SECRETARY OF STATE OF THE UNITED STATES

You ask me for an answer to the query whether there is any actual promise of the dawning of a day of universal peace.

My answer is that there is a promise but no actual assurance that it is near realization. Much progress has been made in recent years toward universal peace, but not until there is a more general and prevailing sentiment throughout the civilized nations against war, may we expect the reign of universal peace. The great work of its advocates is toward the creation of such a sentiment.

The reception which the arbitration treaties of President Taft have received in the Senate of the United States and by such prominent and influential men as Ex-President Roosevelt shows that such a sentiment does not yet prevail throughout our own country. The attitude of Italy, as I write, respecting the occupation of Turkish territory in Africa, indicates that such a sentiment does not prevail in the councils of European States.

iversal peace is not the mere dream of aries, but it will not come until we : a controlling conviction among the is that war is both wicked and unwise. at end the advocates of peace must conto labor.

THE RIGHT HON. SIR EDWARD FRY BRITISH LORD JUSTICE OF APPEAL; MEMBER OF THE BAGGE FERMANENT COURT OF ARBITRATION

e promise of the Gospel, and the hope in es of the best spirits look forward to on earth and good will toward men; believing as I do in the Divine governof the world, I am bound to retain this but at the same time, I am constrained mit that the fulfilment of the promise far off, and that the dawn of a better s rather a matter of faith than of sight. aying this I do not overlook some streaks it which have appeared during the last ears. I regard the increasing tendency er serious international disputes to arbin as highly important, and the fact that, eral instances, acute differences have been actorily settled in this manner is highly raging. It may be that the dawning of the f universal peace is nearer than we think.

By CLINTON ROGERS WOODRUFF

elieve that international peace will come result of the substitution of arbitration ar as a means of settling international ies. So long as the belligerent instinct ues in the human breast there will albe danger of conflict, or at least of an sak between different peoples. Whatiends to remove a cause of conflict, to extent makes for a peaceful condition of . In our own country the growing homoy of the nation and the gradual ing down of state lines makes for a stable equilibrium, and therefore a peaceful condition. Reciprocity treaties en any two countries so closely contigu-America and Canada would tend in the direction.

raeli is reported to have said that "war annoyance, not a settlement," a conn which an ever widening circle of statesnd students are coming to hold.

nd students are coming to hold. re is unquestionably a "getting together" ; the nations of the world, a better underng among them, a clearer conception common humanity. In this work both erce and the missionary cause play an tant part. These tendencies will likenake for international peace.

By ARTHUR B. FARQUHAR

PRESIDENT OF THE PENNSYLVANIA BRANCE OF THE MATIONAL CONSERVATION ASSOCIATION

The rapidly heightening cost of modern artillery and ammunition and of their use, is making war a more and more expensive investment, which must soon seriously affect nations enjoying the highest credit and prostrate those who are weak. Economy is not here practicable, for the higher cost is that of higher destructiveness, and less destructiveness means defeat. Furthermore: the last Peace Congress urgently recommended "that nations should prevent, as far as possible, loans being raised by their citizens to enable foreign nations to carry on war." If that action be taken — and it appears guite practicable - an important new obstacle will be interposed. The various nations are now so interlaced with each other by commercial transactions and trade interests as to have a common foundation of international credit, the collapse of which would most seriously affect them all, and the amount of loss would be in proportion to the wealth. The strongest nations are therefore most interested in peace.

By HUDSON MAXIM THE INVENTOR OF SMOKELESS POWDER

It would be impracticable for the carnivora and the herbivora to make an arbitration pact to settle their differences, for the one is constituted to prey upon the other, and its very existence depends upon the sacrifice of the other. It could not be made to the best interests of vegetable-feeders to be killed and eaten by the carnivora. By consequence, then, there is no system of arbitration possible for settling the differences between the kingdom of vegetable-eaters and the kingdom of meateaters, for the reason that their interests are antagonistic, and cannot be made mutual.

International arbitration will ultimately become a political machine. The men who control our city and state politics and make and enforce our city and state laws all over the country are not always honest, but, on the contrary, they are often notoriously corrupt. They have much stronger incentives to be honest here than they would have in dealing with foreign nations and strange peoples. What, therefore, are we to expect of their integrity and their honesty in the settlement of international disputes and in the enactment and execution of international laws?

An international board of arbitration would unquestionably be a good thing, but it would not be infallible. The inadequacy and injustice of human laws and legal procedure the world over are proven beyond peradventure of doubt. In all times past, human laws have been largely inadequate, unjust and oppressive, when they have not been entirely inoperative from lack of power to enforce them.

War is evolution's broom that has swept away the unfit with their unfit laws, and given place to new and fitter blood and fitter laws.

By Albert K. Smiley

PRESIDENT OF THE LAKE MOHONK CONFERENCE ON INTERNATIONAL ARBITRATION

I am not confident that there will ever be a time when the world will be free from conflict. I do not expect human nature to be entirely revolutionized and I believe armed force will always be necessary to suppress disorder and insurrection within individual nations.

If, on the other hand, by universal peace is meant a condition of formal peace between civilized nations — that is, absence of what is now termed "war" — I certainly believe there is great promise of its fulfilment. Imperfect as it is, the present Hague Court has commanded the respect of nations to a degree quite remarkable in this stage of civilization. The proposed court of arbitral justice will, when established, command much greater respect; and even if at first it is established by only the eight great powers of the world, it will almost certainly lead to a marked reduction of armaments on land and sea. No international armed force will be needed to enfore the decrees of such a court. It will naturally take some little time, but in my opinion the day is reasonably near when wars between civilized nations will be exceedingly rare and the world will experience a decided relief from the burdens entailed by the maintenance of the present excessive armaments.

By Arthur C. Benson Author

My own belief about the extinction of war, is that war becomes every year more unliked among nations bound together by a common civilization and a common religion. But what I think may be the most practical factor in the process is not mutual good will or the sense of the cruel injury to life and affection which war inflicts, but mutual commerical interdependence, and the growing realization that it is all pure waste, and that even successful belligerents have ultimately to pay for their victory almost as heavily as the vanquished for their defeat. When nations freely invest *in each* other's securities, the payment of a war indemnity is counterbalanced by the depreciation in the national securities of the vanquished, in the case of wealthy nations, so that what the victors gain directly by the indemnity is lost again indirectly.

The factor which will tend to the retention of war seems to me to be the intense sense of patriotism and national pride, which has, I believe, increased of 'ate, owing to the development of personal emotion and imagination, and the influence of the press. Moreover, nations, like individuals, seem liable to gusts of passion and jealousy, against which no commercial and prudential considerations avail.

And, of course, in the future there may be a clash between Orientals and Occidentals. If the pressure of population in some of the great countries of the East became accentuated, there might follow a period of expansion and invasion. This would no doubt consolidate Western nations and obliterate the distinctions of local patriotism.

But speaking generally, it seems to me that people are more and more inclined to think of war as an atrocious and horrible thing, which must be avoided by every kind of conciliation and accommodation. I don't like to prophesy, but I cannot help feeling that there *is* a marked tendency to regard war as an abnormal and avoidable thing, and not as a natural concomitant of life: and this gives ground for substantial hope.

By WILLIAM DE MORGAN

As I see it, the only substantial hope of peace on earth is to be found in the fact that man's chief motive for going into battle is confidence in victory.

So long as he thinks himself stronger than his adversary he will go to war whenever he thinks it expedient to do so. But every day now adds a new and more murderous diabolism to the resources of destruction, and makes the outcome of every war more difficult to predict.

If every nation could be kept in ignorance of the state of its neighbor's armaments, misgivings that it might be outclassed would perhaps color its views of expediency. The expediency of murdering Abel might not have impressed Cain so forcibly if his little brother had been bigger.

By MAARTEN MAARTENS Author

The promise of the future is — manifestly — less war between nation and nation, more war between class and class.

THE TAKING OF TRIPOLI

WHAT ITALY IS ACQUIRING. THE POSSIBILITIES OF THE COUNTRY EXPLAINED BY ONE OF THE FEW FOREIGN EXPLORERS TO ENTER THAT GATEWAY TO THE SAHARA

BY

CHARLES WELLINGTON FURLONG, F.R.S.G. (AUTHOR OF "THE GATEWAY TO THE BAHARA")

RIPOLI Taken! Last Ottoman Rule in Africa at an End!" the headlines of the flared papers announcemorning's ments which bring to point the extreme necessity of an understanding of the significance of names. Tripoli in Barbary means the City of Tripoli, and distinguishes it from the other Mediterranean Tripoli on the coast of Asia Minor, a little north of Palestine. The entire Turkish province in question is known as Tripolitania, a territory larger than a fourth of the United States in area, which embraces what is known as the Fezzan in the south; the province of Barca on the east, governed as an integral part of Turkey, and the Vilayet of Tripoli in the north which includes some 410,000 square miles, of which Tripoli the city is the capital.

The Pasbalic of Tripoli includes that portion of the Vilayet extending from Tunisia to the southernmost point of the Gulf of Sidra. Thus to assume that the fall of Tripoli the city, evacuated by the Turkish army, indicated the complete surrender of the entire province of Tripolitania, or even of the Vilayet of Tripoli seems at least slightly premature, being much the same as assuming that the fall of New York City before the guns of a hostile fleet would be equivalent to the surrendering of the State of New York, or even of the entire United States.

Tripolitania's coast line stretches farther than the distance from Canada to the Gulf of Mexico, and the province runs south from the Mediterranean, as far as from New York to Duluth. Generally speaking it is the Tripolitan Sahara; for, as the mighty Atlas reach northern Tripolitania, their mighty ranges crumble and disappear into the orange yellow sands of the desert which come to the very coast and merge in emerald green as they disappear into the sapphire blue of the Mediterranean.

Among the native Tripolitans the Arabs predominate, next in number are the aboriginal Berbers, Sudanese Blacks, Oriental Jews, and then the Turkish military and merchants. Of the intrusive European elements, before the present bombardment of the city of Tripoli, the Italians probably did not number more than a thousand in all Tripolitania out of a population of about a million; the majority of these-some five or six hundred-being in the 30,000 of the city's population. Next in numbers was a little colony of Maltese fisherfolk, while a mere handful of other Europeans comprising mostly the members of the consulates, completed the foreign population. During my stay, there were only six Englishmen including the consular representative, and 1

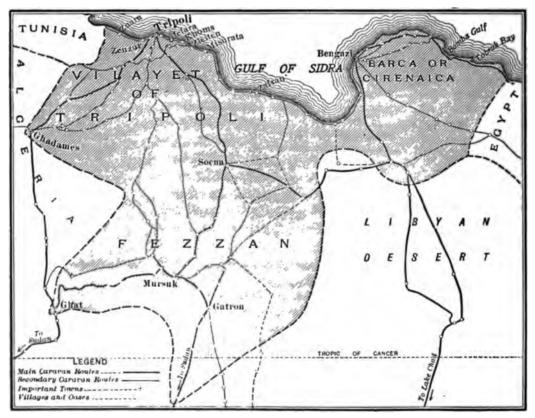
was the only American in all Tripolitania. Previous Turco-Italian relations, ever since the treaty of Berlin and the forming of the *Triple Entente* between Austria, Germany, and Italy, show not only that Austria has coveted Bosnia and Herzegovina, but that Italy coveted both Tunisia and Tripolitania. In 1881, despite strong Italian influence in Tunisia, France suddenly swooped in from the Algerian border, ostensibly to mete out punishment (for the killing of some French engineers) to a tribe called the Khroumiers, who had never been known of before and have never been heard of since.

The pretexts and methods under which. France went into Algeria and Tunisia, and now into Morocco, thus leaving Tripolitania the only available Mediterranean acquisition for Italy, caused Turkey to be cautious. Possibly Turkey didn't encourage an influx of immigrants from a country desirous of driving her out. Should we? But this very apprehension caused Turkey to be doubly cautious in protecting Italians in Tripoli and thus avoiding a *causus belli*. This was not always an easy matter; for there were many renegades from southern Italy, and an old resident in Tripoli informed me that, most of the worst crimes in that city were committed by a bad element among the Sicilians there and not by the Arabs or Turks.

It is not hard for a powerful nation to stir up or manufacture a *causus belli*, and in a country like Tripolitania with a large irresponsible nomadic population such as the Turks must control, it is by no means easy always to protect life and property, as 1 know from experience.

Turkey is supposed to have maintained a standing army in Tripolitania of 20,000

troops although I doubt if there are actually more than half this number in the entire province and some of these are 600 miles from the coast. This army is commanded by the Military Governor who rules as Pasha of the Vilayet of Tripoli with headquarters formerly in the city of Tripoli, where the garrison of the town and the oasis number about 2000 men. **Besides** these troops, Turkey has organized a sort of Spabis or native constabulary, which may number possibly a thousand mounted men. Aside from these are the Kol-ogblou, a sort of feudal militia of native Tripolitans numbering several thousand They also have a body of horse men. and foot, ready to be called out at a moment's notice. The local defense and service by conscription is carried out only on the lines of the Hamidieb of Kurdistan with power to nominate their own officers to the rank of Captain.



THE PROVINCE OF TRIPOLITANIA

SHOWING ITS THREE DIVISIONS, THE VILAYETS OF TRIPOLI, FEZZAN, AND BARCA, WHICH, TAKEN TOGETHER, HAVE AN ARTA ONE QUARTER THAT OF THE UNITED STATES, AND A COAST-LINE GREATER THAN THE DISTANCE BETWEEN CANADA AND THE GULF OF MEXICO

sides this organized service there are rous tribes south of the Vilayet of hi throughout the Fezzan, who being ammedans, would undoubtedly serve llies under the Green Flag of the There is a saying among the het. s of the Sahara that "the most fatal se in the desert is the sword" and the s which seem to contract this mostly, hose fierce buccaneers of the sandy s, the Touaregs. Consequently not the fanatical hatred of the Moslem of the Senousi, which originated in litania and to which the Touaregs bebut modern weapons and ammunias loot, would not be least among the zements under the standard of the

rough troubles at home, stress of cial resources, and lack of foresight, ey has failed to prepare for the adeedefense of her province. A few ble batteries of heavy ordnance in the or sand dunes outside the town would been most effective and most diffor an attacking fleet to locate pre-These shore batteries coupled an efficient torpedo boat flotilla and omarine or two, on account of the s and reefs, could have been made effective against an attacking fleet. ey did not have a single torpedo boat, r as is known, on the entire coast of slitania, and she possessed only one arrison ship covered with barnacles, 1 has been swinging for years at her s in Tripoli harbor. Turkey's total , comprising only five old battleships, irst class cruiser, and about twenty er craft—as against Italy's seven rn battleships, five older ones, seven class cruisers, and 156 smaller vessels rious types - hardly permits the conation of a naval programme, except to he few ships she has safely through the anelles or to keep them dodging about hoals and islands of the Agean sea.

r the past two decades in particular, has been building up a modern navy now the antiquated old bastioned of isolated Tripoli, a few small craft, casional isolated vessel of the Turks ing for home, have offered a kind of tory target practice. Some consider that Italy's *coup* is the , final act agreed upon by the powers of the *Triple Entente*, a sort of reprisal possibly for the coveted Bosnia and Herzegovina provinces recently "acquired" from Turkey by Austria, who secured Italy's backing, if not approval, of two provinces Italy coveted herself. Germany, having less in compensation from Italy than Austria, might less readily sustain the Latins, while France has undoubtedly given Italy a "hands off" assurance regarding Tripolitania. However, Italy above all powers has reason to know how little French North African promises have redounded to the benefit of the promisee.

But France's sudden and unwarranted occupation of Fez and the German *Panther's* sudden spring on Agadir showed her the way, and so, while those two Powers at present are still occupied with the ensuing Moroccan *embroglio*, Italy has seized , what we are pleased to define as the "psychological moment" when the hands of those two powers were filled with affairs of their own.

The Italian Government realized only too well that the success of the grab must depend primarily on the navy and that, above all things, Turkey must not have time to land troops and munitions of war in Tripolitania. Hence the sudden, intimation to Turkey that Italian citizens and Italian interests in Tripolitania were meeting with harsh treatment by the Turks. Assurances from the Porte of full protection in every way to Italians in Tripolitania; then an ultimatum like a bolt from the blue was hurled across the Adriatic to Constantinople. In essence it contained a request for an agreement also a threat.

It "requested" Turkey to agree to an Italian occupation of Tripolitania and gave her twenty-four hours to reply, in failure of which Italy would immediately proceed to occupy it. A case of "heads I win, tails you lose" for the Ottoman. But the "unspeakable Turk," despite political difficulties at home, refused to lose his head and, much to the discomfort of Italy, has acted like a "Christian and a gentleman."

Turkey first asked for a hearing of the

case before the court of nations and put into practice that which the Christian nations had previously criticized it for not doing. Then the Porte issued an appeal to the powers for intervention, meanwhile curbing among its people the flame of resentment — fanaticism if you please; for when any kind of resentment flames, it usually is fanatical. But the powers so far have stuck their thumbs into their vest pockets of indifference and inaction and have sat back.

The new Pasha was sent from Constantinople to control the situation in Tripolitania and he and his family were apprehended and forced to go to Naples. By no coercion and intrigue could Turkey be forced to open hostilities. No specific charges against Turkey have as yet been officially made public, only mere generalities condemning a certain indisposition on Turkey's part to remedy certain conditions in Tripolitania not in accord with Italian ideas — with inferences of discrimination against Italians and Italian interests in Tripolitania.

A threat on the part of the Powers to partition most of the remainder of the Turkish Empire in order thus to force Turkey pacifically to cede Tripoli, is possible and might succeed. Turkey may feel that such is to be the inevitable result, regardless of such cession. And—smarting under the present unjustified attack upon her by a Christian power—supported by others, especially as Austria stands ready to thrust her hand still further into the international grab bag of Europe — Turkey may seek to embroil Europe, and no nation is more astute in understanding the jealousies and foibles of the European powers than Turkey. It is fortunate that Sultan Abdul Hamid is no longer dictator at Constantinople.

There is, however, a still more serious and far reaching contingency which Turkey may employ, not only in mere defense, but in retaliation i. e. the propaganda of an *Iad* or Holy War. This bugaboo of Europe in North Africa has been worked to death as a pretext of war; but in the case of such a propaganda under the Turk, the seriousness is something with which all Christian Europe might have to reckon, and Great Britain in particular.

The position of the Turkish Empire is geographically and religiously the centre of the Mohammedan world. It is practically the last independent Mohammedan state, and from no other could a Moslem propaganda so quickly or effectively set the hoards of Islam aflame. A Turkish attempt to send troops across Egypt (theoretically a Turkish state) to Tripoli, might force a show-down of Britain's To refuse may offend the Moslems hand. of Hindustan, to accede would offend Italy. Only Britain's consideration for her 65,000,000 Mohammedan subjects in India has held them loyal. Already, probably through the instigation of Turkey, appeals for mediation by Britain have come from her Indian subjects. Rumblings of discontent have already been heard both there and in Egypt, and the recent assignment to the latter country of Lord Kitchener may signify the keen foresight of Britain.

Should the fire of fanatical Islam thus once gain headway, it would sweep west ⁴ over all North Africa to the Atlantic and east to the Pacific, and the checking of it by those Powers who have "interests" in Mohammedan lands would involve untold expense in lives and money. But tact and diplomacy on the part both of the Powers and of Turkey will, we hope, probably avert any such useless despoilation of the brother nations of the human family. But if the fire of such a cataclysm should gain headway, will not the responsibility be laid at the door of the nation which struck the match and fanned the spark?

Now this brings up the question of Italy's moral right in the present "war", the first of four viewpoints i.e. moral, political, military, and economic from which we may consider the present situation.

Italy's moral right would depend upon the justness of her cause which must pre-include very grave offences against her on the part of Turkey in Tripolitania. Let us see then what the situation in Tripolitania has really been. I am going to base my statements on what I have observed while living in the City of Tripoli and exploring and travelling in the province.

The Turks maintained law and order in the towns and absolutely peaceful conditions prevailed. Life and property of foreigners, including Italians, were respected provided they tended to their own business and showed a reasonable amount of discretion and respect for the people amongst whom they lived. The main caravan routes and outlying districts were protected as far as possible by Turkish outposts and patrols of soldiers and Arab constabulary; but, except in the limited sections of the main caravan routes, the nomadic desert tribes are a law unto themselves. For this reason and to prevent intriguing foreigners from exploring the country, strangers were not generally allowed to penetrate the interior.

Aside from certain consular, bank, postoffice, telegraph, and steamship officials, the Italians are mostly commission merchants, clerks, or keepers of small shops. To any respectable citizen, Italian or otherwise, was extended the use of the café garden of the Turkish Army and



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THE ARCH OF MARCUS AURELIUS IN TRIPOLI A REMNANT OF THE TIME WHEN THE ROMAN EMPIRE COVERED NORTH AFRICA

Navy Club which became the rendezvous of the foreign residents between five and seven o'clock after the heat of the day.



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TRIPOLI, THE CITY WHICH ITALY CAPTURED THE METROPOLIS OF TRIPOLITANIA, THE TURKISH NORTH AFRICAN PROVINCE WHICH IS MORE THAN ONE-FOURTH AS LARGE AS THE UNITED STATES

THE WORLD'S WORK



copyright by Charles W. Furlong THE AUTHOR AND HIS ESCORT ON A DANGEROUS SECTION OF THE COAST CARAVAN ROUTE

Of the thousand or so Italians in Tripolitania, most were confined to the important coast towns of Tripoli and Bengazi and the other half-dozen secondary smaller coast towns of Khoms, Misratah, Zeliten, Zuara, Zenzour, and Zafran. Probably more than half, say about 600 Italians were among the 30,000 inhabitants of the City of Tripoli. The total average annual commerce of Tripoli amounts to about \$4,000,000. Of the import trade which is about half, Great Britain generally leads with Manchester goods, etc.; the rest is shared mainly by Germany, France, Italy, Turkey, Tunisia, Malta, and Egypt.

The sponge industry maintained by Greeks and Turks, the *esparto* grass (from which paper is made) practically all of which goes to England, and the caravan trade, more or less fluctuating, controlled mainly by Arab and Jewish merchants, form about seven tenths of Tripoli's export trade. Some of the products of the oases and livestock brought in by people of the *Wadan* to the *suks* (markets) comprise the other three tenths. Thus it will be seen that, as the entire commerce of Tripoli amounts to about \$4,000,000 — a mere bagatelle of which Great Britain seems to have the lion's share — Italy's commercial interests when divided up with those of the other nations cannot be very large or vital. So



TYPES OF TRIPOLITANIA'S 1,000,000 POPULATION FROM LEFT TO RIGHT, TWO TYPES OF ARABS WHO PREDOMINATE IN THE NATIVE POPULATION; A BERBER, THE NEXT MOST NUMEROUS RACE: A TURKISH RECRUIT, AND A TURKISH VETERAN. MORE NUMEROUS THAN THESE LATTER, HOWEVER, ARE THE SUDANESE BLACKS AND THE ORIENTAL JEWS



"THE GATEWAY TO THE SAHARA" WHERE THE THREE GREAT CARAVAN ROUTES GO OUT OF THE CITY OF TRIPOLI 1,500 MILES TO THE SUDAN. THESE ARE THE ONLY ROUTES BY WHICH ITALY CAN INVADE THE INTERIOR

from a moral viewpoint, Italy's aggression, would seem to be absolutely unjustified, while her methods of procedure seem to have been unnecessarily crude and tactless. Consequently we must frankly admit Italy's reason to be purely a political and economic move.

From a political and economic standpoint Italy is justified in seeking territory. She is overcrowded despite an annual emigration of 300,000 of her subjects. Her soil, much worked out and not over productive, must support 115 inhabitants to the square kilometer, whereas the productive soil of Germany need provide for but 104 and that of France for scarcely 73. In addition to this, her wealth is not keeping pace with the increase in

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her population, and the hard-working people of sunny Italy are taxed four times the amount of the rest of Europe, 24 per cent. of the land-income falling into the hands of the tax gatherers. Geographically she is nearer to Tripolitania than any other European country and she has the example of her ancient Roman forebears, the most wonderful colonists in the world, who were there before the Mohammedans; if she does not take Tripoli, communication from Turkey, the Turkish Pasha deliberately evacuated Tripoli, probably leaving the flag up and a few men at some of the batteries to draw the Italians' fire; for the greater the havoc to the city the greater the cost to Italy in rebuilding. Unless international complications arise or unusual pressure is brought to bear on Turkey by some power other than Italy, Turkey even with a small contingent of troops in Tripolitania, is



THE SAND DUNES OF THE SAHARA THE HINTERLAND OF TRIPOLI, A COUNTRY OF NOMADIC TRIBES, REACHED ONLY BY CARAVAN ROUTES AND DIFFICULT BOTH TO CONQUER AND TO POLICE

France will; thus from the political viewpoint Italy is justified in her course.

The twenty-four hours of the ultimatum passed. Boom! belched the guns of her great ships. The walls of Tripoli crumbled, and for the first time since the Knights of St. John were driven out of the city in 1551, it is now in the complete control of a Christian power, and from a military viewpoint we have a rather unique and interesting situation.

Absolutely cut off from both reinforcements, further war supplies, and even likely to maintain a long and harassing campaign of which the taking of the coast towns may be but the beginning. In the event of the Turks acting on the defensive, it remains to be seen whether Italy will have the courage to make an immediate invasion *into* the country.

The main scene of hostilities I believe must be confined particularly to the Vilayet of Tripoli rather than to the province of Barca, for Tripoli is the literal "Gateway to the Sahara," the focus of the three main caravan routes which meet here

he Sudan, and it is along the main n routes that a European army have to march. These routes 'er sand as fine as that in an hournto which the feet sink deeply, or ird clayey or stony trails, sometimes ainous, but always monotonous, ie incessant sun-glare beating down verhead, and the everlasting vibratit-waves wriggling up from beneath. out Tripolitania they are taxed, numbering in the entire province some 200,000. The date palm provides food for many of the inhabitants of the interior, and their stones ground with straw and millet are used as fodder for the camels. Thus each oasis is a storehouse in itself. As the camel is the only practical transport in Tripolitania, it will be seen that water, date palms, and camels are absolutely essential



A TRADE CARAVAN AT REST CAMEL IS THE COMMON CARRIER IN TRIPOLI, THE WHOLE COMMERCE OF THE COUNTRY ONLY AMOUNTING TO ABOUT \$4,000,000 A YEAR

certain points, sometimes a few journey apart, are oases which to t extent determine the direction of routes. An oasis means any cull spot, large or small, and prees the existence of water, which e a dug-well or a natural spring. Dalms are planted and cultivated. their shade, fruits and vegetables wn, being irrigated in the growing er laboriously drawn from the wells. alms are of such value that throughto life in this country, and their possession, vital factors in a campaign.

The policy of the Turks would naturally be to fall back along the many caravan routes from one oasis to another, and we may rest assured that all the available camels will be behind their main guard. In the evacuation of oases, in case the cause of recovering ground appeared hopeless, every palm tree could be felled, every well under their shade or on the trails carcass-poisoned and destroyed, and

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Permission of Charles W. Furlong GARDEN WELL IN AN OASIS THE CISTERN IS FILLED FROM THE WELL AND THE GROUND CHANNELS WHICH IRRIGATE THE GARDEN ARE FED FROM THE CISTERN

every camel distributed among the wild Nomads of the desert. The Turks in this manner could still retreat some 600 miles south to their southern city, Murzuk, the capital of Fezzan and, long before the Italians reached there, they might find their "Moscow" in a devastated and sterile land, far from their base of supplies, subjected to all of the tortures of the pitiless heat and the more pitiless relentlessness of the desert hordes. These desert hordes are the Touaregs, Fezzanis, the Gatrunis and the Tibbus. Far on the western borderland of Tripoli also, are the Touareg cities of Ghadames and Ghat. Through these sections and in the vicinity of Aujila in the hinterland of Barca, wild They tribes roam the desert wastes. know the location of every well, and have many secret ones covered with brush and skin under a layer of sand. In the Sahara a man's wealth or power is often determined by the number of wells he controls.

With the Arabs as auxiliaries the Turks have a splendid scout corps. It is now, however, the rainy season, and although an invading army would probably not suffer so much from want of water, it would undoubtedly suffer from chills and fever on account of the cold; and besides, there are many sections which would at certain times be impassable on account of the raging torrents which fill the dry wadis (riverbeds), and at this time of the year the landing of troops is often a most difficult operation, even at the few available ports, and it might entail weeks of waiting.

An invading army would be forced to march much of the time at night on account of the heat, which would offer greater opportunities for sudden attack by desert tribes. It might also be borne in mind that, by reason of the French invasion into the Sahara south of Algerian Tunisia, there has been a great Touareg



AN OASIS OUTSIDE TRIPOLI A SAINT'S TOMB (MARABOUT) UNDER THE PALMS

ation from that region into Tripoli-Thus, although the Turks should

late without a fight in the north in layet of Tripoli, it will be years before can control entire Tripolitania.

nce may offer its good services and are of things in the west and south, e of her own native Algerian, Tunand Saharan troops; but she would ndoubtedly look out for France, and ripolitanian border line would prove Italy. Italy's wisest plan would be to establish herself firmly along the entire littoral and slowly but surely work back into the interior, developing the country as she goes.

And this brings us to the gist of the whole affair, the economic point of view. The great question is - Is Tripoli worth while? Certainly the verghi (poll and property tax) and the tithe of agricultural products which the Turks collect



The Gateway of the Samara

A NATIVE MARKET OUTSIDE THE CITY WALLS FORE THE ITALIAN INVASION THE FOREIGN POPULATION CONSISTED OF ABOUT 600 ITALIANS, A HANDFUL OF MALTESE FISHERFOLK, AND A FEW OTHER EUROPEANS, CHIEFLY THE CONSULATE STAFFS

ovable a quantity as the Algerianccan one has been — determined ne cordon of French outposts. It l not be a great surprise to me if ri-color eventually floated over the 1 of Ghadames, at least that of Ghat a great section of Fezzan.

ib character is difficult to under-. They are children of nature and nangeable in temperament as the ng sands over which they roam. it would be a most unlooked for dence if these tribes permitted a c occupation of Tripolitania by

taxes from the heavily burdened Arabs (and they are adepts at collecting) amounts to but a scant \$600,000. The ' country itself agriculturally sustains about four good harvests out of ten, and the present productive soil of the Vilayet of Tripoli is about two fifths of its 410,000 square miles — a narrow strip along the littoral. Here Arabs, Berbers, and Bedawi cultivate cereals, vegetables, and fruit trees; raise sheep, camels, goats, horses, and donkeys. Where the desert sand is drifted away, I have clattered over the tesselated pavements of ancient Roman

THE WORLD'S WORK

villas laid out 2000 years ago and have traveled for half a day over the crumbled remnants of palaces and ruins of towns along the coast trails overlooking the Mediterranean. This desert coast at that time, then, must have been supporting numerous population; and back in the Tripoli hills, in remnants of ancient Roman cofferdams, I discovered the secret — the conservation of vast water supplies with which the land was irrigated. In those ancient days, it has Arabs remains to be seen. How many of his own 300,000 annual emigrants will, by choice, seek the heat-soaked Tripolitan Sahara in preference to the temperate and inviting land of the United States, the Argentine, or elsewhere, remains to be seen. However, we may rest assured that these thrifty, hardworking sons of Italy, who may seek the picturesque semitropical land of Tropolitania, will do all that hard labor and honest effort can do to make the land bear fruit, which



REVIEW OF THE TURKISH GARRISON IN THE CITY OF TRIPOLI A PART OF THE 20,000 MEN WHICH THE SULTAN WAS SUPPOSED TO KEEP IN THE PROVINCE THOUGH PROBABLY THERE WERE NOT MUCH MORE THAN HALF THAT NUMBER THERE AND SOME OF THESE 600 MILES FROM THE CITY

been said that one might walk from Tripoli to the Straits of Gibraltar in the shade of great forests.

We can be reasonably sure that Tunisia, which to-day supports a population of but a million and a half, in the time of the Caesars supported 20,000,000 people; and we know that with Tunisia and Algeria, Tripoli was the granary of the Roman Empire. But the modern Roman must outrank in this respect the ability of his ancient forbears. In Tripolitania he will need labor; whether he can secure it from the will depend, not so much on the reconstruction of the ancient cofferdams of the Romans as on the introduction of the artesian well.

The political as well as the economic experiment in colonization is practically a new one for Italy. If it is tried in the *Vilayet* of Tripoli (and I believe it will be) may success attend the effort, not only for the sake of the crowded overpacked population at home, but for the sake also of the over-taxed and honest Arab farmer of the *Wadan*.



THE HELP THAT COUNTS

THE SELF MASTER COLONY AND THE PARTING OF THE WAYS HOME BEGINNING THE GENTLE-MEN RANKERS ANEW — THE CHILDREN'S AID SOCIETY WHICH STARTED A DESERTED OR-PHAN ON THE WAY TO BE A GOVERNOR



ΒY

HENRY CARTER

NE night in the springtime of last year a boy of twenty, who had slipped from the straight and narrow path of material honesty, stood and looked out through the bars of his cell in the Elmira Reformatory. The boy was not altogether a bad sort. He had made a bad mistake, but he had taken his medicine and paid for it like a man. Boys are taught trades at the Elmira Re-

formatory; and the credit system, by which terms of imprisonment are reduced for good conduct, is in full force. The authorities explained this to the boy when he came there. For instance, excellent conduct and fair progress in learning his trade would cut six months off his term; perfect conduct and extreme industry and ability would take off a year. The boy had earned his "copper,"

and had saved a year of his life. His



THE HOME OF THE SELF MASTERS

GIVEN BY MR. C. H. INGERSOLL, WHERE BED, BOARD, TOBACCO, FIFTY CENTS A WEEK, AND A CHANCE TO WORK ARE GIVEN TO THIRTY MEN WHO HAVE LOST THEIR GRIP MENTALLY, MORALLY OR PHYSI-CALLY. IN A MONTH OR TWO THEY ARE BUILT UP AGAIN AND OTHERS TAKE THEIR PLACES THE WORLD'S WORK



LEARNING SELF MASTERY AND RUG-MAKING THE WAY THE MEN ARE GIVEN CONFIDENCE IN THEMSELVES IS "TO PUT THEM TO WORK, WITHOUT FUSS OR PREACHING, AT SOME USEFUL OCCUPATION, WHERE THEY CAN SEE THAT THEY ARE ACTUALLY DOING SOMETHING, AND BY REFUSING TO LET THEM DWELL ON THEIR UNFORTUNATE EXPERIENCE IN THE PAST"

conduct had been perfect; he had worked harder and learned more at his trade than any of his fellows. This night as he stood and looked through the bars at the empty corridor, he had only three days left to serve — and then the prison madness overcame him. He gripped the bars that shut him in and shook them like mad; he screamed and yelled. Other prisoners joined in, and soon the corridor was in an uproar. Then the guards came; and the boy lost the year that had been granted him for good conduct.

When he came out at last he was quite unreformed. The loss of his year had soured him and made him hard and tough. He blamed society. He and society were enemies and he was ripe for declaring war on his enemy and beginning the sort



IN THE PRINT SHOP WHICH DOES JOB PRINTING AND PUBLISHES THE SELF MASTER MAGAZINE, WHICH TOGETHER WITH RUG-MAKING, TRUCK GARDENING, AND OTHER INDUSTRIES, HELPS SUPPORT THE COLONY



۰.

ANDRESS S. FLOYD who conducts the self master colony, where wrecks of men get back their nerve to try life on a useful level again

He always thinks and talks of them as "fellows," which is an important thing to note. He took three or four young men of good parts, who had fallen through drink, into his home and helped them; and they went back into the honorable part of the world where they belonged. Then he moved from New York to Rahway, N. J., and the work grew. It grew until one day Floyd went to a millionaire.

Floyd said to the boy, when he had heard his story of despair in the lodging house: "Now, I tell you; I've got a little place out in the country over in Jersey where there are a lot of us fellows who've been up against it. If you won't say anything to the boys about having been in 'stir,' I'll be glad to have you come over and stay with us until you get your nerve back and find a job to go to. Under-



THE PARTING OF THE WAYS HOME IN CHICAGO WHICH IN THE FIRST 21 MONTHS OF ITS EXISTENCE, FOUND EMPLOYMENT FOR 953 OF THE 1264 EX-CONVICTS THAT PASSED THROUGH ITS DOORS, AND GAVE MATERIAL AID TO THE OTHERS

Mr. C. H. Ingersoll, and said that he would have to have a farm to take care of the masterless men who were coming to him to win back self-mastery. Mr. Ingersoll knew what the work was and he bought and turned over to Floyd an abandoned country home with fifty acres of land at Union, N. J. There, two years ago, Floyd, with his young wife, started something new under the name of the Self Master Colony. stand me: if you come over there you've got to forget all about the bad luck you had in the past. Want to come?"

The boy came sullenly shambling through the woods to the door of the home two days later.

"He was tough," says Floyd; "he was a real tough one."

So tough and skeptical was he that it was a week before he decided to accept the Self Master Colony for what it pro-

fessed to be — a place where you were as good as the next fellow, no matter what your past record — so long as you worked. When he saw that the head of the colony desired to make, not a saint or an object lesson out of him, but a man, the boy began to stiffen his spine and hold up his head. For this was what his seared young soul was hungering for — the chance to be a man. Charity he would not accept because of the iron that had been driven into his heart, but help "from one fellow to another," — that and that only could reach home to him.

"It took a long time for this one to thaw out," says Floyd, "but after that he began to grow and grow right."

At the end of two months the boy came to Floyd and said: "I hadn't ought to stay here any longer. You're crowded to the limit here and there are lots of fellows outside who ought to get in here and be put on their feet. I'm all right now. I can go out and get a job. I'll be getting out and giving some other fellow a chance to come in."

"All right," said Floyd. "Look upon this as your home. Come back here at night until you find your job."

Then the boy went out to fight for a place in the world. He "had his nerve back."

He returned the first night.

"Find a job?" asked Floyd.

"No."

The second night it was the same, and also the third. On the fourth night he did not come back. Next morning Floyd received a letter from him. He had found a job:

"A man who runs a metal roofing company took me on and said he would give me a chance. Watch me make something out of that chance! I am going to Atlantic City to-morrow and begin work on a job that will last a long time."

That was something over nine months ago. One Sunday, only a few weeks past, a well dressed, contented looking young mechanic dropped off the trolley car at Union and came briskly through the woods to the Self Master Colony. He was neat and clean, and his eye was bright,



THE HOME'S KITCHEN WHERE THE MEN FROM THE BRIDEWELL BEGIN THEIR NEW CAREERS WITH A GOOD SQUARE MEAL

and he looked the whole world square in the face.

"Remember me, Mr. Floyd?" he called out cheerily. "I'm the tough kid that you picked up in New York. I — " "Hold on," said Floyd. "You've got

"Hold on," said Floyd. "You've got that wrong. You're a friend of mine that I happened to meet while you had a streak of bad luck."

"Right"! laughed the boy. "Well, I made good on my chance. I've been working every working day since I got



A GOOD PLACE TO SLEEP FOR WHICH, TOGETHER WITH THREE MEALS, A MAN IS CHARGED FIFTEEN CENTS A DAY TO BE PAID WHEN HE GETS HIS FIRST JOB

THE WORLD'S WORK



RESCUED FROM THE SLUMS

AN ORPHAN TO WHOM THE CHILDREN'S AID SOCIETY GAVE A GOOD HOME IN THE COUNTRY AND A CHANCE IN LIFE. IN THE PAST SOME OF THE SOCIETY'S PROTEGES HAVE BECOME GOVERNORS, CONGRESSMEN, JUDGES, ETC.

that job. And if you don't believe I'm taking care of myself" — He dove into his pocket and drew out a roll of bills containing over one hundred dollars — "I brought this along to show you. I could loan you some, Mr. Floyd, if you happened to be short."

Here is an illuminative example of the new sort of practical work which does not question whether the case be worthy, but which helps, because help is needed, and which seeks to help in such a way that help will not be needed again. The work of Mr. Floyd in his New Jersey colony expresses the new idea.

"It is not merely a question of giving," says Mr. Floyd, "it is also a question of giving right. If you give a man merely food or money, you don't give him much. If you give him anything, and along with it give him the feeling that he is a miserable creature, hardly fit to live, and that you help him only because you want to maintain your position of superiority to him, you don't help him; you hurt him. It is bad to give a man anything: the way to help him is to help him earn it. These men who are in need of help have, before they come seeking help, condemned themselves much more severely than you or I ever will condemn them. If we help them merely by handing them something, we make them despise themselves. After that a man isn't much good.

"But if you take a man and give him a thought along with your assistance, you help him. Men and boys come here to us discouraged and embittered, convinced that they are no good and that there isn't any use trying further. Now, if you take these men and give them a chance to see how mistaken they are,



THE BRACE FARM SCHOOL OF THE CHILDREN'S AID SOCIETY WHICH, IN THE FIFTY-RIGHT YEARS OF ITS EXISTENCE, HAS FOUND HOMES IN THE COUNTRY FOR 27,701 WAIFS, AND FAID SITUATIONS FOR 27,451 OLDER BOYS AND GIRLS

to see that they are not hopeless and that they can make good, you have started them on a new point of view. The way we try to bring this change about is by putting them to work, without any fuss or preaching, at some useful occupation where they can see that they actually are doing something, and by refusing to let them dwell on their unfortunate experiences of the past. One man recently said: 'My name is so and so and I used to be a burglar.' I said: 'I don't care what your name is, or what your past. What can you do?' He said he had learned to cook — in prison. 'All right,' l said. 'We need a cook. You can go to work You won't get much pay, right away. but you will have a chance to forget your old profession.' That man is our cook to-day, and while we get him to open locked doors if we happen to lose a key — and he does it in a manner to make you lose faith in locks — he has made himself over since he came here.

"We put some of the men to work in the weaving room where we make rugs. When they see a rug begin to grow under their fingers they begin to pick up. They see that after all they can do something. The same obtains with those put to work around the farm. On an average, at the end of two months they come to me and say: 'l'll be getting out. I can take care of myself now. I'll give some other fellow a chance to come here and get straightened up.' And they do take care of themselves. Every few days I get a letter from one of the boys who has gone through here with the heartening word that he is making good and playing the part of a man. That is what counts - that is what this work is running for."

The Self Master Colony has room for thirty men at a time, and the accommodations always are crowded. Its struggle is a keen one, for the Colony aims to be self supporting. It draws its members from seven classes: the man unable to find immediate employment, the man in middle life who has lost his business, the intemperate young man trying to control himself, the country boy stranded in the city, the rich man's son wayward and estranged from his family, the man discouraged through domestic troubles, and the man run down physically and mentally and needing outdoor work. These are the worth-saving, who, if no help is offered them, drift down through the strata of free lodging-house existence into the mire of hobo-dom, criminality, and hopeless mendicancy. Floyd's idea is to catch them at this crisis in their lives.

At this writing there are as members of the colony a man who recently acted as secretary to a successful New England novelist, a New York newspaper editor, and an architectural draftsman of some prominence. The latter two fell through drink, the first one never explained and never was asked to explain what brought him down. All three are men of education and all have more than ordinary ability. They want to get back to the world of usefulness or they would not be where they are, and they are not men who possibly could bring themselves to accept charity. They are gentlemen rankers who now have the chance to get into condition to win back their rightful posi-To help all outcast men to this tions. chance is the idea of the Self Master Colony.

This, too, is the idea upon which was founded the "Parting of the Ways" Home in Chicago, the first and the largest of the help-men-to-help-themselves institutions to be established. Every weekday in the year an average of forty men are released from the Chicago House of Correction, the "Bridewell," given a

CONVICTS DISCHARGED FROM THE "BRIDEWELL"				DISCHARGED CONVICTS PASS ING THROUGH THE HOME					
Nov. 19	09 18	25 Mm	•				_	6	Men
Dec. *	17.	21 -						62	-
Jan. 191	0 19	, 9						117	Ξ
Feb. "	186	N -						163	-
March "	18	70 -						199	•
Apnl "	· 17-	44 -						219	
May "	16	× 0						242	•
June "	15)A "				_		270	-
july "	- 15	17 .						288	-
Aug *	· 16	10 -						313	
Sept.	· 14	19 -			_	-	_	405	-
Ort.	· 13	83 -			_			470	
Nev. *	14	06 *			_			555	

MR. MC BRIDE'S SCALE OF RESCUE SHOWING BY ACTUAL FIGURES THAT THE INFLUENCE OF THE "PARTING OF THE WAYS" HOME CHECKS THE NUMBER OF ROUND-TRIP JOURNEYS BE-TWEEN THE PRISON AND THE STREETS nickel, and turned out into the world. Up to two years ago more than 40 per cent. of them found their way back, simply because, after being broken by their prison experience, they were not fitted to take up the battle for existence on the outside. It was two years ago that the Parting of the Ways Home was founded.

Judge MacKenzie Cleland, of parole fame, and a group of interested citizens thought it over and saw that what was needed was a place where these exprisoners could go on their discharge from the Bridewell, where they could be fed for a few days, where the prison taint would wear off them, and where they could be sent to places of employment before drifting back to the "barrel house" life which hitherto had been their only choice. With \$2,000 as a starting fund Parting of the Ways Home was the established in a four-story brick building two miles east of the prison gates and on the same street, and Mr. Rollo H. Mc-Bride was placed in charge as manager.

It is a question which was the more important move, the establishing of the home or the finding of McBride to do the work. It is significant that the two men who are breaking ground in this new sort of work, Mr. Floyd of New Jersey, and Mr. McBride of Chicago, have histories that are similar to a considerable degree. McBride at one time was near the top in the management of a Middle Western railroad. From there he fell to the uttermost depths into which liquor can plunge a fallen man. He was a "levee bum" for seven years in Chicago. One night he stumbled, drunken and blaspheming, into a house of God, and there, like Saul of Tarsus, he says a voice spoke to him, and that was the end of McBride, the "bum." When the time came for him to take up the work of the Parting of the Ways, he had reëstablished himself in the railroad business and was one of the city's leading workers among the helpless and outcast.

This was the idea and the man that came together in November, 1909, to establish, not an exhibition of emotional charity for curious visitors, but a hard, common sense factory for converting

ex-prisoners into independent broken men. Now when a prisoner, whose conduct has indicated that he is not hopeless, is discharged from the Bridewell, Superintendent John L. Whitman gives him, besides the inevitable nickel, a card of introduction to Mr. McBride and directions for reaching the Home. When he arrives at the Parting of the Ways, Mc-Bride shakes hands and says: "I will feed you, sleep you, clothe you, and get you a job, and it won't cost you a cent. After your first pay-day, if you do not care to accept charity and really want to show your appreciation of the Home, you may settle with it at the rate of fifteen cents a meal and bed." Four Four hundred and thirty-two dollars have been paid back to the Home in this way by men who were bound only by their own sense of honor and gratitude.

In the first twenty-one months of its existence 1264 men were passed through this "man factory." Of these 953 were placed in employment and are now working and making an honest living. Of the other 311, the majority were assisted to return to their families or friends. All were helped in some way. Of the 953 for whom jobs were found, 24 are listed as depositors in one Chicago savings bank. How many are depositing in other banks is not known. Since the founding of the Home the population of the Bridewell has been reduced 22 per cent.

reduced 22 per cent. The cost to the city for making an outcast by a prison term is \$9 a man; the cost for each man turned out of the Home is \$6. The proposition is so simple even in dollars and cents that the business men and tax-payers of Chicago are becoming interested.

These two institutions deal with temporarily helpless men and boys. The Children's Aid Society, of New York, takes hold of the work at an earlier, therefore a more vital and hopeful stage, by helping the homeless child of New York City to find a home. One has but to read the records of this society to appreciate the human and economic value of charitable work that removes children from the slums of the city to a wholesome environment.

In the 58 years of its existence, the society has found homes in the country for 27,701 orphans or deserted children, and has provided country situations with wages for 27,451 older boys and girls. Most of the children thus sent out have become farmers or farmers' wives. Some of the others are represented in the following table:

Governor	ı	Army Officers 2
Territorial Governor.	T	Lawyers
Members of Congress	2	U. S. Trans. Clerk . i
Sheriffs	2	Postmasters 9
District Attorneys .	2	Railroad Officials . 6
City Attorney	I	Railroad Men 36
Justice of Supreme		Real Estate Agents. 10
Court (state) .	I	Journalists 16
State Legislators .	9	Teachers 86
County Öfficers	íó	High School Principals 7
Judges	4	School Superintendents 2
Artists	2	College Professors . 2
State Auditor	I	Civil Engineers 3
Clerk of Senate	T	Clergymen 24
Bankers	29	Merchants 23
Physicians	19	Business Clerks 465
-	-	

Take the case of Burke. In 1859 there came to the society's care from the streets of the city a little orphan boy who answered to the name of "Andy" Burke. He was ten years old, homeless, friendless, and hopeless. The career of a child of the streets seemed to be his fate. The society took him under its wing and placed him in the home of Mr. D. W. Butler, of Noblesville, Ind. In 1863 the boy went into the army as a drummer boy in an Indiana regiment. After the war he came back and went to school. From the common school he was sent to Greencastle College, and from the college he moved to the developing country of North Dakota, where he entered a bank as cashier. He was in the banking business for three years. In 1884 he went into politics and was elected county treasurer. From then on, his progress bore steadily upward. The boy now is Ex-Governor Andrew H. Burke, of North Dakota.

In the same year that the Burke boy was taken away from the streets of New York, another Irish boy of the same age, John Brady by name, was deserted in the city by his father. His mother was dead. Young Brady, too, was sent out to Indiana, to the farm of Mr. John Green, near Tipton. He remained there until 1867, teaching school in the winter time. In 1870 he went to Yale College, and in 1874 he entered Union Seminary, from which he was ordained as a minister. He went to Alaska as a missionary — a far cry from the streets of New York. In 1897 President McKinley appointed him Governor of the Territory of Alaska, in which capacity he served three terms. He is now a resident of New York, Ex-Governor John G. Brady.

What the fate of these useful citizens would have been had they been left to the mercies of the city jungle is indicated by another case on the society's records. A family of five girls came under observation. The father was a drunken, shiftless man of no character. The mother was a little worse. The family lived in a single room in an upper West Side basement. The oldest girl was ten, the youngest an infant.

oldest girl was ten, the youngest an infant. The Children's Aid Society secured the four older children as its wards through court procedure. They were placed in homes in Indiana and Missouri. They are now grown up. The oldest two are married and the mothers of young families. One of the younger ones is a professional musician, the other a model daughter in a model home. Their little sister, whom the mother fought for and retained to bring up in the New York slum, also is grown up now. But the life that she leads is one degree worse than was her mother's, a life which her sisters scarcely could have escaped had they remained in the same environment that has damned her.

The results obtained by these charities show that it pays to help people when you really help them. And all efforts to help people must pay in such results if they are to justify themselves in an age of efficiency. The pauper's dole, given in a manner which carries with it no hope but for another dole in the future, is not progressive. But the sav-ing of children from the certain blight of the slum-sickness, and placing them in the only place where children can be reared properly, a home-the redeeming of men who have been broken in the whirl of life, is the kind of effort that really helps. It helps make useful, self-reliant men and women. And this is the noblest work that charity — or anything else — can do.

PENSIONS—WORSE AND MORE OF THEM

PROPOSED INCREASES OF \$50,000,000 A RIOTOUS AND DEBAUCHING WASTE IN THE GOVERNMENT WHILE THE COUNTRY SUFFERS

BY

CHARLES FRANCIS ADAMS

The WORLD'S WORK'S disclosures of the abuses of the Pension System in the course of the astounding increase from \$15,000,000 to \$160,000,000 a year, aroused the country. They appreciably contributed, it is believed, toward checking the further enormous increases (with the necessarily attendant increase of fraud) which were urged upon Congress at the special session. But the danger still overhangs, and with the opening this month of the regular session of Congress, becomes imminent — in spite of the pledges of reform and retrenchment made by the Democratic majority in the House.

In its battle for the purification of the Pension Roll, this magazine has had the bappiness of finding itself supported by multitudes of patriotic citizens, and especially by hundreds of veterans of the Civil War. None has been more hearty in his encouragement than Mr. Charles Francis Adams, himself a Brigadier-General, by brevet, of the Union Army. Gen. Adams saw more than three and a half years of actual service, wholly in regimental work.

Actuated in particular with the desire to voice the protest of the conscience and patriotism of fellow-veterans against the ignoble and demoralizing mendicancy and fraud committed in their name, Gen. Adams now takes up the fight. In a series of three articles he examines proposed pension increase bills and lays bare their faults. Then, turning to constructive suggestion, he outlines the elements of a businesslike plan under which, while the perpetration of fraud would be rendered more difficult, and ample provision for all old soldiers in need would be liberally and equitably supplied, any occasion for further pension legislation would be obviated. Following is the first of Mr. Adams's articles.

-The Editors.

HE publication known as the Congressional Record is an awkward, as well as an enduring fact; and, with it at hand for ready reference by political opponents, habitually to reconcile utterances and votes of a wholly contradictory tenor, involves, on the part of the average member of Congress, recourse by no means infrequent to a fineness of distinction bearing close resemblance to bare-faced sophistry. So gross is this, indeed, as at times to seem indicative of scant respect for the intelligence of those, constituents or otherwise, to confuse and deceive whom it is designed. A somewhat striking illustration of this commonplace is now apparently in order for January, 1912, an illustration to be writ large and

in dollars; in fact, in the scores of millions of dollars.

The special session of the 62nd Congress, convened in April last, adjourned on the 25th of August. Called in advance of the regular date of meeting to consider and act upon the proposed commercial pact with the Dominion of Canada, Congress, in so far as was practical, confined its action to the business immediately in hand, attempting no general legislation; but, at its closing session, Mr. Oscar W. Underwood of Alabama, the official and recognized leader of the dominant party in the House of Representatives, made a statement in regard to the economies in national expenditure so far effected, as a result of the incoming of the political party of which he was the mouthpiece. The amount was

not considerable; in fact, as national expenditures go, it was trivial. In Mr. Underwood's own language "the total saving in money as a result of the enforcement of Democratic policies during the present session of Congress is \$308,836.67." But he then went on further to say that determined effort will be made to effect proportional savings in the administration of the Government in every department"; and he added - "This House is pledged to reform the administration of public affairs and to retrench public expendi-Not a dollar will be approtures. priated which a careful investigation does not demonstrate should be expended in a wise, efficient, and effective administration of public affairs."

The programme to which Mr. Underwood thus committed his party was excellent as well as pronounced. The effect, however, was somewhat impaired by a subsequent remark of Ex-Speaker Cannon, to the effect that he believed "the country will not approve the waste of time over the saving of cents here and there, when the great affairs touching expenditures that aggregate nearly a thousand million dollars are neglected!" and he might have said "ignored."

The saving referred to by Mr. Underwood, so far merely in the nature of an earnest, was thus, he explicitly asserted, the first step in a systematic house-cleaning policy, both sweeping and drastic. So much for the special session of the 62nd Congress, and its Record. Meanwhile, throughout that session there was, from its beginning to its end, in spite of its assurances and commitments, an undertone curiously and distinctly ominous so far as any reduction of the aggregate of public expenditures was concerned — an undertone most suggestive of the ancient adage as respects saving at the spigot and wasting at the bung-hole. While a jealous and watchful eye was kept on the spigot of House expense, the *pension* "Bung Hole" was with difficulty kept stopped. The opening thereof, it was well understood, awaited merely a more opportune, though not remote occasion. Judging from the official report of what was said and done at the special session, that occasion cannot apparently be deferred far beyond the beginning of the new year.

For present purposes it is not necessary here to enlarge upon the existing pension system of the United States. It is sufficient to say that the world has not heretofore in its history seen, as respects volume, anything like it — anything even approaching it. In the year 1866, that immediately following the close of the Civil War, the national appropriation for the payment of pensions, though supposedly covering, under existing legislation, cases of wounds and disability therein incurred, amounted to a little in excess of \$15,000,000, annually. Forty-four years later, in 1910, the exact amount reported as expended under that head lacked less than a trifling \$16,000 of \$160,000,000. In other words, fifty years after the close of the Civil War, the pension payments because of that war having increased in volume ten-fold, were still on the ascending grade. And that they were still on the ascending grade was clearly indicated both in the debates and in the parliamentary action of the special session of the 62nd Congress. Moreover, that, so far as the House of Representatives was concerned, it was not then increased by an amount variously estimated at from \$20,000,000 to \$50,000,000 annually, was due solely to the fact that. by a recourse to ingenious parliamentary expedients, on the part of those anxious to make a showing of economies, action was prevented on a measure upon the calendar - action both persistently and strenuously pressed. Into the nature of the expedients thus resorted to, it is for present purposes unnecessary to enter. So doing would involve the explanation of a most complicated system of parliamentary procedure. The fact, however, was patent that those responsible for the conduct of affairs knew perfectly well that, could a way under the rules be found to compel a vote on the measure in question, it would have been passed by an overwhelming majority of an opposition house, pledged to a reduction in the volume of public expenditures. And this in spite of the fact that the measure in question necessitated an increased treasury outgo of some fifty millions a year — a bare-faced largess — in no way contributing to a "wise, efficient, and effective administration of public affairs."

When, in December, the 62nd Con-gress meets in its first regular session, recourse can apparently no longer be had to parliamentary expedients to prevent action. Like a sword of Damocles, the measure impends. It will have to be met; and it will have to be disposed of. It is the present purpose to discuss the true nature of the impending measure; the reason for inferring that no adequate opposition will or can be offered to its passage; and finally, its defects, and the character of the possible measure which should be substituted for it. The modest origin and phenomenal growth of our pensions has been alluded to. Both the system and the abuses which accompanied its growth have been described in recent numbers of the WORLD'S WORK. The question is no longer of the past; that speaks for itself in the figures of a disbursement in excess of four thousand million dollars. The present discussion relates to what is proposed to be done in the immediate future; the objections to it; and, finally, the sub-stitute policy, which, better late than never, should now be adopted.

The previous favorite measure, the passage of which was narrowly prevented by recourse to a strict observance of the rules of procedure in the Senate during the final days of the closing session of the 61st Congress was known as the Sulloway Service Pension Bill. As reported with a favorable recommendation to the Senate, after its passage by the House, this measure would have imposed upon the Treasury an additional draft estimated by the Pension Office at \$50,000,000 a year. In a minority committee report then submitted, it was stated that, during the last four years, or since February 6, 1907, Congress had increased the pension disbursements by the sum of \$20,000,000, per annum. The sum of \$29,000,000, per annum. act known as that of 1907 increased them by \$16,000,000, and the act of April 19, 1908, added another \$13,000,000 to this amount. And now, a simple amendment to existing laws, strongly urged, granting \$30 a month indiscriminately to every soldier of the war over 70 years of age, would, it was estimated, swell these aggregates by \$9,000,000 more. There would thus be a total increase of \$38,000,000 in the pension payments within four years. An average of, approximately, ten millions increase a year.

That preference in the order of business was not accorded this measure, and that it should, solely because of a recourse to parliamentary expedients by those opposed to it, fail of passage, was, it is needless to say, warmly resented by a large class of would-have-been beneficiaries. As one of those objecting to its precipitate consideration — a public character of long and varied legislative experience - at the time ruefully expressed it, while in daily receipt of remonstrances nearly all "denunciatory" and many excessively abusive"- the natural inference would be that a government now disbursing a hundred and fifty millions a year in pensions "had never done anything for the soldiers of the Civil War, and that this measure (to which precedence over other measures had been denied) was an effort to get some slight recognition for their services."

The 61st Congress expired on the 4th of last March, and the 62nd Congress met a month later. The House of Representatives of the old Congress had been strongly Republican; that of the new was This House had, as strongly Democratic. moreover, been chosen in an outspoken spirit of protest against the extravagant and even reckless scale of public expenditure alleged to have been indulged in - a scale necessitating most onerous taxation. Thus the popular branch of the 62nd Congress was chosen under a distinct mandate — the inauguration of a system of economical reform. The cost of living, already excessive, was manifestly increasing; and a halt was accordingly called to an era of inordinate and ex-travagant public profusion. With an travagant public profusion. eye to this mandate, the committees of the new House were in due time appointed. Over those committees Democratic chairmen presided; Democrats predominated in their membership. Among the com-

mittees thus appointed was that on
 Invalid Pensions. It met, and at once
 proceeded to the work assigned it — that
 of a reformed and economical administration involving far the largest single
 item of national disbursement.

As a result, it may be assumed, of full and deliberate consideration, it at last, on August 19th, reported what must be taken for its idea of an improved economical substitute for the so-called Sulloway bill — that measure which had so narrowly failed of passage by the previous Congress. Of this bill — the Sulloway bill — more presently. Meanwhile, through some parliamentary legerdemain unnecessary to consider, another measure was already before the House. This was known as the Anderson bill, and was a measure of the character usually known as a "blanket bill." That is, it provided for an indiscriminate and large increase of pensions under provisions of the most sweeping character, including not only veterans of the war, but the widows of deceased soldiers and sailors; and it was estimated that, if it became a law, it would increase the draft on the Treasury by some \$50,000,000 a year — in other words, raise that draft in the aggregate to the two hundred million mark. This bill, it was alleged, had been so to speak, "sneaked" into its position on the calendar; and this charge, which was apparently advanced in numerous papers, led, on the 31st of July, to a somewhat unseemly altercation on the floor of the House between two members, both from Ohio - General Sherwood, the chairman of the Committee on Invalid Pensions, and Mr. Anderson, a member of the committee, the introducer of the bill. Mr. Anderson asserted that, though he might have "sneaked" in his bill, he at least did not "sneak into the corridors and fail to vote when the bill came up for action," thus intimating that the chairman of the committee, claiming paternity of another measure, had in this way sought to evade responsibility. Passing by these amenities of debate as immaterial to the main issue, it is not necessary, for present purposes, seriously to consider the so-called Anderson bill. It would, however, be difficult to suggest anything in its favor. Crude and slovenly in form, it was in its provisions indiscriminate, grossly inequitable and wildly profuse. "Blanket" legislation of the most pronounced and vicious character, it was well calculated to promote mendicancy, destroying all sense of respect in the beneficiaries under it. But this measure has been practically superseded by the, so-called, Sherwood bill, formally reported after much deliberation in committee, with one dissentient only. It thus embodies the final conclusions of sixteen members of the present House, ten of whom are Democrats, while six are Republicans. Six of the number were born subsequent to 1860, and three only saw any actual Civil War service. The measure and the accompanying report were, after presentation, referred to the Committee of the Whole House on the State of the Union. Under the rules it is thus in position to be called up for action on any specified Tuesday of the coming session. Over the head of the Democratic House, about to fulfil its Mandate of Economy, this bill now hangs.

In the report which accompanied this bill much space was, for appearance sake, allotted to an enumeration of economies to be effected thereby. The measure itself is framed on the basis of what is known as the "dollar-a-day pension bill," first introduced by the chairman of the present Committee, General Sherwood — "Old Dollar-a-day Sherwood" as he likes to have himself designated — then a newly elected member, early in December, 1907. Re-introduced in December, 1909, it was pending before the Committee on Invalid Pensions up to the end of the 61st Congress. In the report now accompanying its appearance in a new and perfected form, much emphasis is laid upon the fact that, during the preceding year, the Government had paid out over \$700, 000 for medical boards and special examiners. It was now proposed that these boards, to a certain extent barriers against abuse, were to be done away with, as being no longer required. This was a measure of economy! Furthermore, it is stated that, during the previous year, \$300,000 was paid out for special pension

examiners, nearly all of which, it is stated, could now be saved, and the money paid direct to the soldiers. A second barrier against abuse done away with in the name of economy! A further "economy" feature was that, under the sweeping provisions of this measure, the Pension Bureau would be in a position largely to reduce its office force. Over \$1,000,000, it is claimed, now spent in salaries could thus be saved, and paid direct to the soldiers. This measure, without repealing any existing pension law, or in any way modifying, restricting, or changing the laws or rules governing the payment of present pensions to the inmates of national soldiers' homes, provided that every soldier who served in the Civil War, no matter where, when, or how, for the period of ninety days should receive \$15 per month for the remainder of his life; every soldier who served 6 months, \$20; every one who served 9 months was to get \$25; and he who served one year or more, irrespective of his present age, was to receive \$30 per month. All these payments, it is to be borne in mind, were to be made to men who suffered no wound or injury during their term of serivce, or incurred therein any physical disability. Such are already cared for by virtue of other legisla-The payments now provided were tion. to be a pure gratuity, based upon the fact that the recipient, at a period nearly fifty years ago, performed some sort of military service for ninety days, or six months, or nine months, or one year or more. Upon the theory that all the money to be appropriated should go to soldiers in distress, a provision was added that no ex-soldier enjoying a net income of \$1000 a year or more, should draw any additional pension under the provisions of this act. The word "additional" here should be noted. It is a word of much significance in this connection.

While this bill was being drafted and was still in committee, it was referred to the Pension Bureau for the usual estimate of the cost likely to be entailed thereby should it become a law. The Pension Bureau refused, however, to make the called for estimate, on the ground, that, owing to the section which excluded soldiers with

a net private income per year of \$1,000 or more, no data existed upon which an estimate could be based. Thereupon the Committee proceeded to make an estimate of its own. By virtue of this "estimate," the possible number of pension recipients was reduced from 20 to 30 per cent; that number of "veterans" it was "guessed" enjoying incomes of over \$1,000 a year. Other deductions of somewhat similar character were then made; and finally an estimate, - a final "guess" - was reached that the aggregate increased draft on the Treasury during the first year of the operation of the bill was not likely to exceed \$20,000,000. But, as the great mass of the claims are necessarily acted upon during subsequent years (the Bureau being swamped by the number thereof), and all operate back to the time the claim was filed, it is not unsafe to estimate that for the second year the draft made on the Treasury by virtue of this measure would be in the neighborhood of at least The report then goes on to \$40,000,000. state that under this bill no provision was made for the soldiers of the Mexican War; while any further measure for the benefit of soldiers' widows, etc., was to be considered in a separate bill to be reported by another committee. It would thus appear that, under the measure now favorably acted on by the Committee on Invalid Pensions, the \$160,000,000 paid out by the Pension Bureau, according to its report in 1910, is to be increased by the sum of from \$50,000,000 to \$75,000,000 in the not remote future; further provision being yet to be made for the soldiers of the Mexican War, for soldiers' widows, etc., etc., etc.

Sweeping and extravagant as this measure is, it does have one feature of improvement, and of marked improvement, over previous legislation. It recognizes to a certain degree the period of service -- it is at least an effort in the direction of manifest justice. The ninety days man, the six months man, the nine months man, and the three years man are not all lumped together and dealt with as if the mere fact of service at all or of any sort alone called for consideration. Under this system, which had permeated

all previous legislation, men who had never heard a hostile shot, or seen a Confederate flag outside of a museum; men who, as had notoriously been the case, had taken advantage of the expiration of a brief term of service to march home to the sound of the enemy's cannon after battle had been actually joined — such were not set down as the equals in every respect of those who went in for the whole war. A distinction was recognized between the eleventh hour recruit and him who had borne the heat and burden of The bill was at least an the entire day. attempt to recognize the one great essential distinction — differences of time in the manifold enlistments. It had in this respect much to commend it as an advance upon all previous efforts at pension legislation. So much, at least, must be said in commendation of it.

Conceding this, the present "Sher-wood" bill — that under immediate con-sideration — is, as presented, none the less in other respects a somewhat noticeable example of that absence of care and exact-ness characteristic of all "blanket" legislation. It invites concealment, deception, fraud, and perjury. Take, for example, that clause upon which so much emphasis in the accompanying report is laid, intended to confine pension payments under this act to the needy. Under a previous pension measure of a different character reported in the Senate in 1909 (Senate 4183), it was provided that a beneficiary under that act should first "make affidavit that his income derived from private sources and including the income of his wife" did not exceed a specified amount; but in the Sherwood bill, it will be observed, it is merely provided that a pension under the act should not be paid to any soldier whose annual income is \$1000 or more. As already stated, it was then crudely estimated that from 20 to 30 per cent. of the possible beneficiaries would be excluded by the operations of this clause. If so, they must, it would appear, be excluded at their own option. No affidavit is required; no provision is made for examination of individual cases; there is no exception be-The cause of income derived from a wife.

possible beneficiary is left to settle the matter with his own conscience. Prac-tically, the exception thus amounts to nothing. Moreover, what at most, or in any case, does it amount to? The accompanying report especially says that the bill does not repeal or modify any existing pension law. The exclusion, therefore, of cases in which the possible recipient has a private income of \$1000 or more, would only prevent his drawing the difference between the pension provided under a previous law and a penson provided under The economy upon the proposed law. which so much emphasis in the report is laid, thus amounts to nothing at all. It is an economical blind, devised to "save the face," so to speak, of a committee conscious of a mandate to reduce the public outgo.

It has already been stated that no precedent exists in the history of the human race for such indiscriminate and promiscuous giving as that already provided for under the existing pension laws of the United States, or for anything even approaching it. Of this the British Old Age Pension act is illustrative. This act, -at the time of its passage deemed one of unprecedented liberality outside of our own pension system — it was estimated, would impose a draft on the Imperial Treasury of about six million sterling (\$30,000,000) a year. Experience is uniform and invariable to the effect that every measure of indiscriminate public giving far exceeds, in its practical operation, any previous estimate made of the cost thereof. It proved so in the case of the British Old Age Pension act, the provisons of which were most general. The originally estimated disbursement of six million sterling a year, will, in the third year of the operation of the act be thirteen million, . the equivalent of some \$65,000,000 in American money. The annual pension drain on the American Treasury, because of a war fought close upon fifty years ago, already considerably more than twice that amount, will, under the proposed legislation, should it become a law, exceed it by more than three fold. Nor is the limit reached, or the end even remotely in sight.

It is a safe and good rule for legislators, whether municipal, state, or national, to measure every proposed public expenditure by their individual and private standards - in other words, to do for and with the public as under similar conditions and circumstances they would When, do for themselves, with their own. for instance, it is a question of making a draft on the public treasury, the strictly conscientious legislator would err on the right side only, should he be actuated, mutatis mutandis, by the same considerations of reasonable expenditure which would actuate him were he signing a check or authorizing a draft on his own bank deposit.

The matter of provision to be made for those who for any reason are insufficiently provided for, is no new question. On the contrary, in one form or another, it has, as a problem, occupied the attention of the individual man, the legislator, and the business administrator or director almost since the beginning of time. And if, as a result of all human experience, through largesses, distributions, charitable bequests and foundations, poor-laws and work-houses, doles, out-door relief, asylums, and pensions - the panem et circenses of all times and kinds - one fact stands forth more distinct and indisputable than most others, it is that promiscuous and indiscriminate benefactions and givings are a curse to all concerned. In such case the demand always exceeds the supply; feeding on itself, the thing fed grows with an exceeding growth. Impairing self-respect, it saps the desire of self-help. It creates dependents and begets mendicants.

It remains to apply these rules of action and results of experience to the United States pension legislation. Did any one ever hear of a private individual or a large business concern which, in providing for employees and dependents, pursued the policy which has for the last thirty years been pursued by the United States Congress, as respects what are known as the "veterans" of the Civil War, or those dependent upon them? Did any one, either in a private capacity, a corporate capacity, or a public capacity, ever hear of a system under which equal amounts

were distributed in the form of annunities to every one who had been in a public or private or corporate employ, at a given period of time - provided only it was in excess of ninety days - and wholly irrespective of his means, present occupation, earning capacity, or physical condition? A private individual who, dealing with his own funds, adopted such a policy, would unquestionably at an early day be in bankruptcy; provided always he was not put under guardianship by a court-of-law on petition of members of his family or those dependent on him. The directors of a business corporation, no matter how large, who pursued such a policy, would unquestionably be held personally liable for perversion of corporate funds. Yet this is exactly the course which, in the case of the Civil War pension roll, has, for the last thrity years, been pursued by a succession of Congresses.

Custom has habituated the country to the spectacle; and the extreme crudeness, and consequent waste and incidental abuses and corruption of the system are taken as matters of course. They excite neither notice nor criticism. To realize the situation it becomes necessary to get a glimpse of it objectively — to see ourselves as others must see us. Let a case be supposed. Reference has already been made to the British Old Age Pension system. By virtue of that act, ill-considered in many respects and confessedly open to grave criticism, weekly payments are made under clauses necessarily general in their phraseology, to all persons coming under their purview. These of course are numbered by tens of thousands. Now let it be assumed that, in addition to general legislative action, Parliament were to assume both administrative and judicial functions; inviting individual applications, exceptional in character and undertaking, to pass upon each separate appeal; granting special exemptions and favors, and in cases even correcting; and setting aside the judgments and sentences of judicial tribunals, declaring him not a criminal who is a criminal of record; and if this were done habitually and in thousands of cases each year (pensioning

pardoning being recognized as a parintary perquisite) such a system, criminate, illogical, wasteful, and con-, we would at once pronounce orthy of a civilized country and ssible of continued operation. Yet is the exact system in use in the ed States. As a result of its workings, ndred and sixty million dollars were, 10, drawn out of the Treasury, and r those workings it is proposed to out two hundred millions in 1913. this not a fact, the statement of it

d seem incredible. e question, therefore, naturally sugitself why is such a system continued? nd much more, how has it come about the extension of such a system is not proposed but is so sure of passage, can it once be brought to a vote, n can be forestalled only by recourse rliamentary expedients? To any one makes a study, even a superficial r, of existing conditions, the answer vious. Much has been heard of late e trusts and of great trade combina-which control legislation, greatly to ublic detriment, while more conducive to private emolument --- "predatory as the phrase goes. It is safe, :h. ver, to say that there is to-day in lington, or in the world, no influence 1, in its power to break down opposiand to bring about the legislative ts it desires, is at all comparable to influence which has grown up and ne organized under the existing 2d States pension system. That sysexisting disburses eight score millions a year. rever disbursements on any account into the millions, the opportunity /hat is known as "pickings" cannot To that rule no exception can xist. und. The Commissioner of Pensions, s report for the year ending June 30, states that more than 25,000 recogattorneys practise before the Bureau. ng the year 1909 more than \$320,000 ublic money was disbursed among He further states that there was rked increase in the amount of attorfees paid, due to claims filed and ed under an act passed during the ous year. Every "blanket" act

implies an enormous increase of attorneys fees. A most fair-faced and plausible, but altogether deceptive and very innocuous clause from time to time appears in these acts to the effect that no money under the provisions thereof shall be paid to attorneys. The clause amounts to absolutely nothing. This was curiously demonstrated in the case of possible beneficiaries under the various pension laws after the Spanish War. "On the return of the army from the Philippine Islands, most of the troops were mustered out in San Francisco. In advance of their arrival at that point, the pension attorneys of Washington hurried to the spot to open offices or have their agents ready to meet the returning soldiers. According to the language of the soldiers themselves, the rival agents beset them at once, importuning them to file their claims for pensions without delay. To the bewildered youths, eager only to reach their homes, seventyfive attorneys seemed to be pursuing each victim, assuring him that it was his duty to file his application, whether an invalid The hospitals had to be guarded or not. against these tormentors masquerading as friends of the invalids." In the case of a single regiment composed of officers and men of exceptional physical excellence, 477 applications for pensions were filed within four months, for over twenty different diseases!

"Wheresoever the carcass is there will the eagles be gathered together." For "carcass" in the above Biblical aphorism read "pension largess" and, for "eagles," 'vultures," and the situation with us as respects pension attorneys is not in-adequately set forth. For them, each fresh "blanket" bill spells — "Harvest"! And it is safe to say that, if the exigencies of legislation called for it, every one of the 25,000 attorneys practising before the Pension Bureau could be depended upon for at least one telegram to some member of Congress. It is no exaggeration, therefore, to assert that, at a single indication amounting merely to a warning from the sentinel "vulture," from twenty to thirty thousand telegrams would in a single day be poured in upon Congress. The pressure also could be directed exactly at the points where pressure was most necessary or desirable. Outside of Congressional circles, few have any idea of the influences which can thus be brought to bear. It is to be remembered also that, on the other side, nothing is heard. What is every one's business is proverbially no one's business; and any member of Congress, whether Senate or House, questioned on the point, would state that to one letter or message of protest against some "blanket' act involving the expenditure of tens of millions, he will receive at least a hundred urgent messages demanding its passage. If, moreover, any member of Congress raises his voice against such a measure, he becomes at once the recipient of letters of remonstrance, some indignant, others abusive and threatening. Most rarely, however, does he get a letter of commenda-The logical result tion or sympathy. Members of Congress are somefollows. what exceptionally human.

Looked at from another point of view the political influence in favor of any and every additional pension measure, no matter what its character, is apparent, and even more startling than apparent -On the 30th of June last, there were upon the rolls of the Pension Office the names of over 880,000 recipients. These, of course, are unequally distributed. They represent, however, on an average, considerably more than 2,000 recipients for each present Congressional district of the country. In Indiana, for instance, there are 4.176 pensioners to a district; in Maine there are 3,773. The six New England states average 2,985 recipients to each district. In twelve other states -New York, Pennsylvania, New Jersey, Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Missouri, Oklahoma, and Kansas

the districts average a trifle more than 2,800 each. On the other hand, in the eleven states which constituted the Confederacy, represented in the aggregate by 98 members of Congress, there are but 754 recipients to a district. The two states of the Confederacy having the largest number of pensioners are Arkansas and Tennessee with a fraction more than 1,640 to a district; but Georgia with eleven representatives averages 310 pensioners only to each

district; while South Carolina with seven representatives has but 275. In seven former Confederate states having an aggregate of sixty-eight representatives, the pensioners average 490 only to a district, as compared with 3,258, the average in six populous Northern states returning 89 members of the House. Furthermore, the pensioners in the Southern states referred to are, presumbly, nearly all pensioners coming down from earlier wars - the Mexican War or even that of 1812 and the provisions of the pending Sherwood bill, with its fifty millions of increased annual outgo, affect the states named in no appreciable degree; while, on the other hand, six Northern states -Ohio, Illinois, Indiana, Wisconsin, Iowa, and Kansas -- have at least 120,000 would-be beneficiaries under that bill, averaging not less than 1,300 to a Congressional district.

For reasons that at once suggest themselves, no considerable opposition to this indiscriminate but unequal distribution of public money has as yet been made by the representatives of the Southern states; though, in addition to their share of the heavy burden of taxation imposed generally by the national pension payments, each of these states supports a local system making provision for the disabled and necessitous yet living, among those furnished by it to the armies of the Confederacy. Incidentally, it may be observed that some of those Confederate pension measures as respects administration as well as the measure of relief furnished, might well afford material for Congressional study. Carefully framed, while assisting the deserving and needy, they do not hold out temptation to fraud or actively stimulate and foster mendicancy. For instance, under the pension law of South Carolina there is a provision that property sufficient to produce \$75 in the applicant's own or his wife's name, debars a possible beneficiary from receipt of a pension. Furthermore, it is credibly asserted that in the Confederacy the veteran "who possesses even a moderate competence, who has sons or daughters able to provide for him would regard it as a humiliation to be offered a pension by the State."

EDUCATION AND MONEY, LEADER-SHIP AND MORALITY

THE CASH VALUE OF TRAINING IN ALL PURSUITS — SEVENTY-FIVE PER CENT. OF LEADERS EDUCATED MEN — THE VOTE ON THE LORIMER QUESTION A MORAL TEST

BY

PAUL H. NEYSTROM

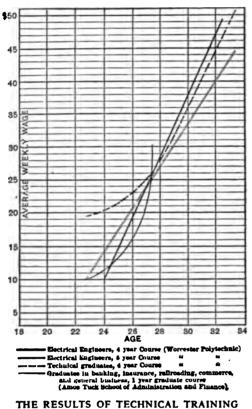
HE results of education may be viewed from two dif-ferent standpoints, one posdifitive and commendatory of what has already been accomplished. and the other negative and critical of the failure of the schools to do what seems within possibility. In the past, most discussions upon this subject have been either too much of one or the other, and this has been the case because arguments had to be built upon beliefs and opinions rather than facts. The facts were not obtainable. lt is noteworthy, however, that theoretical statements concerning the values of education have recently given place more and more to arguments based on facts or actual conditions. The time seems ripe for a summary of such facts.

As is well known by all, the positive results of education are in some respects intangible and therefore difficult to measure, and some think that the most intangible of the results are the most valuable. The breadth of view, the liberality of thought, the increased satisfaction in living, the diversified interests, the various touches which education lays upon character, are all incommensurable but of undoubted value.

In these days of scientific business management, however, when all lines of human activity are being observed, experimented upon, and standardized, it is not strange that the schools, which are in a certain sense business institutions, collecting and expending enormous sums of money, should be challenged to show results from these expenditures. The demand is fair and should be squarely met. But, at present, it is obvious that, no matter how good the results may be, it is difficult to show what they are because of failure on the part of the educational institutions to keep suitable records of their work. Cost accounting is the watchword of the industrial world, and there is need of cost accounting and other statistics in education likewise.

Meagre as they are, there are still certain evidences available. These may be grouped under three heads; — first, those which show the money value of education; second, those which show the relation of education to leadership; and third, those which show the relation of education to good citizenship, public and private morality.

The facts concerning the money value of education have been obtained in a variety of ways. A number of schools have kept account of their graduates, especially as to positions held and salaries received from year to year, so that average incomes for each year after leaving the school could be computed. These schools are of both secondary and college grade, so that the value of progressive amounts of education may be compared. State commissions on industrial education in Massachusetts and in New Jersey have compiled statistics comparing the average incomes at various ages of those who have received technical education with those who have not had such advantages. And certain individuals have made special investigations on the money value of education in definite fields. Mr. James M. Dodge conducted such an investigation in the mechanical industries; Mr. Herbert J. Hapgood, in business,

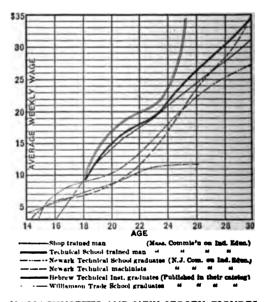


SHOWING THAT THE SALARIES OF THE GRADU-ATES OF THE WORCESTER POLYTECHNIC INSTITUTE VARY DIRECTLY WITH THE LENGTH OF THEIR TRAINING — AND SHOWING ALSO THE RESULTS OF TRAINING AT THE AMOS TUCK SCHOOL OF BUSINESS

and Mr. K. C. Livermore, working with Professor G. F. Warren of Cornell University, has made a study of the earning power of the farmers of four townships in the State of New York, classified according to the amount of education they received.

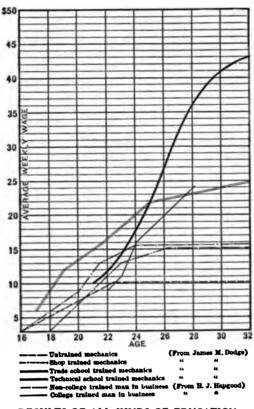
These statistics, although admittedly imperfect and meagre, show with surprising uniformity that education does have a value which may be expressed in dollars and cents; and it is noteworthy that this applies with equal force in industry, business, and agriculture. It is also noteworthy that there is not a single exception in the results as shown, nor in any others so far as the writer knows, to the rule that the higher the average of education the higher the average earning power. The late William T. Harris, when Commissioner of Education of the United States, pointed out that, where the public term is longest, there the average productive capacity of the citizen is greatest. He took as his example the United States as a whole and the State of Massachusetts. The average school period per inhabitant in the whole United States was 4.3 years; the average school period for Massachusetts was 7 years. The ratio of the school period in that state to the whole United States being, therefore, 70 to 43; but the ratio of productive capacity per individual in Massachusetts to that of each individual in the whole United States was then 66 to 37 which is equivalent to 70 to 40.5. The similarity of the ratios that is, of education, 70 to 43 and of productivity, 70 to 40.5, constituted, accord-ing to Harris, more than a coincidence; and upon this basis he computed that, for each year spent in school beyond the average of 4.3 years, the future earning power of the individual would be increased more than one thousand dollars.

As to leadership, we have frequently heard in this country of the number of self-made men and women who have forged their way to the front in business, industry, and politics. This has con-



MASSACHUSETTS AND NEW JERSEY FIGURES COMPILED BY THE COMMISSIONS ON INDUSTRIAL EDU-CATION, WHICH SHOW THE RELATIVE EARNING POWER OF SHOP-TRAINED MEN AND TECH-NICAL SCHOOL GRADUATES

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RESULTS OF ALL KINDS OF EDUCATION FROM THE INVESTIGATIONS OF MR. JAMES M. DODGE AND MR. H. J. HAPGOOD

stituted a criticism in a negative way of the schools and particularly of higher education; for, if the schools do not contribute in any large way to the development of leaders, one of their purposes of existence is challenged.

For definite evidence upon this point we may turn to "Who's Who in America," with its biographical sketches of more than 17,000 men and women, admittedly leaders in their various occupations and successful from the standpoint of present popular opinion. Among these names one will find not only political officials, such as congressmen, judges, governors, members of legislatures; but also professional men, engineers, manufacturers, inventors, industrial organizers, brokers, and agriculturists.

In the brief account of each individual's life, there is, in the majority of cases, a statement of the educational advantages enjoyed. By studying these statements one should be able to determine quite definitely whether education has had any share in shaping the careers of these individuals or not. If it should be found that most of them are without education such as is received in schools, then it would have to be admitted that the school systems were failing to accomplish one of their great purposes.

The publishers of this work have investigated this question and the results found, stated in condensed form, are as follows: - Of the total number about whom educational facts are given, 71 per cent. have had college training; 58 per cent. are graduates of colleges or schools of college or university grades; 16 per cent. ended their education with secondary schools - that is, high schools, academies, normals, or seminaries; 9 per cent. received only a common school education; 3.8 per cent. were privately educated. But most important of all, as a contradiction of the critics, is the fact that only twotenths of one per cent. of all these men and women were self-taught. It is perfectly clear then that the leaders who are high

NUMBER OF FARMERS	EDUCATION	AV RAGE LABOR INCOME
165	Attended District school only Attended high school or equivalent Attended college or university	\$318 622 847

COLLEGE AND NON-COLLEGE BRED FARMERS THE RESULTS OF INVESTIGATIONS IN FOUR TOWNSHIPS

CAPITAL	AVERAGE LA- BOR INCOME OF FARMERS WITH DIS- TRICTSCHOOL EDUCATION	OF FARMERS WITH MORE		
\$ 2,000 and under	\$ 187	\$ 286		
2,001-4,000	241	275		
4,001-6,000	398	466		
6,001-8,000	345	709		
8,001-10,000	618	796		
10,001-15,000	525	1,091		
over 15,000	1,054	1,272		

HOW EDUCATION PAYS ON THE FARM THE FINANCIAL RESULTS OF EDUCATION BEYOND THE DISTRICT SCHOOL

in the ranks of industry, business, the professions, and politics, come from the well educated classes. These figures become much more significant when we recall that less than 5 per cent. of the youth of the country pass from the com-mon school to the high school, and perhaps not one in a hundred of the entire population receives any college training at all; yet 71 per cent. of the successful men and women of our time have received this college training. To be sure this should be qualified because the "Who's Who" list includes most college professors-men who from their professions are naturally college graduates - which makes it proportionately include more names of educators than of business men, etc., who are not necessarily college graduates. The result nevertheless has significance.

Another interesting fact in the old discussion of whether the city or the country is most prolific in the production of successful men may be drawn from "Who's Who in America." Frederick Adams Wood, a noted student of heredity, investigated the question by means of this volume and came to the conclusion that cities of 8,000 or more people have furnished twice as many prominent men as the country, in proportion to population. His explanation is that people of strong capacity and ability are attracted to the cities, and he reasons from this that their children must be brighter and more able than the children of less ambitious or less energetic people who live in the country. This, however, is not the only explanation. There is another factor of greater significance, and that is the difference in educational opportunity which exists between the city and the country. Country schools are, and have been, defective. The country school lacks the equipment, the grading, the libraries, the experienced professional teachers, which the city school has, for long, been able to supply to its children. The country boy or girl who is to become a leader must come to town to be educated.

In older countries, where social conditions are much more firmly fixed, the ratios of numbers of great men from the city, to those from the country, are

considerably higher. Professor Odin has shown that the ratio in France has been close to thirteen from the city to one from the country for a period of 500 years. Professor L. F. Ward has shown that 98 per cent. of the noted people of Europe received liberal educations in their youth. It is noteworthy that the percentage of college graduates listed in "Who's Who in America" climbed from 56 per cent. in the 1905-5 volume to 58 per cent. in the 1910-11 volume. This indicates the tendency of the times in the dependence of leadership upon higher education.

The relation of education to good citizenship and to public and private morality is not so clear nor so easily determined as in the case of the relation of education to earning power and to preparation for leadership. Still some facts may be cited which, if not good evidence, are at least suggestive.

When the public schools were in their infancy and educational reformers were busily fighting for their establishment, a frequent argument used was that money expended in schools would be saved many times in the decrease of crime which would follow. It was argued that the schools would take the place of jails and prisons. It must be frankly admitted that no such large results have as yet been achieved, although it must be as frankly stated that public education, according to the ideals of the reformer, has not yet been achieved. Not until our society can require and guarantee that every child shall have what constitutes a common school education, can we say that even the first step demanded by the educational reformer has been accomplished. At present the average number of years attended by children in the American schools at the present time, falls short at least three years of the time necessary under the best conditions to give this common school education.

To determine the positive, moral value of education, so far as public morality is concerned, the following plan was adoped. Lists were prepared of names drawn from histories and biographies of individuals who have, through act and

word, sought moral progress; who have worked for the general welfare; whose thoughts have been for the weak as well as for the strong; and who have not identified themselves with a class or clique with the intent of excluding social benefits from all others.

Other lists have been prepared using names of the opposite type; those who have sought individual welfare; who have served special interests at the expense of public interests; who have identified themselves with selfishness of a kind dangerous to society. Ideals for men are constantly changing in certain particulars. Some men, considered good citizens in times past, would, if they practised the same methods to-day as in their own times, be considered dangerous members of modern communities. Still. there is, in every time, an opportunity to see a difference between those individuals who, professedly and actually, considered only personal interest as opposed to those who, though they perhaps also sought personal interest, did so through advancing the welfare of all.

Using "Who's Who in America" on similar lists drawn up for men of our own time, a conclusion of this question of the relation of education to moral progress and good citizenship, which seems fair, has been drawn. The investigation showed that there is clearly a general rule but to it there are many exceptions. In both past and present there have been many individuals who were self-made or who have had but little institutional education, who have placed themselves in the front ranks of the movement for social or general betterment. Of this fraction of the population, the American people are justly proud. Society owes On the other much, indeed, to this class. hand, many individuals with most excellent institutional education may be found, who have plainly forgotten the services that society has rendered to them and who are using their education for mean and selfish purposes. Making allowances, however, for these exceptions, it is clear that, during the last fifty years, not less than 75 per cent. of those who have stood as leaders for the best things in society, have received the best educational advantages offered in the country; and of that other group of well known individuals whom we shall briefly class as public wrong-doers, fully 75 per cent. have had even less than the influence of eight years within common school walls.

Turn where you will and you will find the constructive reformer almost invariably an educated man or woman. Study the life history of the grafter, the crook, the subservient handyman for special interests, the degenerate political boss who recks not how victories are to be gained, who buys votes as he buys land, who corrupts legislatures, dominates city councils, and you will find, almost invariably, a man with limited institutional education, usually one who began his contact with the realities of a hard world at an early age, and who daily learned the lesson, so frequently taught in the business world, "each one for himself," according to the law of the jungle.

It is not so remarkable that this should be the case when we consider that the years spent in school, especially the high school and college, are the most impressionable in life. The contact in those years, not only with liberalizing studies, but with people of highest moral and social ideals, the teachers — this with the absence of the hard competitive environment of the market place — tends to promote development and growth of those social sentiments and ideals regarding the welfare of our fellowmen, which have their germ in every human being. Even if there were not a single subject of practical value taught during the advanced school period to the boy or girl, it does not seem that it would be a loss to society to continue to support and encourage attendance in these higher schools in order to preserve its young people, during these formative years, from contact with certain phases of business life. As it now exists in some quarters, business brutalizes and dehumanizes all but the strongest characters. Add, now, to this use of the school as a shield at a critical time of life, the education which comes from thought and from the study of subjects of social significance; and, to this, the personal contact and instruction of high-minded teachers,

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and you have a combination of influences which are bound to have their effect upon the welfare of society, through the students when they become active members of that society.

The exceptions to the rule may be explained by the fact that the school does not guarantee education to any one. All that it offers is opportunity. Teachers education to cannot give students. Equipment, laboratories, buildings, libraries, all that one finds in a school are no surety that the youth will be educated. These are but means by which the student himself may obtain an education. The teacher points the way, the student must do the work. It is entirely possible for a student to pass through any school without getting a real education. No examination can reveal how much a part of himself the studies and influence of the schools have become. Everything indicates, however, that the better the teachers and the better the equipment, the greater the likelihood that most young people in attendance will get the results desired from the schools.

As an example of the method just described, to suggest if not to prove the moral effect of education, an investigation of one aspect of the Lorimer case is illuminating. During the last session of Congress, the United States Senate was called upon to decide whether William Lorimer of Illinois, should be permitted to retain his seat in that body or not. It was alleged by his opponents, upon proof quite generally accepted by the public as conclusive, that he had been elected to his position by improper means, which reflected upon his honor as well as upon the legislature of the State of Illinois. As provided by the United States Constitution, judgment as to his guilt rested with members of the Senate. The question was not a political one, since both Democrats and Republicans voted on both sides of the question. It was not a question of local or sectional interest, for members from all over the country voted on both sides of the question. It was, more than anything else, a moral question. It was one which involved a careful consideration of the interests of

the whole nation as opposed to the interests of a few individuals. It was a question that called for high moral courage on the part of those who were to decide it, and, not only that, but a broad conception of the effects of their decision upon the Senate, upon the attitude of the public toward governing bodies, and upon the general welfare of the public itself. Using "Who's Who in America" and the "Congressional Register" as the sources of information, facts were determined concerning the education of the Senators. The accompanying table gives the results.

EDUCATION OF SENATORS WHO VOTED	AGAINST LORIMER	FOR LORIMER
College education	35	18
Secondary education Common school education	3	15
No record	i	
Total	40	46

Seven eighths of those who voted against Lorimer had received college education, while only a fraction more than three eighths of those who voted for Lorimer had received any college education. At least twenty-six of those who voted for Lorimer had never attended educational institutions higher than secondary grade, while only four among those who voted against Lorimer had such meagre education.

It is not maintained that these figures drawn from a study of those voting on the Lorimer question prove anything definitely however. Even though valueless from a scientific standpoint, they are, at least, food for thought.

After making a number of such lists as that given above in various fields, the writer has been drawn strongly to the conclusion that there is a close relationship between education and good citizenship. There is even something to be said for the results of the various kinds of education — classical, technical, professional, and scientific. Each has its own tendencies in preparing young people for social life. But this constitutes another story. Here we must be content if we may but make clear the value of general education in money, in preparation for leadership, and in making good citizens.

THE SOUTH REALIZING ITSELF

THIRD ARTICLE

REMAKERS OF INDUSTRY

THE SPIRIT OF SCIENCE WHICH, THROUGH TWO MEN, REVOLUTIONIZED THE TURPEN-TINE INDUSTRY AND THE SOUTHERN STEEL BUSINESS — THE SOUTHERN POWER COMPANY AND A NEW ERA IN THE COTTON MILLS

BY

EDWIN MIMS

(PROPESSOR OF ENGLISH IN THE UNIVERSITY OF NORTH CAROLINA)

RACTICALLY every Southern industry is now being put upon a more substantial basis as the result of better organization, expert management, or technical skill. Succeeding the era in which the resources of the South were developed, sometimes with remarkable profits even in spite of crude and wasteful methods, has come an era in which these industries are coming into the hands of trained men. Formerly it was comparatively easy to make money by the manufacture of coarse cotton goods or pig iron; men went into manufacturing from other professions and had little trouble in succeeding. Unexpected obstacles and increased competition have in recent years caused these same men either to fail or to readjust themselves to new conditions. A prominent cotton manufacturer said not long ago that everybody in a cotton mill to-day from floor-sweeper to president had to be educated — at least, in the school of experience. The industrial leaders are putting a new emphasis on expert superintendence and the training of employees.

Sometimes important results have come from superior management. Citizens of Durham, N. C., recall vividly the reforms wrought in the two large tobacco factories of that city by Mr. C. W. Toms, formerly superintendent of the city schools. He introduced into the factories the same mastery of details and capacity for organization that he had displayed in the management of the most progressive system of schools in the state. The "prac-

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tical men" were surprised that a school man could find so many things to improve, so many wastes to cut out. The Blackwell Durham Tobacco Company was a profitable business under old conditions, but under the expert management of Mr. W. W. Flowers it has become a far more profitable one. Mr. Flowers, thwarted in his ambition to become a specialist in German, has applied to manufacturing the accuracy and thoroughness that would have made him a notable scholar. No controversy as to the merits of a large corporation should obscure the significance of such men in the present era of Southern development.

The bags in which Bull Durham smoking tobacco is put up were made by hand until a young North Carolinian, John Kerr, a graduate of the Massachusetts Institute of Technology, invented a machine which has led to their manufacture on a large scale by the Golden Belt Manufacturing Company. This invention suggests the fact that the South's proportion of patents has increased in recent years. Two young farmers of Moore County, N. C., a few years ago invented a cotton planter, for the manufacturing of which they have established one of the successful industries of Charlotte. In the same town, Mr. Stuart W. Cramer manufactures several cotton mill machines of his own patenting, notably, an invention for the automatic regulation of the relative humidity and temperature of any mill, that is used in the mills of New England as well as in the South.

What science is doing in Southern industry is made concrete by the experiences of two men from the same county in Georgia both of whom received an inspiration in Germany that proved to be the turning point in their careers and of great service to their native section. Professor C. H. Herty, now head of the department of chemistry in the University of North Carolina, while taking lectures at Charlottenberg (Berlin) under Professor O. N. Witt, one of the most celebrated industrial chemists of Europe, inquired of the professor one day what he thought of the turpentine industry of With a characteristic German America. gesture the latter threw up his hands and exclaimed: "You have no industry, you have a butchery. I speak from personal knowledge, for I have been in Florida. You are wasting your natural resources and get nothing like an adequate return from them.

The remark was a surprise to the young American scholar, who had been born on the edge of the turpentine belt and had heard all his life of the money made from this industry. He could make no reply at the time, having never seen the actual operation of getting resin from pine trees. He decided that as soon as he reached home he would see for himself and, if the criticism proved true, devote himself to finding a remedy.

He began his investigations at Valdosta, Ga. He saw at a glance the wastefulness of the method employed. In addition to the necessary "wounding" of the tree to cause the resin to flow, deep holes ("boxes") were cut at the base. These boxes weakened the trees so that they were an easy prey to winds and forest fires. Moreover, there was a good deal of waste in dipping the resin from the boxes.

Such was the practice which he saw, a practice that was not very efficient in getting resin and which was very destructive to the forests. He secured all the literature on the subject and found that in France the turpentine operators had used clay cups instead of boxes cut in the wood, and that in this way the trees had been saved for as much as a hundred years. He found, too, that many patents

had been procured at Washington by men who had worked at the problem of a substitute for the harmful box method. The difficulty with the French method was that it called for skilled laborers that could not be commanded in the South; and the difficulty with the American patents was that none of them had been successful commercially. So he went to work to find a substitute that would be simple enough to be used by Negro laborers, cheap enough to command the attention of operators and renters, and efficient enough to secure a maximum flow of resin.

On his first vacation — he was then adjunct professor in the University of Georgia - he went to Savannah to interest the turpentine operators in his ideas and plans. He met with almost entire indifference on the part of men who seemed to feel that it was better to leave good enough alone, especially as pine forests seemed almost inexhaustible. At the end of his second day, after almost abandoning hope, he secured the promise of some timber with which to experiment and a pledge of \$150 to cover actual expenses. In the spring of 1901 he fitted up near Statesboro a sort of forest laboratory, arranged in various plots of timber to test the comparative results of the box and cup methods. He found it difficult to get laborers, the Negroes having nothing but contempt for the "flower pots" that were put upon trees, for his system consisted of little metal gutters running diagonally down across the facing and emptying into a cup — an earthenware pot hung on the side of the tree. It was a very simple looking thing to revolutionize a great industry.

One man was not indifferent to the results of these investigations. Mr. Gifford Pinchot, then in the forestry department at Washington, after hearing Professor Herty's story, said:

"You are the man I have been looking for. What can we do? We will publish anything you write. You'd better become one of the experts of the department. This means not only increased profits for the turpentine operators but the conservation of our forests."

The result was that Dr. Herty resigned

ofessorship and, with the support Bureau of Forestry, conducted exints on a much larger tract of tim-Ocilla, Ga. — the owners of the furnishing labor and timber and the profits. There, with a squad live Negroes, by systematic tests, ved still more conclusively that an ied yield over a longer period of ind a better quality of resin came he cup method than from the old

Three years later similar tests 1 an increased yield of 30 per n the "cuppings" of the second and years, while at the same time the vere preserved from storm and fire. next problem was to get the cups actured, and to secure the coion of the operators. The manuers of pottery said that they could anufacture the cup for less than ents, and they laughed at Professor when he said that he wanted not ds, but millions. One morning in brleans, two years later, Dr. Herty ie million and a half cups to two men hey were waiting for their breakfast. ime a pottery plant was bought at Tenn., with the intention of manung cups half the time and stoneware ier half. As the result of an address at Jacksonville in 1902 before the ation of Turpentine Operators, had been organized two years to limit the output of turpentine er to save the forests, Dr. Herty d widespread interest in the new 1. The newspapers were his en-The railroads bestic supporters. interested to the point of giving a reduced rate on the transportation cups, while some owners of timber pledged themselves to let their only on condition that the operators use cups.

two years, Dr. Herty conducted strations under the Bureau of Forbeginning with a convict camp in wamps of Georgia in water one eep on a cold February day, and

by covering the territory from Carolina to Mississippi. While were at first some disappointments ted with the cups, they have gradually won their way with the great majority of intelligent operators. Though the company has a monopoly, they have sold the cups uniformly at a cent and a half; and the factory has worked day and night to supply the demand. It is estimated that the cup system has already added more than ten million dollars to the annual value of the turpentine industry.

Not satisfied with these results, Professor Herty has continued his investigations during the past five years, especially in the direction of determining the results of narrow and shallow chip-ping of trees. Profiting by the discoveries made by a Swiss professor as to the source and causes of the production of resin, he has made other contributions to the improvement of the turpentine industry. For four years, near Jacksonville, Fla., the Forest Service, with his advice, has conducted experiments with 25,000 trees arranged in four equal crops and chipped in different ways; while in the laboratory of the University of North Carolina experiments have determined the effect of shallow chipping on the quality of the product. The results recently published go to show that the trees which were chipped lightly yielded a greater percentage of turpentine and a better quality; that such chipping left the timber in a condition to be immediately worked again for a second fouryear period; and that, by the conservative selection of trees, the same tract may be worked indefinitely, and at the same time yield more turpentine than was produced by the old destructive methods. The upshot of all this patient scientific work is that we have now the prospect of an intelligent treatment of one of the South's most important industries. "Instead of being a self-destroying industry bound to disappear before many years, the naval stores industry, after having retreated southward and westward because its material in the old regions gave out, is now in prospect of becoming stable throughout the present Southern pine belt." To test these results on a larger scale, the Forest Service has recently established the Choctanhatchee National Forest "which will be continuously yielding turpentine, continuously producing lumber, and continuously renewing itself."

The other Southerner to whom 1 referred as moved by the scientific spirit was Mr. George Gordon Crawford, now president of the Tennessee Coal, Iron, and Railroad Company, who has, during the past four years, by expert management and by the application of technical knowledge, revolutionized the iron and steel business of the Birmingham district. The first graduate of the Georgia School of Technology in 1890, he went to Germany to spend two years in the study of technical chemistry in the Karl Eberhard University at Tübingen with a view to supplementing his knowledge of mechanical engineering with that of metallurgy hoping thereby to prepare himself for success in the iron and steel business. Soon after reaching Germany he heard a professor say in one of his lectures that the Southern states of America were in the matter of kultur at about the stage of Europeans in the Middle Ages. Somewhat sensitive at this remark, he found upon inquiry that the professor did not mean intellectual culture but rather industrial efficiency. From that day he had a new sense of efficiency as a factor in industrial development. Upon his return to this country he went to Birmingham to learn the practical side of the iron and steel business, only to find that his German professor was right with regard to this industry at least; for at that time, 1892, the business was upon a crude basis, from the standpont of both financial management and the processes of manufacturing.

After three months he became an employee of the Carnegie Steel Company at Pittsburgh, first as chemist and then as draftsman. He refused promotion at different times in order to learn every process in the manufacture of steel. His technical knowledge and practical sense soon led to his appointment as assistant superintendent and then as superintendent of the blast furnaces of the Edgar Thomson steel mills — the largest furnaces in the world. Later as manager of the National Tube Company at McKees-

port, he not only had charge of every kind of steel mills but directed ten thousand workmen. He completely overhauled the extensive plant of the Company, putting in improvements to the extent of \$9,000,000. By this time he was well known throughout the United States Steel Corporation, having successfully invented original devices and labor-saving expedients. He was serving on a half dozen of the most important committees of the Corporation, some of which called for visits to the iron and steel mills of Europe. It was natural that, when the Tennessee Coal, Iron and Railroad Company became a subsidiary of the Steel Corporation in 1907, he should become its president.

In the prime of his life — he was then only thirty-eight years old - and with the knowledge of the best that was being done in the manufacture of iron and steel throughout the world, he entered upon his duties at Birmingham. Although he found that much improvement had been made since he had left there fifteen years before, yet when all is said as to the progress of the district there was still a condition of uncertainty, of restlessness, and even of feverishness. Booms had been so often followed by panics; and periods of the wildest enthusiasm had given way so often to periods of depression that confidence was necessary. Improvements made in various departments needed to be crystallized into an organic This was the state of affairs whole. that greeted Mr. Crawford in Birmingham.

Mr. Crawford has studied the cost sheets - not only those of his company but also those of the subsidiary companies of the United States Steel Corporation, copies of which are sent to him weekly. From his study of these cost sheets he has made certain demands of superintendents and foremen; he has gradually brought about more efficient management and a greater tonnage per man in every department of the company's work. Without any of the characteristics of a despot he has brought the entire plant in line with business the best modern practices. Moreover, he has had an eye upon every detail and every process of mining and manufacturing. He has used the too appropriated by the Steel ation to improve trackage, to ine labor-saving devices, to build s that are of the best quality ed in the world — in a word, to ut a complete plant characterized manence, economy, confort, and

The climax of the Ensley plant, includes iron and coal mines and images for the manufacture of iron el, is the rail mill, which now, by e of the duplex process of steel cture, turns out rails that are y many of the large railroads of ntry because they are better than er rails.

point of view of Mr. Crawford in e improvements may be the better ood by two of his sayings: "It's a natural development we are If, every month, returns are a little than the month before, and a gradual improvement shown, I rfectly satisfied." "Better than ; with our heads in the clouds and ng, is to look where we would cognize obstacles, and avoid them.' as accordingly been patient, for the oratory schooling sticks. He has from no illusions as to the superior iges of the Birmingham district. e optimistic citizens of Birmingham dulging in bombastic utterances, it upon get-rich-quick processes, ves in telling the exact truth. In le recently published in the Atlanta tion, he called attention to the it the production of pig iron had d almost stationary in the South 02, while that of the United States creased 8,000,000 tons; that the ce of pig iron had been due to ing the cream" and bad book-; that, though the quality of steel ide in the Ensley mills is as good in the world, its cost is greater; though the juxtaposition of coal, ;, and limestone seems most favore coal is handled less cheaply than • sections; that the ore has so much orus in it as to render its manuinto steel a more expensive process; ie Ensley furnaces manufacture tons a month while those at McKeesport, identical in number and size, produce 10,000 tons: that labor in other steel districts is more efficient because it has been better trained.

He has insisted likewise that, while Birmingham in view of its location has the right to the iron and steel trade of 30 per cent, of the population of the United States and to a large export trade in South and Central America, it has failed to command this market. This, he says, is because of its lack of finished products, its suicidal policy of selling pigiron at a low price to Northern plants, the inefficiency of transportation facilities, and the lack of steamships from Southern ports that renders almost impossible an export trade. And an export trade is necessary in the steel business to relieve a temporary depression in the home market.

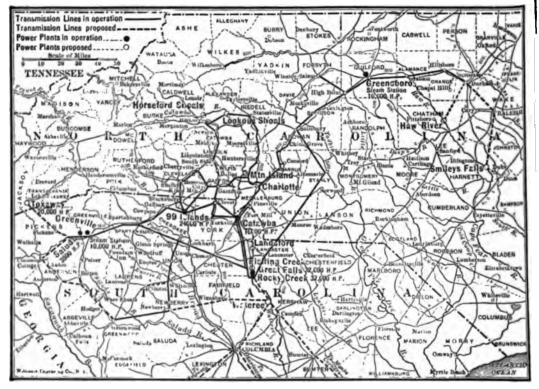
With the full recognition, then, of all these obstacles, Mr. Crawford is working constructively to remove them as fast as possible — they have been to him a challenge for more aggressive work rather than a cause of depression. He has already accomplished much. His company recently sent 7,000 tons of steel rails to South America by chartering special vessels to carry them; and in labor-saving machinery and in some special improvements in manufacturing iron and steel he has made contributions to the whole country.

More important still is the fact that Mr. Crawford has outlined plans looking to the development of diversified steel plants, which will contribute still further to the prosperity of the Birmingham district. A \$3,500,000 by-product coke oven plant, which is to produce 3500 to 4000 tons of coke a day and which besides will conserve such by-products as gas, ammonia, and tar, is now nearing completion. The American Steel and Wire Company, another subsidiary company of the Steel Corporation, is just finishing a plant capitalized at \$4,000,000 and intended for the manufacture of nails, staples, and various kinds of wire. The product of this plant will amount to 450 tons a day and will call for 1500 skilled employees. The Universal Cement Company is now manufacturing Portland cement from the slag of the iron furnaces of Ensley — another illustration of the utilization of waste products. These plants are but suggestive of the development that will inevitably come as the result of Mr. Crawford's far-seeing vision. Their work will be greatly facilitated by the correlation and coordination of all forces and organizations.

The most serious obstacle that Mr. Crawford has met is the lack of skilled laborers. Negroes cannot be used except in some of the drudgery work of the coal mines, foreigners are not always welcomed either by foremen or by the general public, and skilled laborers from other steel districts have been difficult to secure because of the lack of proper living conditions. The situation has been improved by offering to the employees prizes and bonuses for suggestions that they might make for the improvement and efficiency of manufacturing, by the building of bath houses and lockers in the mines, by the introduc-

tion of all sorts of safety devices, and by trying in every way to make life pleasant for the employees. In 1908 the company, having decided to encourage gardening by the miners on the grounds surrounding their houses, built neat wire fences around the yards. An agricultural expert from the United States Department of Agriculture was hired to supervise the work, and the result is that 800 gardens are now being cultivated by 25 per cent. of the employees. The effects have been most gratifying to the company because laborers have been made more efficient by the increased satisfaction they have in their home surroundings — and gratifying to the em-ployees in that their cost of living is thus reduced and that they have a pleasant occupation outside of work hours.

A still more important result is the building at Corey near Birmingham of a model industrial town for the workers in the plants that are now being constructed. This has been done not by the



THE TERRITORY OF THE SOUTHERN POWER COMPANY SHOWING THE TRANSMISSION LINES OF A POWER SYSTEM WHICH, THOUGH ONE OF THE YOUNGLIST, IS ALREADY ONE OF THE BIGGEST IN THE WORLD



A TURPENTINE BOX UNDER THE OLD METHOD WAS CUT DEEP O THE BASE OF THE TREE TO CATCH E RESIN. IT WAS WASTEFUL OF THE ESIN AND DESTRUCTIVE TO THE TREES

Corporation as at Gary, Ind., but scal real estate company, under the on of Mr. Robert L. Jemison, Jr. planning of this, the first industrial n the Southern States, is of such ance as to call for further comment. mison, a young man thirty-three of age, had within a period of eight suilt up a real estate business that cond to none in the South. When ched upon the subject of providing te living conditions for the skilled en of the steel plant, he visited all del industrial towns of the United read all the literature pertaining se of England, France, and Gersecured the well known landscape ct, Mr. George H. Miller, of , to draw up the plans; and with teristic business sagacity and farpublic spirit, proceeded to build 50 acres a town that would reap nefit and at the same time avoid stakes of similar experiments else-Briefly, the fundamental features

of Corey are the following: All possible modern improvements for health, convenience, and cleanliness; the arrangement of the town in zones or districts some of them for business houses, and others for various types of residences, ranging from a minimum of \$1,250 to a maximum of \$5,000; a system of streets, sidewalks, and boulevards, artistically arranged with regard to each other and the elaborate planting of every street and avenue with many varieties of trees, shrubs, and flowers; and crowning all, a large central portion of many acres to be devoted to a plaza, a civic centre including the municipal building, school, public library, and Y. M. C. A. building, and a large central park with provisions for outdoor athletics of every kind and for recreation and amusement. Already the entire system of streets and prac-



THE NEW CUP METHOD

AFTER A SCIENTIFIC INVESTIGATION DR. C. H. HERTY FOUND HOW HE COULD SUPPLANT THE BOX WITH A CUP WHICH DOES NOT INJURE THE TREE AND WHICH HAS ALREADY ADDED TEN MIL-LION DOLLARS A YEAR TO THE TURPENTINE BUSI-NESS AND WHICH WILL MAKE IT A PERPETUAL INSTEAD OF A SELF DESTROYING (NOUSTRY)

THE WORLD'S WORK



BIRMINGHAM FORTY-FIVE YEARS AGO BEFORE THE COAL AND IRON WAS DISCOVERED WHEN THIS HOUSE STOOD ALONE

tically all the tree planting has been finished, while attractive houses, ranging from modern bungalow cottages that may be rented for \$15 a month, to more expensive homes for foremen and superintendents have been completed.

Whatever, then, may come in future years, the foundations of the iron and steel business have been so well laid as to insure prosperity. The outlook for the cotton mill industry at the present time is less promising. Following an era of remarkable success has come an era of standstill and depression. A leading cotton manufacturer said recently that everything seemed to be against the cotton mills this year - Providence included. And yet there is a favorable view to take of even this situation. The present depression in the cotton mill industry has forced the presidents of these mills to make rigid inquiries into every detail of their business - to take advantage of every labor-saving machine, to study every waste, to undertake a finer quality of goods that will insure better profits, to finish their products instead of sending them to New England bleacheries and finishing mills, to study the markets more intelligently, and above all to see the importance of trained foremen and superintendents and of a mill population constantly increasing in training and efficiency.

Take, for instance, the recently established Republic Mill at Great Falls, S. C.

Its president, Mr. R. S. Mebane, and its secretary and treasurer, Mr. H. P. Mebane, were formerly engaged in the manufacture of cotton at Graham, N. C. They saw that the following of old methods and processes would not avail at the present time; so they sold out their interests, devoted an entire year to the study of every phase of the cotton mill situation in New England and in the best Southern mills, and with the aid of an experienced architect drew up plans for a new factory which should take advantage of all that they had learned about mill architecture, machinery, expert management, and the buying and marketing of goods. They secured the financial backing of the Duke family, who were interested in the Southern Power Company and who suggested that the new factory might be advantageously located at Great Falls. On March 1,1911, the mill began operation with 580 looms, and 25,200 spindles.

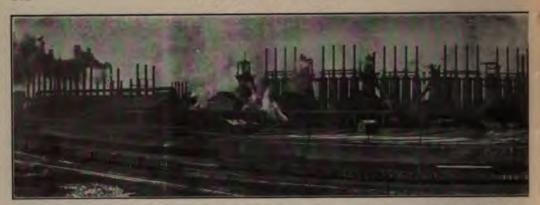


A BIRMINGHAM SKYSCRAPER IN 1911, AFTER THIRIY YEARS OF HAP-HAZARD EXPLOITING OF THE DISTRICT'S RE-SOURCES. THE ERA OF SCIENCE AND PROPER DEVELOPMENT OFFERS HOPES FOR A BETTER IF MORE CONSERVATIVE FUTURE



MR. GEORGE GORDON CRAWFORD

THE FIRST GRADUATE OF THE GEORGIA SCHOOL OF TECHNOLOGY IN 1890, WHO STUDIED IN GERMANY, RECEIVED HIS EXPERIENCE IN THE PITTSBURGH DISTRICT AND WHO AT THIRTY-EIGHT BECAME PRESIDENT OF THE TENNESSEE COAL, IRON, AND RAILROAD CO.— THE NEW TYPE OF MEN OF SCIENCE WHO ARE TAKING HOLD OF THE MANUFACTURING OF THE SOUTH THE WORLD'S WORK



THE BLAST FURNACES OF THE ENSLEY WORKS OF THE WHICH, UNDER THE EXPERT MANAGEMENT OF MR. CRAWFORD, IS CEASING TO "SKIM THE CREAM" UFACTURE, AND IS ENTERING THE

The looms are the latest improvement of the Northrop Draper automatic type, selfistead of each mill having a manager who twenty-six of which may be operated by has charge of all departments, there are one weaver; they run while the employees are at dinner. There is, furthermore, a Barber-Coleman drawing-in machine which takes the place of fifteen or twenty girls. Excellent provisions for light and ventilation in this mill are supplemented by the Cramer humidifying system already referred to. Electric appliances enable the owners of the mill to compute exactly the cost of power for any depart-ment of the mill. In a word, it is as well fitted up as any mill in the country. The living conditions of the employees are on a par with every other feature of the mill; among other noteworthy provisions is that for every cottage, in addition to electric lights and sewerage, pure water is produced by the electric-ozone process.

Approximately the same conditions prevail — on a larger scale to be sure in the twelve mills (four at Columbia, two at Greers, one at Greenville, etc.) that have recently been merged into the Parker Cotton Mills Company, with headquarters at Greenville, with a capital stock of \$15,000,000. The merger has been brought about without any of the ruthless methods adopted by some larger corporations; it appears to have been a normal and healthy outgrowth of economic conditions. The main idea of its pres-ident — Mr. Lewis W. Parker — is that by combination the individual capacities of different men adapted to leadership and management may best be realized. experts in finance, in the operation of the plant, in buying and selling, and in the study of the scientific phases of cotton manufacturing, each one of these experts giving his attention to his particular subject in all the mills. The policy of the president is to do for the less progressive mills what has just been suggested in the consideration of the Republic Millas fast as possible to introduce all modern improvements, to manufacture an in-creasingly high quality of goods, and to cut out the middle men between the mills and the buyers of finished products.

Mr. Parker, originally a lawyer, be-came interested in cotton manufacturing by acting as a receiver for a bankrupt cotton mill which he set going again. By study and by travel he has become one of the most progressive mill men of the South, having been president of the South Carolina Cotton Manufacturers' Association and of the National Association, and being still a recognized leader in all meetings that are concerned with the cotton mill situation. In a recent address before the University of South Carolina, on "Science and its Relation to the Industrial Development of the South,' Mr. Parker said, in speaking especially of the cotton mill industry:

The character of this manufacture has been of a comparatively low order, and our mills

THE SOUTH REALIZING ITSELF



TENNESSEE COAL, IRON, AND RAILROAD COMPANY OF THE NATURAL RESOURCES OF THE REGION TO SELL AS PIG IRON TO NORTHERN MILLS TO MAN-PROFITABLE FINISHED PRODUCT ERA

have been content to manufacture that class of goods which requires the least skill, both on the part of the management and the employees. Northern mills have finished and printed cotton goods. They require a scientific knowledge beyond that possessed by most of our manufacturers, and a field is open in the future for the possessors of such knowledge. In all these lines we have been content to be "hewers of wood and drawers of water," allowing to others the benefits which come from increased skill and greater knowledge.

He has accordingly employed in the mills under his control graduates of

textile schools. He was, as pointed out in a preceding article, one of the first to support Mr. D. R. Coker in his plans to lengthen the staple of upland cotton and thus to bring about a greater evenness of fiber in the manufacture of cotton. Seeing the large percentage of waste products in his own mills, he has been quick to profit by any suggestions for the better utilization of such products.

Furthermore, he has seen that one of the most important changes in the manufacture of cotton is the substitution of



BETTER HOMES MAKE BETTER WORKMEN Some of the 800 gardens which employees have made about their houses under the supervision of an expert from the department of agriculture hired by the company which is trying to draw to birmingham the skilled workmen whom it needs THE WORLD'S WORK



A STREET IN COREY, THE MODEL TOWN NEAR BIRMINGHAM PROVIDED WITH THE MOST IMPROVED SANITATION AND PLANNED AROUND A CIVIC CENTRE AND A LARGE PUBLIC PARK IN ZONES FOR BUSINESS HOUSES AND FOR RESIDENCES ADAPTED TO EVERY SIZED INCOME

electric power for steam which in addition to other advantages produces uniformity of speed. Electric power is made possible on a large scale by the development of the water powers of North and South Carolina by the Southern Power Company. The organization of this company in 1905 was due to the dreams of Dr. W. Gill Wiley, the capital and confidence of Messrs J. B. and B. N. Duke, and the engineering plans outlined by Mr. W. S. Lee. The story of its achievement is clearly too large a subject to treat in the course of this article. Suffice it to say that this company, with its power stations at Great Falls, Rocky Creek, Ninety-nine Islands — all related to one another and capable of being used to supplement each other in cases of emergency — now supplies electric power for 152 cotton mills, lights some forty-five or fifty towns, has a vast scheme of interurban electric railways well under way, and besides is furnishing power to a constantly increasing number of smaller industries, such as cotton gins, cotton seed oil mills, etc.

From the standpoint of this article, the most significant phase of all this development is the work of Mr. W. S. Lee, vice president and chief engineer, and Mr. Fraser, electrical engineer, who, working together and with a large number of other trained men from the leading technical colleges of the country, have in six years' time wrought out in all its



IN THE BUSINESS SECTION OF COREY A TOWN THAT CAN NEVER HAVE A SLUM FOR THE EMPLOYEES OF THE STEEL MILLS

THE SOUTH REALIZING ITSELF



THE REPUBLIC MILL AT GREAT FALLS, S. C. THE NEW TYPE IN THE SOUTH, BUILT UPON THE KNOWLEDGE GAINED BY A YEAR'S CAREFUL INVESTIGATION OF THE MOST ADVANCED IDEAS OF MILL MANAGEMENT AND MACHINERY IN THE COUNTRY

details one of the most significant as well as one of the largest systems of electric power in the world. Mr. Lee was a graduate of the South Carolina Military Academy and had spent several years in engineering work in different parts of the South. For three years he was chief engineer of the Columbus Power Company, putting in a large dam to furnish power for the city and for the large cotton mills of Columbus. The Catawba Power Company, out of which the Southern Power Company grew, was all but a failure until Mr. Lee took hold of it, and with his knowledge of engineering and his broad industrial vision, worked out a complete plan, the details of which he has executed with remarkable swiftness and success.

He was fortunate in securing the services of Mr. Fraser, a graduate of, and for two years an assistant in, McGill University in Canada, later in charge of a large electric plant in Montreal and later still a constructing engineer for the Westinghouse Company, for whom he came South to install some electrical machinery. He



MR. LEWIS W. PARKER WHO IS BUILDING UP A STAFF OF SPECIALISTS TO IMPROVE THE EFFICIENCY OF THE TWELVE MILLS IN THE PARKER COTTON MILLS COMPANY



THE GREAT FALLS MILL VILLAGE IN WHICH THE HOUSES PROVIDED WITH ELECTRIC LIGHTS, SEWERAGE, BATHROOMS, AND WATER PURIFIED BY THE OZONE PROCESS ARE RENTED TO THE EMPLOYEES FOR ONE DOLLAR A MONTH PER ROOM

THE WORLD'S WORK

was just about to go back to the North when Mr. Lee offered him the position of Electrical Engineer for the Southern Power Company. It was one chance in a thousand, he said, as he spoke of the opportunity that had come to him to design and build this vast system of transmission lines. In doing so he has made contributions to the development of hydro-electric power, for it was the first Such are some of the typical industries of the present era of manufacturing in the South. Instances might be multiplied that would give additional significance to the general idea of this article. One can not help having the utmost optimism in regarding the situation in its entirety. But what causes one to have the highest hopes for the future of Southern industries is that an increasing number of



THE WEAVE ROOM OF THE REPUBLIC MILLS IN WHICH THE CRAMER HUMIDIFIERS REGULATE THE TEMPERATURE AND THE MACHINERY IS SO PERFECTED THAT TWENTY-SIX LOOMS CAN BE OPERATED BY ONE MAN. THE MACHINERY RUNS AUTOMATICALLY WHILE THE OPERATORS ARE OUT AT DINNER

system to carry 100,000 volts such distances, this having been considered impractical heretofore. He has therefore had to work out many details for himself, such as the three supplementary steam stations in Greenville, Greensboro, and Durham. Engineering papers and magazines throughout the country have published accounts of the various stages of development of this system as significant for the whole country. business men are realizing that unintelligent, unskillful labor is in the long run not only unprofitable but dangerous to capital; and that to secure the best living conditions for their employees is at once good business and a wise provision for the improvement of the masses of the people for whom they are especially responsible.

Mr. Julian S. Carr, Jr., president of the Durham Hosiery Mills, has recently

made provision for his employees in the way of school advantages that promise much for the future. He has announced for some time that no child under fourteen years of age shall be allowed to work in his factory. Since September 1, no one who cannot read and write has been employed. To meet this condition he has provided the night school taught by the most successful primary teacher in the Durham schools. Furthermore, he regularly employs a trained nurse to look after all the sick among his employees. At first regarded with suspicion, she is now considered as a devoted friend and helper by the entire mill population. Within the past week Mr. Carr has announced a plan of profit sharing, by which employees who are sick, or who make valuable suggestions for increasing the efficiency of any part of the mill, or who have grown old in the service, will reap the benefit of a fund set aside as their share of the profits. While this arrangement seems but a slight one from the financial standpoint, it is but the beginning of a more extensive development of a complete system of coöperation between employer and employee.



MR. W. S. LEE Vice-president and chief engineer of the Southern power company

The necessity for such provisions for the welfare of employees has been stated strongly by Mr. Thomas F. Parker, formerly president of the Monaghan Mills (Greenville) and now vice-president of



THE ROCKY CREEK, S. C., STATION

OF THE SOUTHERN POWER COMPANY WHICH SUPPLIES POWER TO 152 COTTON MILLS, LIGHTS FORTY-FIVE OR FIFTY TOWNS, AND HAS AN EXTENSIVE INTERURBAN TROLLEY SYSTEM UNDER CON TRUCTION

THE WORLD'S WORK



TRANSMISSION LINES OF THE SOUTHERN POWER COMPANY, THE FIRST SYSTEM TO CARRY 100,000 VOLTS LONG DISTANCES

the Parker Cotton Mills Company. He was perhaps the first cotton manufac-turer in the Carolinas to become vitally interested in welfare work for the employees. He has given this subject much of his time and consideration; the constructive results wrought out in his own mills give evidence of his practical sense, his wisdom, and his spirit of earnest consecration. I know of few more inspiring sights than that of the various buildings and play-grounds provided for the 1500 people who compose the population of the Monaghan Mills. The attractive Y. M. C. A. building with its gymnasium, its baths, its reading room, its night classes; the home of the trained nurse and the domestic science teacher a sort of college settlement in the factory population; the medical dispensaries, with loan closets and rooms for surgical operations; the public school building and kindergarten, recreation grounds and athletic fields - all these are under the supervision of Mr. Parker, who does not consider his duty done when money is appropriated for such purposes.

There are some mills in which these same features may be found and yet without a corresponding success because of the lack of such trained Y. M. C. A. secretaries as Mr. Hollis, who knows

everybody in the community and acts as a unifying and socializing force for people who have been unused to the conditions which meet them in their new home. Nor have all mill presidents been so constant in their attention to the de-velopment of such plans as has Mr. Parker, who has done everything to keep this work from being in any sense paternalistic. Now that he has become the supervisor of this work in the other mills of the corporation, his ideas and plans may be expected to lead to even more significant results. Already the Y. M. C. A. work at the Victor Mill in Greer surpasses in some respects the corre-sponding work in Greenville. It is surely a new era in the South when a man of Mr. Parker's wealth and ability devotes practically. his entire time to the consideration of this one feature of the cotton mill situation. He has not only appealed to his associates in business to take an enlightened and far-seeing view of their responsibility to the constantly increasing mill population, but he has through articles and addresses spoken to the heart



BUILDING THE DAM AT NINETY-NINE ISLANDS, ONE OF THE COM-PANY'S THREE BIG HYDRO-ELECTRIC GENERATING PLANTS

THE SOUTH REALIZING ITSELF

and conscience of the state, appealing for wise legislation—and to the church, appealing for a larger vision of the relation between spiritual and intellectual and physical well-being. Altogether one of the most remarkable addresses ever made in a Southern institution was that made at Trinity College by Mr. Parker during the past winter — a moving appeal to the future leaders of the South to consider the actual conditions that prevail in cotton mill villages. With candor, he "This army has to be trained and perfected; facts are to be faced and seemingly insurmountable difficulties to be overcome that the God of our fathers may be our God and that the safety and greatness of our beloved state may be secured to all generations, not by the might and wealth of a few but by the education, development, and patriotism of a united people."

"They ask that you give them of your time, thought, and understanding; they



THE GENERATORS AT THE GREAT FALLS STATION PART OF THE SYSTEM WHICH SUPPLIES POWER ALMOST ACROSS TWO STATES

spoke of conditions as they are. Some of his sayings are worthy of much publicity:

"Few, if any, manufacturing villages of the world are more destitute of interest and amusements for the people than are those of the average South Carolina mills."

"Any illiterate child who goes to the average village school for a year is thereby increased in mill efficiency."

"Manufacturers have not handled this problem as they have the agencies employed by the mills in the manufacturing of their products." do not want and would not accept charity; their great need is mental stimulus and the quickening of their faculties."

"Mental stimulus and a quickening of the faculties," the inquiring scientific mind in men and managers is the big force behind the South's new era in manufacturing.

[In the next article Dr. Mims will explain how the South bas grappled with peculiarly difficult problems in education and how it is solving them in ways that have great national significance.—THE EDITORS.]



A CITY WITH A GENERAL MANAGER

THE STAUNTON PLAN THAT MADE ONE DOLLAR OF CITY MONEY GO AS FAR AS TWO HAD GONE BEFORE

BY

HENRY OYEN

NE Saturday afternoon in April, 1908, a crew of work-

city paymaster's window, drew their paychecks, looked at them in surprise, then they drew together and talked it over. At last one of them stepped back to the window.

"Say, boss," he said, "these checks are all wrong."

"What's the matter with them?"

"Why, they only give us three days pay for the week.'

'Well, that's right. You only worked three days. The other three days it



MEN WHO EARN THEIR PAY INSTEAD OF BEING PAID FOR EVERY WORKING HOUR OF EVERY DAY IN THE WEEK, RAIN OR SHINE, THE CITY LABORERS NOW RECEIVE WAGES ONLY FOR THE HOURS THEY ACTUALLY WORK

rained. Three days' pay is all you earned. That's simple enough, isn't it?"

ingmen employed on the "But, boss," protested the man: "this streets of Staunton, Va., is a city job! We never heard of anypushed their way up to the , thing like this before. When it rains we always go over in the school house basement and sit and talk, and our time goes on just the same."

Well, it won't any more," was the sharp answer. "There's been a change, There is a General Manager in this town now, and a city job has ceased to be a loafer's cinch. From now on city money is going to buy just as much as private money. Do you understand?"

"Mister," said the man, "that's something that I just can't believe.'

In this fashion the "Staunton Plan" of municipal management was inaugurated and received. By it a step forward in the science of city government has been taken. A regularly incorporated American city with its business affairs managed on a strictly business basis, as the affairs of a business corporation are managed, with economy and efficiency the watchwords in place of politics and spoils, has become a reality — an established fact in history, by which other cities may take their bearings in this day of strenuous casting about for the much sought haven of Good City Government.

Staunton, Va., planted down 'mongst the blue-veiled hills of the lower Shenandoah Valley, population approximating 12,000, has had for the last three years, or since March, 1908, "Business In The City Hall" as no other city has had it. During these years it has been a municipal corporation turned into a business corporation. It has had a General Manager. one man carefully selected, hired, and paid, to manage its business affairs as business affairs should be managed. And in these three years Staunton has been made over. It has been lifted from mud to asphalt. A fine old town, which was sagging badly at its foundation, has been placed on a sound basis without any increase in city expenditures; and the fact has been established that under honest, capable business management — under the Staunton Plan as it has been operated in Staunton — the value of the city's money to the city is increased by at least 100 per cent.

To appreciate the history of this re markable civic experience it is well to know something of Staunton, the scene of the innovation.

It is not a progressive town, as Des Moines is progressive, or Memphis, or Kansas City. It is an old town with traditions that reach back to the days of the Old South. The growth of its population is less than the natural increase. It runs to church spires and schools rather than to smoke-stacks and industries. Gov. Woodrow Wilson was born there in the manse of the old Presbyterian Church. The manse to-day has a new coat of olive green paint; otherwise it is said to be quite the same as when old Doctor Wilson thundered in the pulpit next door. Woodrow Wilson removed from Staunton at the early age of a few months. Many have followed in the Governor's young footsteps. Staunton has regarded their departure with equanimity. The city has not developed much. Instead it has succeeded in raising an uncommonly fine crop of intelligent and educated citizens. That is why the Plan came to Staunton.

These intelligent and educated citizens naturally were not skilled in the science of town management any more than the citizens of any other town are skilled in this science. They were excellent lawyers, bankers, doctors, merchants, and so on. In their own various vocations they were experts, and successful. In the city hall — which was something quite out of their line, where duty came to them as strong members of the community — they were not expert and not successful. There is



MR. CHARLES E. ASHBURNER THE GENERAL MANAGER OF STAUNTON, VA., WHO RESCUED THE CITY FROM BANKRUPTCY, RE-OR-GANIZED THE CITY HALL ON BUSINESS PRINCIPLES, AND MADE STAUNTON LIVE ON ITS INCOME

nothing exceptional about this; you can find the same condition prevailing in a thousand other city governments. But in Staunton, because of the physical peculiarities of its location, the results stood out in a way that even the blind might observe.

Staunton may be divided unto three portions. There is the downtown district — the business district — which lies on the floor of a valley, and may be said to be four blocks square. Long, high hills wall in this small heart of the city. On the slopes is what may be called the intermediate district, composed mainly of residences, schools, and churches, with a few small stores and business establishments scattered here and there. Beyond this, on top of the surrounding hills, and farther beyond, is the outlying district, composed entirely of scattered residences, the suburbs of Staunton. From the heart of the city to this outlying fringe is about a mile.

Under its old-fashioned double-council system of government, Staunton had paved and kept in some sort of fashion its tiny business district. The intermediate district had at one time, long ago, been paved in crude fashion with board of managers who gave but a small part of their time, and only a little more thought to the work of directing its affairs.

I wished to find out how some of the city's money had been spent in these years. I didn't succeed. Nobody knew, nobody could find out. There had been no records kept. It had been spent all of it, and honestly — but how, nobody could tell. Under this lack of system Staunton was paving about one block of street each year, other streets were wear-



A HILL STREET IN STAUNTON

DURING THE THREE YEARS OF MR. ASHBURNER'S MANAGEMENT, THE CITY HAS INCREASED THE AMOUNT OF STREET PAVING FROM 1,000 TO 9,577 FEET PER YEAR, AND THIS AT A RATE PER FOOT OF LESS THAN ONE HALF THE LOWEST FIGURE OF THE CONTRACTORS UNDER THE OLD RÉGIME

crushed stone. But as the years went by and nothing was done for the district's upkeep the crushed stone had been worn away, and the streets become little more than mud roads. The outlying district had no streets at all. This condition resulted not from poverty in revenues, and not from any direct graft on the part of its governing body. Staunton has approximately \$160,000 a year to care for itself and no one can be found in the city who believes that there was anything but honesty in the council. But Staunton was like a business corporation without a manager and with only an amateur ing out much more rapidly, and the town was sinking back into its mud roads. It owed \$600,000, and was running deeper and deeper into debt, being forced each year to borrow money to meet the deficit that resulted from this lack of management. It was on the path that leads to bankruptcy.

This was the condition of Staunton, a mud town sinking beneath its indebtedness, when a few of its leading citizens began casting around for a means to save it. The constitution of Virginia (noble old relic!) requires cities of the first class to maintain a mayor and two branches

council, the board of aldermen common council. In Staunton plete council numbers twenty-two. us deprived of the right to adopt ent by commission, Staunton beearch its own ingenuity to devise scheme of government.

ohn R. Crosby, President of the Council, Mr. H. H. Lang, t of the Board of Aldermen, and R. Sydnor, a councilman were ng spirits in furthering the moveid may be called the fathers of eral Manager Plan. In March, except the Finance, Ordinance and Auditing Committees. The General Manager shall discharge such other duties as may from time to time be required of him by the Council.

The maximum salary was placed at \$2,500 a year.

The position was advertised, for this was a new kind of job and there was no place to look for the right man. There never had been a General Manager of a city before. Applications began to come in. Most of them naturally were from local men, from plumbers, contractors, superintendents, and so forth. All these



THE BUSINESS DISTRICT OF THE "GENERAL MANAGER" TOWN WAS MADE OVER IN THREE YEARS; A WATER SHORTAGE OVERCOME, MUD STREETS PAVED, A SEWER SYSTEM INSTALLED, THE GARBAGE DISPOSAL IMPROVED, STREET SIGNS PUT UP AND MANY OTHER IMPROVEMENTS MADE — WITHOUT INCREASING THE TAX RATE

r. Crosby introduced an ordinance as passed by the council providthe appointment by the council leral Manager whose duties were ed as follows:

General Manager shall devote his ne to the duties of his office, and shall ire charge and control of all the executof the city in its various departments, entire charge and control of the heads tments and employees of the city. make all contracts for labor and supl in general perform all of the adminisnd executive work now performed by al standing committees of the Council, were willing to work for much less than the maximum salary, the figures demanded running from \$1,000 to \$1,800 a year. There was just one applicant who placed his minimum figure at the council's maximum. He was an outside man, Mr. Charles E. Ashburner, of Richmond, Va.

Seven years ago there had been a washout in the business district of the city, a subterranean creek going on a rampage and swallowing up a good section of Staunton real estate. Local contractors were called to bid upon the work of repairing the damage and the lowest figure offered on the job was \$4,000. A few councilmen

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demurred and called the bids too high. They were assured that the work couldn't be done for less, but one of them, Mr. W. R. Sydnor, happened to be local agent of the Chesapeake and Ohio Railroad, and Mr. Ashburner happened to be the C. & O's. engineer of maintenance for the Staunton division. Sydnor sent for Ashburner and asked him to calculate what the washout could be repaired for, the work being done as cheaply as if it were a railroad job. Ashburner calculated and said: "Seven hundred and thirty-seven dollars

will leave you a little margin." The local contractors scoffed, but the qualifications were combined. Ashburner is forty-two years old, the son of an English army officer, and was born in India He was educated in France and Germany winding up at Heidelberg. He is a civil engineer. His training since leaving school has been essentially practical. He has been engineer in charge of a company town in Virginia, was connected with the Bureau of Highways of the United States he served in a similar capacity for the State of Virginia, was in charge of maintenance work on the C. & O. R. R., and did engineering work for the city of Richmond He is medium-sized and twitching with



ANOTHER EXAMPLE OF EFFICIENCY SCHOOL YARD, IN WHICH FORMERLY THE CHILDREN HAD NOT BEEN ABLE TO PLAY IN RAINY WEATHER ON ACCOUNT OF THE MUD, WAS PAVED UNDER THE SUPERVISION OF MR. ASHBURNER, WHO, AFTER REFUSING A CONTRACT BID FOR THE JOB AT \$2,000, DID IT HIMSELF FOR \$900

councilmen went to work and had the work done under their own direction, and the complete bill was \$725 and a few cents.

The council elected Ashburner when they saw his name among the applicants for the General Manager's position.

Ashburner made a success of his job from the beginning, in spite of some opposition. This alone proves him to be a rather extraordinary man, for the position of General Manager is one requiring many peculiar qualifications to fill. Staunton was fortunate in getting at the beginning a man in whom these the nervous energy that marks the enthusiast. He is a practical idealist; no one can talk with him for five minutes without realizing that his nature would throw him body and soul into such a work as town management, that his thoughts would be of the work before himself. A man in Staunton whom he had antagonized went up and down the streets, loudly announcing that he was going up to Ashburner's office and run him out of town. Men who had worked with the General Manager on the railroad sought out the man and said:

"You don't know that man. You may run him out of town sure enough, but he'll be right there in his office working away any time you tell him you're coming to do it."

The man quit talking.

His strongest characteristics probably are his desire for "doing a job right," his enthusiasm, his excessive supply of energy, and his inclination to shake hands with everybody, including his avowed enemies. When he was given the task of running Staunton his natural enthusiasm drove him to a single aim:

"To make this the finest little city in America, bar none!"

His interpretation of the job was: "I am hired by everybody in this town. I am working for everybody in it, rich and poor, black and white. Every citizen is a shareholder in this corporation, and every one of them is entitled to a shareholder's full privileges. As manager of the affairs of their corporation I am responsible to each and every one of them. My office is a clearing house for shareholders."

The office was opened April 15, 1908. It was not located in the city hall, but in a two-room suite on the second floor of a business block in the heart of the downtown district. On the door was stenciled:

"General Manager, City of Staunton." Those two rooms soon became the most popular offices in town.

Staunton at this time, as we have seen, was mostly a mud town, with no discernible prospects of becoming anything else. City money, under the old mismanagement, covered the floor of the valley; but it wouldn't reach up the hills. Ashburner's first task as General Manager was to make it reach.

On October 3, 1905, the council had passed a resolution calling for the laying of a small piece of granolithic sidewalk on Prospect Street. All such work had been let out to local contractors who bid on the jobs. Being experienced contractors and knowing the ways of city governments, these contractors bid in the same way that contractors to-day are bidding on city work all over the country, naming figures that would have been

ridiculous on a business job. The lowest bid for this little job of paving had been \$2.25 a yard. One dollar and seventy-five cents per yard is the lowest that any granolithic work had been done for by contractors in Staunton. Although the resolution had been passed in 1905 no money had been found to do the work with up to 1908, and Ashburner found the resolution among the council papers on his arrival.

In spite of the fact that the contractors knew him to be a paving expert, and therefore certain to know what the right price should be for this piece of work, when he called for bids on it they again turned in as a minimum \$2.25 per square yard.

"All right," said Ashburner. "Here is where the city goes into the paving business."

His report on the Prospect Street work when completed reads: "216 square yards of paving at 96 cents per square yard, \$209.28." The total under the contract system, at \$2.25 a yard, would have been \$485.

The contractors hooted, said that he was manipulating his figures to make a good impression, that he was putting down work that wouldn't last. Interested citizens came into the General Manager's office and inspected the books and saw the detailed reports of the cost of material and labor that made the price 96 cents. And on the second count, the city was tearing up big chunks of the old \$2.25 contractor pavement because the thin surface had crumbled through; and the city-laid Prospect Street pavement, after three years use, is as solid as the day it was laid.

"There was nothing to this but simple business," said Ashburner. "I laid it down just as if I were doing it for a railroad or for a business firm. I found that it cost 96 cents a square yard."

Two squares away from Main Street was a public school building with a large yard around it. This yard and the walks connected with it never had been paved or even properly cindered. In the spring of 1908, the school children played in mud up to their ankles in damp weather, and after a rainy spell they couldn't play at all. The council passed a resolution calling for the paving of this yard. The contractors bid again, \$2,000 for the job. Under the General Manager Plan, the city did the work for a trifle more than \$900, which was the "business price."

Staunton owns its water and lighting system. Out at the power plant the year before the General Manager came, they "lost" 192 tons of coal, which, at \$2.85 a ton, amounted to \$547.20 of city money. There was not the slightest suspicion of graft involved in this mysterious disappearance; there was no graft in it. But somewhere between the city scales and the engineer's record book, 192 tons of fuel had vanished into nothing through poor business management, and the city was forced to add to its coal appropriation to make up the shortage. Any engineer knows how coal will disappear in the engine room when nobody is watching the firing. Ashburner put a steam-load record gauge in the power house and called

the firemen down to his office. "Boys," he said, "you aren't getting enough wages. You ought to be getting \$5 more a month. But you're not worth it the way you've been firing. Now, that new gauge is going to make you fire just as carefully and well as you know how, because it will show if you let the steam drop, or send it up too high; and I'm going to watch that gauge. You boys watch it, too, and when you're delivering the goods you'll get the \$5 more a month that you ought to have."

The "goods were delivered" and the men got their advance from that day. Previously the water pumps had been forced to run 24 hours a day, 365 days out of the year, and in dry weather there invariably was a shortage of water. With the power plant running on a business basis the pumps were able to shut down from twenty-four to thirty-six hours each week, and no water shortage occurred. In the single item of coal alone, business management saved for Staunton each year the amount of the General Manager's salary. Nearly one thousand tons less were used each year, and the average price was \$2.80 per ton.

Staunton has an excellent, thoroughly

modern little theatre in the city hall. It is the one theatre in the town, and its business is sufficient to attract most of Up the companies that tour the South. to 1908, the city had rented the theatre rights of the house to a local manager rights of the nouse to a local what he under conditions that made it what he bimself called "a soft snap." The city furnished lights, fuel, and attendants and derived a total annual revenue of between \$300 and \$400. There was no thought of graft here, either, though two councilmen had permanent free seats in The General Manager secured the house. authority to put the theatre's lease on the market and sent for the representative of a New York theatrical syndicate to make a bid. The syndicate offer was in terms that would yield the city a minimum rental of \$1,250. It was too good a thing to let go out of town, and the local manager rented at this increased figure, to his own chagrin and the benefit of the city treasury.

In purchasing supplies, the city formerly had operated in the old, unbusinesslike way that is chronic with most cities. Each department purchased its own supplies wherever it pleased without any system whatever. The graft that is a nauseating part of most city purchasing departments for it is sad but true that firms are willing to resort to bribery to get city business — was absent here; but business management was absent, also, and when any records of purchases and expenditures were kept it was not unusual to find, for instance, two different merchants selling the same item to two different departments at different prices. There was no attempt to save city money by buying economically. How many dollars of tax-payers' money were frittered away in this fashion the absence of records makes it impossible to compute. When the General Manager came he made all purchases, from horsefeed to sewer pipes, a business proposition, as the purchasing agent of a business corporation would do. Requisitions for purchases were made out in duplicate. One went to the merchant as his order, the other was filed in the records of the General Manager's office. Any citizen was entitled to walk in and examine these records, and by doing so he was able -

under this simple comprehensive system of book-keeping — to see just what every cent of city money was spent for, who got it, and what was got in return. The records also comprised daily reports of all work done. Thus, if a sidewalk was being laid in front of the property of Mr. William Jones, Mr. Jones could walk into the General Manager's office at any time and see just what it was costing in labor and material to lay every yard of that walk.

Furthermore, if any citizen had anything to complain about — and citizens do find such things or if he wanted to know why certain city work was not being done, he knew that he had only to go to the General Manager's office and he would find the man to talk to. This, possibly, became the most popular feature of the innovation with the average citizen. There is now hardly a citizen in the town who has not at one time or another paid a business visit to the office. The least prominent citizen received the same attention as the big tax-payer and the smallest complaint was promptly attended to.

In this fashion, by making every item of city business a purely business proposition, city money began to reach much farther and it began to be possible to get things done.

To get the streets paved was Staunton's first crying need. There were three principal streets to consider, West Main and East Main, which ran up the hills from the business section to residence districts, and a street which runs out to the city park. Each of these streets had a single street car track laid on ties only, at one side. The rest was plain mud. In wet weather wagons went hub deep in the mire, and it was a feat to make a crossing on foot. The sidewalks at one time had been cindered; but that was long ago and they had given up the ghost of respectability and had sunk back into the mire in company with the streets. The Stonewall Brigade Band plays every warm Monday evening in the park, and Staunton waded and drove through mud to get out to hear the music.

These were the best residence streets of the town. There were about three miles of them. As for the side-streets, picture a red clay country road with a gully washed out in the middle and you may know what they were like.

Staunton never would have got these streets paved under the system by which it was managing itself, for each year it was losing ground physically and sinking deeper in debt financially.

In the first year under the General Manager Plan the city was able to ma-



DIAGRAM OF THE "ONE MAN PLAN" WHICH GIVES STAUNTON, THROUGH THE MEDIUM OF AN EFFICIENT BUSINESS MAN, EFFECTIVE CONTROL OF ALL ITS OWN INTERESTS

cadamize 9,677 lineal feet — nearly two miles — of streets; to lay 1,824 feet of cement curb, and 3,887 feet of granolithic sidewalk. The second year 12,630 lineal feet of asphalt and macadam streets, 6,993 feet of walks, and 2,556 feet of curb was the result; while the third year the achievement was 6,470 feet of macadam streets, 4,204 feet of sidewalk, and 545 feet of curb. The total for three years was:

Macadam and asphalt

This was done without incurring any indebtedness. The city actually had a surplus of \$17.66.

I talked with a dozen men who were active as councilmen or in other official capacities in running the city in the old days, and the consensus of their judgment is: "Staunton never would have got any of that work done under the old system."

West Main Street and East Main Street now run up the hills under macadam and asphalt, with granolithic sidewalks at their sides, and when Staunton goes out to the park it has a firm walk and a good street running all the way. One may illustrate the difference between the two systems, so far as street paving is concerned with two statements:

Under council system annual amount

of street paved 1,000 feet Under General Manager Plan annual

amount of street paved . . . 9,577 feet

The water famine that had occurred every summer was not due to a lack of adequate water supply or pumping facilities, but to the absence of meters and the consequent carelessness and wastefulness of water users. The city wasted through leaks, open faucets, and careless usage the water for which it suffered each summer.

Ashburner began to put them in every place where there was a faucet, no matter how small the place.

"What!" protested some tax-payers, "putting a \$9 meter in a house where they use only \$2 worth of water!"

"And waste \$50 worth," supplemented the General Manager.

The meters went in. Soon after the waste and leakage began to decrease. A householder wouldn't let his faucet run when he could hear the meter ticking. The water department was set to work looking for leaks in mains and pipes. A campaign against water waste was vigorously prosecuted. So successful was it that, although the water system suddenly was taxed by an increase of three hundred water users through an extension of the city limits, the city had water enough and to spare even during the hottest, dryest spells --- something that had never occurred before - and the pumps were required to work but three hundred days out of the year.

The sewerage system had been woefully incomplete. An open creek through the town was the best it had to carry away its sewage. There were scores of houses without sewer connections, and many streets where no sewers were laid. The General Manager would hardly have done his duty unless he sought to equip the place with an adequate sewerage system, but the value of a business system was shown in that he was able to do the work with the city money then available, which it had not been possible to do before. In three years there were laid 14,201 lineal feet of sewer, and 15,149 feet of water mains.

At the foot of a hill, smack in front of the main entrance to the city park, was the city dumping ground. Garbage was hauled here in open barrels or cans and dumped where every one going to or from the park was forced to become conscious of the fact through the olfactory nerves. This was not good sense, not good busi-The General Manager found a new ness. dumping ground beyond the city limits and started and won a campaign for flytight garbage cans. The women helped him in this: one is forced to the conclusion that the women would "keep house" better than the men are doing if they had the task of city management. Staunton's garbage now goes out of the city in covered metal cans, and the old dumping ground is covered up and seeded to grass.

There were no street signs in the town when the General Manager came, another unbusinesslike feature. There are street signs all over now. But most startling in this crusade of cleaning up was the story of Main Street.

The work was hampered by politicians who opposed in the council many movements for good. It had the bitter opposition from the day of its inauguration of the contractors and others who had fed off the city's carelessness and of the ultraconservative citizens. By using such influence as they possessed, and by attacking the office through attacking the man, these men crippled its efficiency to some extent. So much did they cripple it that Mr. Crosby, one of its fathers, says that the idea never will be a complete success so long as the city is forced to encumber itself with a big unwieldy council. There are twenty-two men in the council at Staunton. The progressives there now are preparing to petition the legislature to amend the state constitution so that the council may be cut to five. Such simplification of the city hall machinery is declared necessary to permit the plan to work as efficiently as it can.

WOODROW WILSON - A BIOGRAPHY

THIRD ARTICLE

THE PROFESSOR WHO BECAME PRINCETON'S PRESIDENT

HOW A TEACHER OF POLITICS HELPED MOULD PUBLIC OPINION AND HOW, WHEN CALLED TO BE HEAD OF A UNIVERSITY, HE SET ABOUT TO REFORM IT

BY

WILLIAM BAYARD HALE (AUTHOR OF "A WEEK IN THE WHITE HOUSE WITH PRESIDENT ROOSEVELT")

SCHOOL teacher's existence is not, in the narration, a thrilling story. The first seventeen years of Woodrow Wilson's life after he left Johns Hopkins University were spent in aching. They were years of usefulness - thousands of students will testify to teaching. the still enduring inspiration they owe to them and to him. They were years of delightful living, of cultured and genial companionship. For leisurely reading, doubtless, there could be set down here a volume of interesting anecdote and scholarly banter and epigram, of pleasant fire-side reminiscences of savants and big-wigs, of literary gossip, and humors of the lecture-room, with perhaps a bit or two of college scandal. No doubt there could be contrived a narrative, fascinating to patient psychologists, of the mental evolution that went on during these years. For the purpose of this biography, however, the point is that they led up to one of the most dramatic and significant of recent battles for the cause of democracy and freedom and prepared a man for leadership in a bigger struggle, the battleground of which is the soil of the American Republic.

Briefly, then, of these college years:

It was with the unrelinquished purpose of having his part in the public life of the nation that Woodrow Wilson entered upon the profession of a teacher of law and politics. It can hardly be said, however, that his first position was one which gave promise of any large immediate influence on public affairs. A number of

Johns Hopkins men, on the opening in 1885 of Bryn Mawr College, accepted as their first professorships places in the faculty of the new institution for women; the vulgar even referred to Bryn Mawr as "Johanna Hopkins." Some were so irreverent as to suggest that the young professors were "merely trying it on the dog." Professor Wilson, though called to Bryn Mawr primarily to give instruction in politics and political economy, taught a good deal besides those subjects; classical history, and the history of the Renaissance fell to him. Perhaps the young ladies profited as much by his teaching of these latter subjects as they did by expositions of political science which could not have come very close home to many of them. His lectures are said on high authority to have been "marvels" of scholarship, profoundly impressing his classes. Yet there are not lacking bits of evidence which seem to betray a certain failure to take the idea of instructing young ladies in politics quite as seriously as some of the other faculty members took their tasks. The higher education of women was not then a thing accepted; 'twas rather an idea to be vindicated, and the people who had organized and who administered Bryn Mawr were in the mood to do a good job of vindication.

Professor Wilson worked very hard to make his lectures interesting; one of the faculty who lived next door testifies that the light in his study window was invariably burning long after everybody else had gone to bed. From the

start-off of his professional career, Mr. Wilson appears to have realized the ne cessity of imparting vivacity and reality to his lectures; there is some ground to suspect that the intense young ladies who sat under him did not always appreciate the lighter side of his discourses. At all events, it is remembered that he appeared one day in the lecture-room without the long mustache which had up to then adorned his countenance -- a sacrifice which, it was hinted, he had made in the hope of being hereafter better able to suggest to his classes certain delicacies of thought and fancy which they had shown little sign of apprehending.

Bryn Mawr College at the beginning consisted of Taylor Hall, and one dormitory — Merion. It opcned with fortythree students. Three houses at the edge of the campus were occupied by the dean and professors, many of the latter being bachelors. Later Mr. Wilson leased a pretty cottage, the parsonage of the little Baptist Church on the old Gulf Road, in the midst of a lovely countryside. In this their first home, the Wilsons took great pride and satisfaction. In vacation time they went back South among old friends. It was in the South that the first two children were born.

In June, 1886, Professor Wilson took his Ph.D. at Johns Hopkins, the university accepting as his thesis his book "Congressional Government." During his third year at Bryn Mawr, Professor Wilson accepted a lectureship at Johns Hopkins; this took him to Baltimore once a week for twenty-five weeks.

Connection between the school where Mr. Wilson had last been a student and the one in which he was first a teacher was, as has been said, close. Francis E. King and John Carey Thomas, of the Board of Trustees of Johns Hopkins, had been instrumental in drawing up the courses of study on the "group system," in which much pride was justly felt at the new college. Its dean was Dr. Thomas's daughter, Miss M. Carey Thomas — who continues to-day, since President Rhodes's death under the title of president, to administer the institution. Among the Hopkins men in the faculty were E. B. Wilson, a celebrated biok now at Columbia University; Prof F. S. Lee, now also of the Colu faculty; Professor Paul Shorey, no Chicago University, who represented literary side of classical study; E. W. Hopkins, now of Yale, a ma contrasting spirit and interest, taught the classics as a philologist.

Social life at Bryn Mawr was agreeable. An invitation to an older larger institution was nevertheless to be declined; ampler opportunity or in a school attended by young men, in 1888 Professor Wilson accepted election to the chair of History and itical Economy at Wesleyan Unive Middletown, Conn.

Wesleyan University was an establ institution with its course of study faculty, and its traditions long set In the faculty Mr. Wilson found a in ber of men of marked ability—chief an them, perhaps, Professor Caleb chester, head of the Departmen English. The faculty contained st men also in Dr. W. O. Atwater, chemist, and Professor W. North Ri

The university is most fortunately beautifully situated, stretching alo ridge above the Connecticut valley overlooking pleasing prospects. Mi town is a place of elms and old col The Wilson residence mansions. iust across from the college grounds, ing out over the valley. Though forr under Methodist control, the unive is really non-sectarian and liberal ir. best sense. It was then co-educati but only five or six young women we that time in each class. The stuc body was made up, as it still is, of 1 young fellows from what we n describe as the middle walks of Wesleyan was not a rich man's college

From the start, Professor Wil courses were extremely popular. well indeed they might be; for New land had rarely heard such instru as was given in the lecture-room of leyan's Professor of History and itical Economy. While at Middle he continued his lectureship at J

Hopkins; now, however, instead of going down once a week, he bunched his twentyfive lectures in a month of vacation allowed him by the Wesleyan trustees. His fame as a popular lecturer also was growing apace, and he was frequently called to give addresses in New England and the Eastern states. It was while at Middletown that he wrote "The State" a volume which, with less pretentions to literary form than his other work, involved an enormous amount of labor.

Mr. Wilson was a member of the athletic committee of Wesleyan and took the keenest interest in the college sports. One student of the time remembers how incensed he became at the limited ambition of the Wesleyan boys who, when they played against Yale, were satisfied "That's only to keep the score down. "I no ambition at all," he used to cry. "Go in and win; you can lick Yale as well as any other team. Go after their scalps. Don't admit for a moment that they can beat you." Is it possible that this gallant encouragement drew any of its warmth from the traditional hatred of Eli and the Tiger?

Life at Middletown was pleasant. But Mr. Wilson's growing reputation would not permit him to remain there. When in 1890 the chair of Jurisprudence and Politics in Princeton College became vacant through the death of Professor Alexander Johnson, the trustees elected to it the Princeton graduate who had so quickly distinguished himself as a student of politics.

September, 1890, then, found Woodrow Wilson again domiciled in the Jersey collegiate town, which, fifteen years before, he had first gazed 'round upon with the eyes of a raw student from the South. He was now a man whose renown had begun to spread in the world, an author, a public speaker of enviable repute, the head of a family, a figure of consideration, a Doctor, if you please, both of Philosophy and of Law.

The Wilsons rented a house in Library Place. After a few years they built a home for themselves on an adjoining lot, an attractive half-timbered house designed by Mrs. Wilson.

The new professor stepped at once into the front rank, as indeed became a Princeton graduate, a member of one of the most famous classes the old college had graduated, a man thoroughly imbued with the best traditions of the place. his lectures - Princeton had no But tradition that accounted for their charm. They instantly became popular; the attendance mounted until it surpassed that ever before or since given any course of study at Princeton; before long very nearly four hundred students, almost the total number of juniors and seniors combined, were taking Wilson's courses — and they were no "cinches" either. Widely informed, marked by a mastery of fact even to slight detail, inspiring in their range and sweep, and spiced with pervading sense of humor, Professor Wilson's lectures were further marked by the great freedom with which he delivered himself of his views on current It was his custom to put students events. on their honor not to report him; there were always likely to be in attendance students who had connections with city newspapers who might frequently have made good "stories" out of the professor's lively comments on the politics of the day, but none ever took advantage of the opportunity.

The classes were now so large that the work of a professor consisted almost entirely of lecturing. As we shall see later, it was not then the Princeton idea to give the students any particular oversight or inspiration elsewhere than in the classroom; yet the Wilson home became, and always remained, a resort hugely popular with the young men who were so lucky as to be admitted to it — and its doors were hospitably hung. Professor Wilson, in short, stepped into the position of first favorite, alike with his colleagues of the faculty and with the under-grads. They have at Princeton a way of voting at the end of each year for all possible sorts of "popular personages." For a number of years Professor Wilson was voted the most popular professor. He was able, he was genial, he was active; a member of the faculty committee on outdoor sports, and of the faculty committee on discipline. In faculty meetings Mr. Wilson soon became one of those most attentively listened to. Though meetings were generally informal, occasionally there was a debate in which his quite remarkable powers showed at their best.

During the twelve years, 1890 to 1902, Mr. Wilson continued to fulfil at Princeton the duties of Professor of Jurisprudence and Politics. They were twelve years of steady, yet pleasant labor; years of growth and of growing influence, both in the university and in the country. Four new books were added to the list signed by this man who wrote history and politics with so much literary charm; "Division and Reunion"; "An Old Mas-ter"; "Mere Literature," and "George Washington." He was heard now in lectures and occasionally in addresses in many parts of the land - discussing public questions before commercial, in-dustrial. and professional bodies. The dustrial, and professional bodies. vigor of his views on questions of the day, as well as his readiness, grace, and power on the platform, gave him place among the recognized leaders of national thought. He had for a time continued going down to Johns Hopkins, and now he gave occasional lectures at the New York Law School.

At the end of a decade in his chair, Mr. Wilson had attained, naturally, and with the good will of all, a position of unchallenged supremacy in the university town and of marked distinction in the country.

With such brief summary this biography must dismiss a period the external facts of which were of little dramatic value — incommensurate altogether with their importance in the development and strengthening of conviction and character which were to have play in the time which we now approach.

As one looks into those twelve years and (to the eye that regards merely externals) their somewhat prosaic events, what chiefly impresses him in the man is the growth in vividness of his social sense, his love of humanity — expressing itself most commonly in terms of patriotism. It is clear too that he is winning some wise insight into the mystery of the unfolding of the minds of young men; acquiring much skill in the craft of the teacher and reaching withal some conclusions respecting principles and methods of education. But beyond and above all other convictions that ripened during these twelve years the enlivening corrpanionship of in students, in the joyful exercise before them of his gift of speech, and in the lonely stillness of a heart that pondered the history of human institutions and the laws of progress, there grew up in Woodrow Wilson a fervent devotion to democracy. You cannot understand the man from this time forth, you cannot follow the battle of the next few years through the intricate alleys through which it raged, unless you are always conscious that you are beholding a scene in which the central figure is that of a prophet inspired by a passionate sense of the majesty of the law of social justice; a warrior burning with abhorrence of secret things. of things that divide and isolate, hot with hatred of the artificial distinction, the unearned privilege, the unequal opportunity; a knight animated by a loving tenderness for the man at the bottom, a tenderness not sentimental, but born in reason — like the reverent regard of the philosopher for the lowly root and the good homely soil from which it pleases God to nourish the flower that nods in acknowledged beauty in the air above.

All this you would discern if you studied the speeches and read the books and listened to his pupils describe the spirit of the lectures of the Princeton professor. But you will see it all manifest in action when he exchanges his professional for an executive office.

Princeton, like other American colleges, had been going through a period of change. The serious-minded men of an earlier generation, intent on fitting themselves for a learned profession, and therefore eager to study—and to study the old Tripod, Greek, Latin and Mathematics—had been swamped by an influx of fellows of a new sort—fellows who came to college to stay for a few jolly years on the way to business. They had no intention of doing more than the

authorities required, and Princeton had fallen into the habit of requiring little, either in the way of study or discipline. President Francis Landey Patton, the brilliant scholar who would have been in his glory at the head of a college of an earlier day, found the new tasks irksome and impossible, and in June, 1902, resigned them.

There seems to have been no discussion as to the successorship. It appears to have been the most natural thing in the world that it should fall to the Princeton man who had made a great name for himself in the world of books and of scholarship; who had been one of the most active members of the faculty; and who, above all, by his oratorical powers could best represent the college in the great world. Wilson, therefore, was chosen, and the announcement was made on Commencement Day.

The presidency of Princeton University is a position of dignity and consideration. The long line of men, reaching back one hundred and sixty years who had filled it, were, each in his time, among the most distinguished divines and scholars of the land. By a sort of instinct, or chance - such as that which had at the beginning named the college hall Nassau rather than Belcher - Princeton had Latgravitated toward the aristocratic. terly, the university had come to be known as "the most charming country club in America." Its retiring head had avowed it impossible that it should be other than a college for rich men's sons.

Whatever may have been expected of him, it was impossible for the new president (who by the way was the first layman to occupy the chair), to fall into the easeful tradition of the office. It was impossible for him merely to institute a few necessary reforms and let things go on much as before. He had scarcely been inaugurated when everybody became aware that, for good or ill, the Judgment Day had dawned over the quiet campus and the ivied halls. There was to be no lack of initiative, no fearfulness and trembling before novel proposals, no shirking of responsibility, no failure of nerve. There was no undue precipitancy. President Wilson spent a year studying conditions — he already knew them pretty well — from his new vantage-point. He did not, however, feel any necessity of awaiting the lapse of a year before undertaking to bring the scholarship and the discipline of the school up to what it already was on paper. He assigned this work to a committee on examination and standing, at the head of which he appointed Professor, now Dean, Harry Fine. Students who failed to pass their examinations were dropped, rich or poor, with or without social "pull." Work was absolutely demanded.

There was, of course, an immense sensation when the Princeton students found that, from that day forth, they must go to work. Work had not been a Princeton tradition. The reverberations of indignation rolled through the skies for several years, until there came in a new body of students, prepared and willing to live up to the new standards.

During that first year also a committee on revision of the course of study was appointed to report the following year.

If Princeton was to be a place of work, it was to be fruitful work, work worth doing, worth taking four years out of a young man's life to do. It was to be, above all, as President Wilson saw it and continually phrased it, work that would fit a young man to serve his country better — by which I suppose he meant serve it by living as a citizen, an employer, a man of business, that larger and fuller life which true education imparts.

He even went so far as to say that he wanted the university to make its graduates henceforth as unlike their fathers as possible — by which, of course, he meant that fathers, being settled in their opinions and in reverence for what is established, have a part to play different from that of sons, who particularly must sympathize with the re-creative and reformative processes of life and society. That saying blanched the cheek of many an elderly Princetonian; it was spoken in an understanding of the necessity of opening college doors to the new facts which modern science have added to the store of human knowledge; spoken, also, in appreciation of the new social conscience that has been born in the world, though it is so slow in coming to the birth in colleges.

First, of course, a university that would serve the nation must take into its course of study—its system of intellectual training—the mass of new knowledge of which the old curriculum was ignorant; the college course of the fathers of the present generation had become an anachronism.

If it had fallen to President Eliot of Harvard to proclaim the new age in which the old educational ideas had ceased to suffice, Princeton, under the presidency of Wilson, now took up the completing work of positively constructing a system which should contain the new ideas, the new subjects; and not only contain them, but organize them, coördinate them, put them into proper sequence and relation.

We are here in a region of big things in the educational world, yet (so little do most of us concern ourselves with questions of education, which do so profoundly concern the future) it would doubtless be unwise to dwell on them.

President Wilson's committee, after months of labor, the freed and enthusiastic labor of eager men, promulgated a revised — or rather new — system of collegiate study. It was the first positive attempt made to bring the new college education into intelligent and systematic relationships as a body of discipline. All interested in education know of the revolution wrought by the "department system" that has ever since prevailed at Princeton; while it offered the widest scope for the "election" of studies, it practically assured that the studies "elected" should lead to one settled purpose; that is, it intelligently coordinated a student's work; it turned him out of college not with a smattering of a thousand subjects, but with a pretty thorough training in some one broad group of subjects.

President Wilson is entitled to the credit of presiding over this revision. He did not himself work it out in detail. *Possibly he contributed at the outset* little more than the "group system" idea already used at Bryn Mawr. But from this germinal idea the plan grew into a great architectural scheme. The educational edifice now erected was a fabric of fine articulation, of nice adjustment. It was a first evidence and result of that principle of Wilson's mind which demands coördination, and right relationship and it was the first step toward the transformation of Princeton into a university for the people.

President Wilson's next step was to commit Princeton to the revolution that has come about with the adoption of the preceptorial system. It was his idea that the university had grown too large longer to train its students merely through lectures and examinations. There was no provision for the students outside of the class-rooms. What they did elsewhere, where they lived, what they talked about, with whom they associated, what books they read, what ideals of life were held up before them — with all these, the university in the days before had had nothing to do. Fifteen hours a week in lecture rooms represented the only opportunity possessed by the faculty to ' 'educate" the men. All this, said the president, must be changed. These young men must not be turned out into the street to go and come without direction. without proper companionship, without inspiration, during the other one hundred and fifty hours of the week. His idea was to put the students more intimately into association with a body of young instructors, who were to afford the under-grads friendly companionship and oversight. Formal recitations were largely abolished. Men studied subjects; they did not merely "take courses." Constant informal, personal contact between students and faculty was the keynote of the new plan.

To this idea also there was little objection, though some of the trustees and perhaps a few of the faculty began to get a little uneasy at so far leaving the old ruts. Long after the preceptorial system had been put in operation it was brought up against President Wilson

that he had inaugurated it on his own dictum without having consulted the faculty.

The cost of the preceptorial system was very great, approximately \$100,000 a year. It was determined to raise at least a part of this by subscriptions from the alumni. Possibly this determination was a practical error; for it gave the alumni an influence and voice in the management of the university, especially it gave them a degree of control over the teaching system which has not thus far been particularly happy in its results. The new does not always flourish best under the too close shade of the old. The original idea was that graduate classes should endow, each of them, two or three preceptorships. This was so modified that classes were allowed to contribute annually the salaries of preceptors in lieu of the capital for a foundation.

The preceptorial system was established, and became a distinctive feature of Princeton life. In connection with the gew curriculum, it worked — call it a miracle, and you use none too strong a word. It created a new Princeton, a place no longer of set tasks, recitations and examinations unhappily breaking into the pleasant days of good fellowship and sport; but a place where, to a considerable degree at least, good-fellowship was seen to be compatible with study, and study to be not necessarily a grind. The minds of hundreds of students were emancipated and stimulated; the place pulsated with a new sort of spontaneity and zest.

Princeton University, which, when the last president resigned, was in such a case that, according to a trustee of the day, its career "threatened to end in its virtual extinction" as an important educational influence in America, was attracting the surprised attention of the country. It had a constructive programme. It had a leader, and a harmonious faculty, and it had at least an acquiescent board of trustees.

Alas! that the further steps in that programme, the further ends to which the leader's clear vision and firm purpose looked, meant — *democracy*. Alas! that the educational revolution could not have proceeded without laying its irreverent hand on what the spirit of old Princeton recognized as the sacred ark of social privilege! Alas! that it showed so much more concern for manhood than for money!

[In the next installment Mr. Hale will tell the story of the fight at Princeton over the "Quad" system and the Graduate College proposals — a story which has never been told, but which is as full of dramatic interest as it is of national significance.—

DO YOU WANT A FARM?

AST month the WORLD'S WORK invited any reader wishing to make a home on a farm to write and say so; and the magazine offered to help him in his quest. The purpose of this invitation was to find out definitely to what extent the "back to the land" movement is real, in other words, whether you want a farm or merely want somebody else to go and live on one.

Following this same cue, the magazine now describes a number of farms which are for sale — again to find out whether people really wish to go to the country. By the expenditure of some time and money, the WORLD'S WORK has endeavored to secure accurate, trustworthy, detailed descriptions from men who are in a position to know the facts. The locations of the farms are well-known and do not represent doubtful "agricultural paradises." They are typical farming communities where, under the direction of the right men, successes have been and are being achieved — successes that mean homes, health, contentment, good legitimate work, and happiness.

At the date of this writing (October 21st) these farms are for sale at the prices named, which are judged to be fair and which are the final prices and terms. The WORLD's WORK will forward direct to the owners of the farms all inquiries and communications in the order in which they are received. It cannot guarantee, of course, that by such a time the properties will not have been sold, but until they are sold all readers of the magazine will have equal chances of applying for them. Of course, no sensible man will ever buy land without making a personal investigation of it. Every precaution has been taken to have these descriptions accurate and reliable; but personal examination is the very foundation stone upon which rests the successful choice and development of a farm home.

Again it seems almost unnecessary to add that the WORLD'S WORK is not acting as an agent for any owner, nor will it receive any commission or financial reward if any or all these farms be sold through its activity. In every case the description of the property was requested before the owner knew of the plan on foot. The sole object of the magazine is to find out the actual extent of the "back to the land" movement. All inquiries and correspondence regarding these farms should be sent to the Land Department of the WORLD'S WORK, referring to any one farm by number to avoid possibility of error.

FARM NO. 1.

Located in Madison County, N. Y., is a farm of 197 acres. It is three miles from the Madison station on the New York, Ontario and Western line; a quarter of a mile from a school and three miles from a milk station over excellent roads. The general surface of the farm is rolling. The soil is a clay loam, of which 80 acres are meadow, 40 acres are covered with maple, beech, and hemlock timber, and 150 acres are tillable. These are best adapted to the growth of hops, corn, rye, oats, potatoes, peas, beans, grass, and alfalfa. There are 60 bearing apple trees as well as cherry, and plum trees and various kinds of berries. The wire fences are all in good condition.

The house, 30 by 40 feet with a piazza, has been recently built and is equipped with hot and cold water, a bathroom and a furnace; the water being piped from a windmill and living springs. There is a barn 30 by 60 feet, also piped for water, with a cement floor and a silo. The horse barn is 30 by 40 feet, and near by are a tool house, an ice house, a hog house, a granary, and a smoke house.

The farm is well known in the neighborhood; it is highly productive and the location affords healthfulness and a magnificent view. Lake Morain, a summer resort of considerable importance, is but half a mile away; Utica is but 20 miles, and Syracuse about 30 miles distant, 'cross country. The farm is occupied at present by the owner who desires to engage in business in Brooklyn.

The price of the farm is \$6500; the terms, \$2000 down, and the balance on mortgage at 5 per cent.

Madison County, comprising some 649 square miles, at an elevation of about 1000 feet, is in the heart of the south central dairy region of New York. In common with the other dairy counties, it is also well adapted to the growing of corn, potatoes, hops, etc. The climate has no unusual features, al-

The climate has no unusual features, although it is often marked by a great variability. The average temperature for January in this region has been known to vary from 14.3° to 60.6° in different years. Almost invariably the highlands exposed to the winds have more severe winter conditions, and also more moderate summer temperatures. The average growing season extends from about May 12 to October 1. The rainfall is sufficient, averaging about 40 inches for this entire region.

FARM NO. 2.

Six and a half miles from the Valley City station of the Baltimore and Ohio Railroad, in the town of Hinckley, Medina County, Ohio, is Farm No. 2, of 108 acres. This location brings it within three miles of Brunswick, four miles from an electric car line, eight miles from a cheese factory, nine miles from an electric light plant, four miles from a milk station, three miles from a butter factory, one mile from churches, and three quarters of a mile from a school. In all directions the roads are of good quality stone or dirt construction, especially the highway leading to Cleveland, 14 miles distant, which is paved with brick and stone for all but two and a half miles. Medina, a town of 2750 inhabitants, from which mail is delivered to the farm by Rural Free Delivery, is nine miles south. The Rocky River is two and a half miles east.

The land ranges from level to somewhat rolling. The soil is uniformly of a good quality, clay loam with a clay subsoil, well adapted to general farming, dairying, and the growth

of grains, grass, winter vegetables, and late varieties of apples. There are 25 acres of meadow, 15 to 25 acres of natural pasture, 10 acres of maple and beech timber, and about 85 acres tillable, although not artificially drained. Fifty apple trees, ten peach trees, five plum trees, four pear trees, and grape vines furnish a good supply of fruit. The fences are of wire with iron posts.

The dwelling is a one and one half story frame house of 12 rooms and a good cellar, well painted, and watered by a cistern and a well. Near the good bank barn, 30 by 60 feet, are a sheep shed 24 by 50 feet, a wagon house 24 by 40 feet, a new hen house 16 by 30 feet, a new corn house, a new hog pen, a wood house, a smoke house and a shop. The barn is watered by the cistern and well; the fields, by springs.

The farm is not occupied at present, the owner having recently died and left it to his son who has another business. It is in excellent condition, live stock farming having been carried on in addition to the use of fertilizers; it has never been rented (except to the East Ohio Gas Co., for oil, at \$1 per acre per year) and it has been in one family for four generations.

The price is \$8100; the terms are one-half cash and the balance on mortgage.

Like the eight other northeastern counties of Chio, Medina, with its large areas of heavy black soil is especially adapted to the dairying industry, particularly since there is so near at hand an excellent market for all perishable products. Transportation facilities are excellent. The roads are good and there is a good distribution of railroad service, and a cheap medium of transportation in Lake Erie. The elevation ranges between 800 and 1200 feet above sea level. The temperature is greatly modified by the presence of Lake Erie, although the average temperature for winter is 28.2° F. The summer temperature in all these northern counties is moderate, the highest maximum recorded up to 1905 being P. There are occasional hot, humid spells; **9**9 but these are usually of short duration, being driven away by lake breezes. The annual precipitation is about 35.5 inches, and the annual snowfall about 42.5 inches. The average growing season is 157 days, sufficiently long for growing all crops of the temperate climate.

FARM NO. 3.

Near the southern point of a triangular area in the south central part of Kandiyohi County, Minn., of which triangle the northwest apex is the city of Willmar (4135 population), the northeast apex the village of Kandiyohi, and the southern apex, the town of Svea, lies Farm No. 3, of 182 acres. It is eight and a half miles from Willmar, eight and a half miles from Kandiyohi (both of these places being on the Great Northern Railroad), and two miles from Svea. At Svea are two general stores, a blacksmith shop, a bank, and a first class creamery, while the farm is kept in touch with affairs by means of a telephone line, and a Rural Free Delivery mail service.

The level and gently rolling land is composed of a heavy, black loam soil, with a stiff clay subsoil. Of the 182 acres, 115 are already under the plow, 25 acres more are ready for plowing; there is a wild grass pasture of 30 acres, and there are three acres of cottonwood and box elder timber. The remainder of the farm could also be cultivated if some tile draining were done. Corn, wheat, barley, oats, and flax have been and can be grown on the farm, but it is advised that more stock be kept and a more diversified system of farming be practised in order to improve the land.

There is a house of four rooms, and a barn worth \$600, as well as a small granary, a well and a windmill. There are apple and plum trees in bearing, 30 bushels of apples having been harvested this fall.

Willmar and Kandiyohi offer good markets for all farm products and also good opportunities for buying. At the former place there are two large department stores, and a farmers' coöperative store, and at both centres there are farmers' grain elevators. The roads are level and for the most part in good condition. By the spring of 1912 a road to the main Svea-Willmar turnpike will have been gravelled and finished. As it is, a load of 112 bushels of wheat was hauled to Willmar this fall by an ordinary team without any trouble. In renting the farm on shares, the owner (receiving one-third) received this year, \$600 for the crops harvested.

The price, is \$8736. There is a first mortgage of \$4000 at 5 per cent., due on or before November 15, 1917, and a second mortgage of \$2000 at 6 per cent., to become due on or before three years from date of sale. The balance of \$2736 must be cash. An abstract showing good title will be furnished.

Kandiyohi County is typical of a large portion of southern Minnesota, lying between 1000 and 1200 feet above sea level. Topographically "there are three general provinces (1) the irregular morainic region, north and east of Willmar (2) the area of gently rolling prairie south and east of that city (3) the level sandy plain in the northeastern part of the county." All three provinces are, as a whole, rather poorly drained and contain numerous lakes, but these are most abundant in the first named section. In general the soil is a heavy glacial loam, a hundred or more feet deep. In the northeast it becomes rather sandy and poor, and southwest of Willmar, tracts are encountered where there is an excess of alkali. The price of land in this region varies from \$45 per acre far from markets to \$75 per acre near them. The ordinary farm is of 160 acres although some places are of 240 and 320 acres. Most of the farmers are Norwegians and Swedes with a good sprinkling of Germans, Hollanders, Danes, Americans, and Irish.

The climatic conditions are typical of the Northwest plains, being marked by moderate rainfall and a rather low temperature. ln Lyon County, about 60 miles southwest of Willmar, the extreme range of temperature is 142°; 38° below zero has been registered in February and 104° in August. The average growing season, for a number of years before 1903, was 141 days. During the winter the prevailing winds are from the north and northwest; in summer they are from the south and southwest. Occasionally a hot south wind will tend to damage the corn crop. The rainfall is about 25.15 inches, with the greatest chances of drought during July. However, the rains of August and September are usually sufficient to make possible fair yields of corn. A number of farms in this region have run down because of continuous cropping without rotation. By means of green manures, rotation, and more stock farming, they can readily be brought to a productive and profitable state.

FARM NO. 4.

Of this farm of 166 acres, $159\frac{1}{2}$ acres are located outside the city of Great Falls, Cascade County, Mont., on the Sun River, with a mile of river frontage; the remaining $6\frac{1}{2}$ acres lie within the limits of that city, which is the county seat. Within three miles of the farm is the business centre of the city, and within two miles is a graded city school, both being reached over a well-traveled country road.

The land lies on three levels: fifty acres are unbroken, perfectly level upland, part of the "Sun River bench," (On adjoining bench lands, grain has been successfully raised without irrigation for a number of years.); fifteen acres form a steep northern slope suitable for pasture, the base of the slope being well adapted to the growing of fruits; the remainder is rolling lowland and river flat. At present there are 25 acres of alfalfa, 15 acres of winter wheat, and 10 acres just broken. Including the upland, 100 acres more can be plowed. The soil is rich loam, well supplied with humus and plant food, especially the bottom land which is high enough to prevent flooding.

The buildings are situated about half way down the slope, well protected from the prevailing south and southwest winds. They include a house of eight rooms and a small cellar, with a well in the kitchen; a frame barn, 30 by 150 feet, with full stone stable basement and a hay capacity of 150 tons; and several outbuildings. The fences are of barbed wire.

There are no irrigation facilities on the farm at present since good crops have been raised on this, and neighboring lands, without artificial watering. But irrigation could be installed on this land to great advantage for, of course, the yields under such treatment are much surer and larger. This would, however, involve additional expense. The National Sun River Irrigation Project, now 8 per cent. completed, will irrigate about 276,000 acres of land and may supply water to part of this farm below the bench. There is a market for all farm crops in the city. The taxes paid in 1910 amounted to \$62.78.

The owner is an elderly man whose family do not care for farm life, and who desires to retire after disposing of the farm. He has made the price, \$9130. He desires all cash, in which case he will make a discount of \$500. Otherwise his terms are one-half cash, the balance for three years, at 7 per cent.

He will sell the following personal property for \$1500: household goods for eight rooms, including a piano, 4 head of horses, 1 yearling colt, 3 cows, 3 yearling calves, 2 buggies, 1 lumber wagon, 350 chickens, 15 tons hay, 350 bushels wheat, 25 sacks potatoes.

Great Falls is perhaps the leading industrial city of Montana. Its natural water-power resources are excellent, the total efficiency of the Missouri River at this point having been estimated to be about 100,000 horse power. The city is therefore growing with great rapidity both in population and importance, and is offering a constantly growing market. The agriculture of the region too has made great strides within the last few years, and with the development of irrigation systems will advance still further. However, Great Falls is in the heart of that section of Montana where hay and, to some extent, grain-farming can be carried on fairly successfully without irrigation. The price of farm land about Great Falls varies considerably according to location and condition; \$1000 to \$1600 per acre has been paid for highly improved irrigated farms.

The soil in the neighborhood, especially in the valleys, is fertile and well adapted to the growth

of a number of crops or to dairying. The annual average precipitation for the county is only 14.77 inches but the bottom lands are often supplied with sub-surface water from the rivers. Moreover the large amount of the rainfall is well distributed over the four principal growing months — from April to August. At Great Falls the average monthly temperatures are as follows: Jan. 24°, Feb. 25,° Mar. 32°, Apr. 45°, May 53°, June 60°, July 67°, Aug. 66°, Sept. 57°, Oct. 48°, Nov. 34°, Dec. 31°, Annual 45°.

FARM NO. 5a

Albemarle County, Va., is in the heart of the Piedmont Section of the South, where, on the foothills of the Blue Ridge, the Albemarle Pippin apple reaches its most delicious development. In the northeast part of the county is located this farm of 267 acres, one half mile from Profit station on the main line of the Southern Railway; 109 miles from Washington, over that road; and seven miles northeast of Charlottesville.

The surface is rolling; the soil is chiefly loam and clay loam, at present run down through poor management, but well suited to apple growing if humus is supplied and cover crops are grown. There are twenty acres in timber; the greater part of the remainder is cleared and available for orchard planting or dairying. Seven hundred Winesap and York Imperial apple trees are just coming into bearing, the first crop having been shipped in 1910.

There are two houses in good repair, one old, the other modern, both supplied with water from an elevated tank. The stable is ample for 40 head of cattle, horses, and young stock; it is supplied with water by a windmill which also is used for grinding feed. There are also a hog shed and other outbuildings. Excellent spring water, and a fresh spring branch running across the farm supply water for grazing stock.

The price was \$10,000 until November 1, when it was increased 10 per cent., as the owner expected to set several thousand young trees this fall if the property had not by that time been sold. The terms are one-half cash, the balance on easy terms to be agreed upon.

FARM NO. 5b

Almost alongside the farm just described, but a mile, instead of half a mile, from Profiit, are 465 more acres of the same general sort of land. Of this, 325 acres are sufficiently level to permit machine cultivation, the remainder, rather rough and rolling, offering opportunities for pasturing or orcharding, providing sod

culture were practised.

Rich bottoms cover 100 acres; 100 acres more are on a slightly higher plane, but are also approximately level and valuable for crop raising; the remainder slopes upward for about 200 feet in a quarter of a mile. Fifty acres of cut-over timber land are now being used as a hog range, but they will supply abundant firewood and later, saw-timber. Wire fences divide the farm into nine fields.

The dwelling house and two tenant houses are well located where springs could easily be piped to furnish a gravity supply of water. The shed barn 65 by 65 feet in size will accommodate 12 horses, 50 cows, and 75 sheep. It is supplied with three driveways and a hay fork and has a hay capacity of 25 tons. A blacksmith and machine shop, a corn crib, and a buggy shed and granary combined are located nearby. Many springs of good water are scattered over the farm, which could be developed into an excellent stock raising estate with a generous acreage in fruit and alfalfa.

The price, after November 1, is \$16,500; one third cash, the balance on terms to suit.

These two farms can be bought together, giving a fine combination stock and fruit farm, or separately. The former of the two is at present rented; the latter is being cared for by hired help. Both renters and employees would be glad to stay on the property and could probably be engaged as farm laborers.

Railroad facilities are excellent, the Chesapeake and Ohio system crossing the county from west to east, and the Southern Railway from north to south, the two lines intersecting at Charlottesville.

The mean monthly temperatures at Charlottesville for a number of years were as follows: Jan. 35°, Feb. 35°, Mar. 46°, Apr. 55°, May 66°, June 72°, July 76°, Aug. 74°, Sept. 68°, Oct. 57°, Nov. 47°, Dec. 38°, Annual 56°.

Rainfall is abundant and well distributed throughout the year. The snowfall is relatively slight, approximating 20 inches. The average dates of the first killing frost in the autumn and the last killing frost in the spring are given as October 28 and April 7.

If you really wish to go on a farm then here is an opportunity. Write to the Land Department of the WORLD's WORK and it will put you in touch with the owners of these farms. On the magazine's part this service is free to both parties, nor will it describe any more farms in this way. The purpose of this article is to make an actual experiment into the demand for land.

THE MARCH OF THE CITIES

WHAT THE WOMEN DID FOR LOUISVILLE

Following Mr. Henry Oyen's comprehensive series, "The Awakening of the which showed how they are meeting the problems that twentieth century civilization upon them — how far-seeing municipalities are the hope of an efficient democrac. WORLD'S WORK has decided to publish a series of city achievements as encourage one of the most important movements of progress of this time — the physical, mor social improvement of American cities.— THE EDITORS.

T WAS the women, who woke up Louisville. They first realized the tremendous importance of concerted and disinterested action to secure permanent civic improvement. With abundant public parks, wide avenues, hundreds of thousands of shade trees, and seven miles of river frontage, Louisville was capable of being made into a beautiful city. The women set to work to bring this about by opening a campaign through newspapers, personal letters, and personal solicitation.

The first object of their attack was the factory situation. The factories for the most part dumped their rubbish anywhere that happened to be convenient and made no attempt to keep their premises in order. The women's movement soon brought a Manufacturers quickly change. responded to their appeal. Rubbish was no longer dumped carelessly. Grass seed was sown. Flower beds were planted. Factory windows were adorned with pots of growing plants and many owners were induced to apply a coat of well-nigh forgotten paint. Owners of tenement houses were appealed to, and they recognized the commercial advantage of beautifying their premises. A successful crusade was inaugurated against awning poles which reached to the street and tended to block traffic on the pavement, and against overhead wires, which now have been forced underground.

The crusade for cleanliness and beauty had a peculiar psychological effect. It was to be expected that it would teach factory hands and tenement dwellers to lead more cleanly lives and that it would stimulate wealthier residents to beautify their own premises and these th did; but it did far more. The w crusade was hardly completed w crusade was begun for a pure milk : Within twelve months the dairy si was revolutionized. The public h come inoculated with the fever of c ness and sanitation and a mere desc of the conditions surrounding the a American dairy was sufficient. brought in by interstate traffic an the upstate trade was subjected same rigid scrutiny that prevails i dairies and Louisville's milk supp been immeasurably improved.

The leaven kept working. Three the voters had rejected a proposiissue city bonds for the complet the sewer system. The issue finally and \$4,000,000 was spent upon a cosystem. The new filter plant wa pleted at a cost of \$3,000,000. A tucky, Indiana, and Ohio t commission is now at work on pl purify the water of the Ohio River it reaches the Louisville filter plan

In the wake of the civic renai public attention was attracted river-front. The subject of wate parks was broached and though dream has not yet been fully re the river-front is being constant proved.

The burden of these improv naturally fell most heavily up business men and property owners city. Yet none has troubled to ca how much the campaign has a business. They are all satisfied i purely speculative standpoint; they that the "cleaned up" city pays.

The World's Work

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MR. OSCAR W. UNDERWOOD

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CHAIRMAN OF THE COMMITTEE ON WAYS AND MEANS OF THE HOUSE OF REPRESENTA-TIVES UPON WHOSE LEADERSHIP THE SUCCESS OF TARIFF REVISION WILL DEPEND. HE HAS EXPRESSED HIMSELF AS WILLING TO COÖPERATE WITH THE PRESIDENT'S TARIFF BOARD IN SO FAR AS IT GIVES REAL HELP

THE WORLD'S WORK

JANUARY, 1912

VOLUME XXIII



NUMBER 3

THE MARCH OF EVENTS



E FACE a new year of excitement and uncertainty. A Presidential campaign somewhat disturbs normal

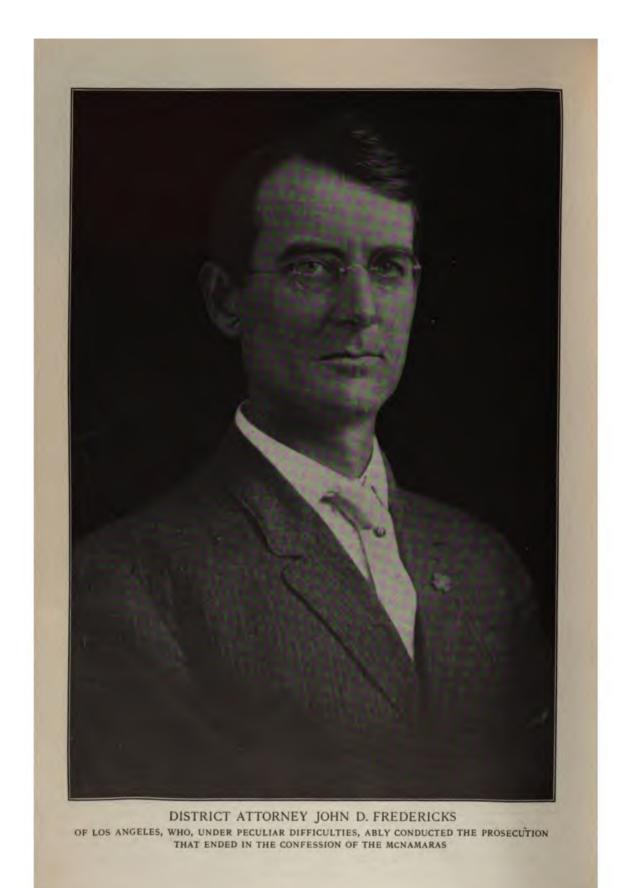
activities, but it is also made the excuse for a degree of disturbance that it need not cause. The election of this candidate or of that, of a Republican or of a Democrat, is not going to shake the foundation of industrial life; but we find it convenient to put whatever fears or doubts we have in a bundle and to label the bundle "the Presidential year"; and a mental habit is stronger than a physical fact.

There is much to say in favor of a Presidential term of six or eight years with a prohibition of reëlection; but there is, of course, something to be said against such a change, and the great trouble of so amending the Constitution will stand in the way till a strong agitation be made for it.

We must take our quadrennial excitement and disturbance, then, cheerfully, as we do. We even take it with enjoyment. In addition to other emotions that it calls forth, it appeals strongly to our love of the conflict, our fondness for the game, our liking for the excitement of it. We are all politicians at bottom, and we look with condescension, even with contempt, on the man who does not become somewhat aroused once in four years from his devotion to his own personal affairs. But politics and business affairs are,

after all, only a segment of life. The new year brings promise of cheerful and prosperous activity in most other directions. It is a good time to live and to work. Our land becomes ever more fruitful, our cities more beautiful, our training more widely spread and more efficient, our life more healthful, the common sense of the people more surely to be depended on, the plane of conscience in public and private affairs becomes higher, our great activities go on well, such as road-building, school improvement, sanitation, helpful concern for the unfortunate, and the growth of our interest in one another. We are free, every man according to his ability, to work out our normal development and personal comfort. If you make a fair measure of the conditions of life at any time in the past and compare them with the present, you will not be likely to wish that you had lived in any former period.

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BREAKING THE WORLD'S PLOWING RECORD THE THREE TRACTION ENGINES AND 50-GANG PLOW WHICH CUT FIVE-INCH FURROWS AT THE RATE OF AN ACRE EVERY FOUR-AND-A-QUARTER MINUTES AT THE PURDUE UNIVERSITY FIELD DEMONSTRATION



MRS. GENE STRATTON-PORTER WHOSE NATURE-NOVELS, "THE HARVESTER," "FRECKLES," AND "A GIRL OF THE LIMBER-LOST" HAVE REACHED EDITIONS OF MORE THAN HALF A MILLION COPIES AND GIVE A GOOD 'NDICATION OF THE WIDE POPULARITY OF NATURE-SUBJECTS IN THE UNITED STATES



• MAURICE MAETERLINCK (and his wife) TO WHOM THE NOBEL PRIZE (ABOUT \$40,000) FOR LITERATURE WAS AWARDED IN 1911, AND WHO NOW MAY BE FAIRLY REGARDED AS THE FOREMOST IMAGINATIVE WRITER ON THE EUROPEAN CONTINENT

MAYOR SAMUEL L. SHANK, OF INDIANAPOLIS, SELLING LOCAL PRODUCE DIRECT TO CONSUMERS - A SPECTACULAR LOCAL PROTEST AGAINST THE FACT, CITED BY PRESIDENT YOAKUM, OF THE 'FRISCO R. R. SYSTEM, THAT OF THE \$13,000,000,000 PAID BY AMERICAN CONSUMERS FOR FOOD \$7,000,000,000 GOES TO MIDDLEMEN A MAYOR VS. THE MIDDLEMEN

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LOOKING THE NEW YEAR IN THE FACE

HERE is an interesting time before us — very interesting as well as exciting.

There is hardly need to sketch the great political tasks of the year - the Congressional programme for trust and tariff legislation, the meeting of the national conventions to nominate candidates for the Presidency, the campaign, and the election. The hope and fear of a Democratic victory, much more acute than at any time since Cleveland's last election, give an interest to the year's politics that perhaps half the voters never before felt. Nor will it be merely a straight struggle between the two parties; for each party is undergoing a rapid internal change. Party lines were never so loose at any time since the Civil War. New machinery is in the making, too -- primaries and the like; and there is the effort of the people, like an undercurrent, to get rid of bosses and other mechanism and to take government more and more into their own hands. It will be the most interesting political year that most men now living have known.

This political activity and other and graver causes disturb also the financial and commercial world, which looks to the new year with anxiety — with more anxiety and uncertainty than need be. For the financial and commercial world is not free from superstitions.

11

But let us turn now from the turmoil of politics and business and we shall still find exciting tasks and problems.

Life ever becomes safer from disease. We have become so familiar with the mastery of yellow-fever, the prevention of malaria, the possible and, if people were careful, the complete conquest of typhoid, the successful barricade against cholera, the lessening of tuberculosis, even the cure of meningitis and the great discovery of Ehrlch, that we take the changes that these imply for granted. Many diseases as yet baffle our skill and lie beyond our knowledge — notably cancer — the time does seem within measurable reach when most of the worst ailments that beset us will be under command.

It is worth our while to remember, if we wish to exercise the fine quality of gratitude, that there are no more useful or devoted men living than those zealous and eager investigators at such institutions as the Rockefeller Institute for Medical Research in New York and the Pasteur Institute in Paris. They take rank among the very greatest benefactors of mankind in our time or in any time; and their discoveries follow one another so fast that any year may be made historic by them.

In fact it is not an idle thing to say that a new era in human flistory began with the work that our scientific men have already done in Cuba and in Panama and in the Philippines; for henceforth the conquest of the tropics will be a purely economic question. It is no longer a question of the lives of men. Any tropical region can be made a healthful place for men of our race, as soon as it be worth while to make it so. And this means potential additions to the wealth of the world that cannot be even guessed at.

And we are just finding out that the hookworm disease has held a large part of the population of the tropic and lower temperate zones in the inefficiency of anæmia and has so held millions of human beings for centuries. No one can yet even guess at the great influence that this disease has had in shaping the history of India, of China, of Africa, not to speak of our own Southern states. Henceforth millions of human beings will rapidly be released from this bondage.

In surgery, too. wonders multiply with the triumphs of Dr. Carel and other great experimental surgeons — even the possibility of replacing worn-out human organs with sound ones from other bodies.

Ш.

But the domain of medical discovery and surgery and sanitation is only one segment of the great circle of experimental and applied science that is making the world a new world to live in. Not less startling are the changes that are taking place by reason of new discoveries and new methods in agriculture and in the widening of the application of electricity. Wireless telegraphy is taken for granted; and the new area of convenience and economy covered by electricity broadens all the while. We are probably on the edge of a revolution in the cheapening of power.

In so practical and abbreviated a summary there is hardly a place for the exciting experiments and investigations that are throwing the old cosmic theories into the scientific scrap-heap. Suns and solar systems come into being by laws that we are just getting glimpses of; and the hope fills many minds of tracking the very secret of life nearer to its revealing. Astromers and biologists alike work with a keener hope than ever before.

IV

Definite headway has been made by the many agencies for the better care and protection of the child. We are fast taking the view that, since neglected or unfortunate children are not responsible for their condition and since children are the most precious asset of society, it is the bounden duty of society, in some way, to see that they are not neglected.

This activity takes many forms. Local laws are every year rewritten — healthlaws, school-laws, work-laws — looking toward the better conservation of young life. Private organizations of many sorts attack various phases of the problem. All these activities denote that the American conscience is arousing itself on this subject. And we may look for greater and greater changes toward the humaner and more helpful attitude of society in general and of government toward the better protection of children.

As a part of the same awakening there is coming a greater care of working women. The two problems go together.

And the feeling that woman suffrage will help toward these ends has much to do with the growing favor in which it is held. We shall almost certainly see its area extended beyond the five states that have now granted it. Much of the sheer prejudice against it is melting away.

The high cost of living - of food in

particular — is the powerful incentive to a thorough examination of the cost and methods of transportation and distribution. Thus a new earnestness is felt in the efforts to secure a parcels post, a new impulse is given to cooperative trading in spite of the somewhat discouraging efforts to plant this English institution in the United States. The unnecessary middleman and the parasitical distributing agencies can hardly count much longer on the public indifference.

All these are subjects of social welfare. The same impulse that moves them takes many other forms, such as the better safeguarding of working men's lives and health, the never-ending if often futile war against the unwholesome tenement, the humaner view of criminals and their better treatment — and other kindred forms that this humaner spirit of our time takes.

It is hardly necessary to speak of the rapid improvement in city government and the continued beautification of our cities; or of the even more rapid growth of comfort and profit of fann-life wherever skillful and competent men take it up.

We have entered upon an era of unprecedented activity in road-building, a task that was delayed too long but that is now taken up in most sections of the country with zeal and intelligence. Automobile travel has stimulated this activity, but other and more fundamental causes also have been at work. The farmers are awakening to the profits of good roads and states and counties from one end of the country to the other are busy building.

Loud as the noise of Presidential politics will be then, Congress and the campaign will by no means take all the energies of the public mind. We are carrying steadily forward a great and varied volume of good work to make our land a better land to live in. And there is so much to be done and so many tasks in hand that no man with a will to help his country or his fellows can plead an excuse for indifference or for inactivity.

V

Abroad, the year dawns with a clouded sky. The European equilibrium is so

unstable that it justifies concern. The ambitions and mutual suspicions of England, Germany, and France make a conflict possible (to put it mildly). For there are many men in each of these countries that look for another great European war, not this year, perhaps, but within a short period.

These countries have, too, their internal problems. Socialism is growing in all of them. Spain also is in a ferment; almost anything may happen there and in Por-. In Eastern Europe, too, unrest tugal. prevails. The Austrian Emperor cannot in the natural course of things, live much longer. King Peter's throne is shaking. The Young Turks are making a mess of it in the Ottoman capital, and the Balkan ghost is likely to walk at almost any time. Persia's chronic state of revolution is another source of danger to Europe's peace. Russia's advance toward India has been going on quietly for many years, but she is not likely to be allowed to cross Persia without a tussle with England.

Still the great political happenings of the year will probably take place in Asia. What 1912 will bring to that greatest and most ancient of empires, China, is past all speculation. Were no other great public change to come this year than the determining of the fate of China, the year is still likely to be one of the most important in recent annals. Events there touch directly a large proportion of the human race.

A KANSAS EPIGRAM ABOUT THE PRESIDENT

T ONE of the towns in Kansas where President Taft stopped during his long journey, а great crowd of country people came to hear him. His speech was an historical discourse which provoked no enthusiasm. As the crowd dispersed one countryman said to another: "No, he ain't one of us." There is much testimony to show that this feeling prevails in many parts of the country which the President visited. At a club, surrounded by lawyers, where his good-natured, companionable qualities have free play at close range, he captivates the company; but, when he meets the

masses of the people, they do not find themselves in direct contact with him. They do not feel sure that he knows them or understands their problems. He talks as an administrator might talk to his "little brown brothers" or as a judge to a jury. His thought seems impersonal, remote, formal, not the spontaneous utterances of "one of us." Even his policies that the people approve seem in a way to lack directness and effectiveness. Does he want tariff-reform? It must come only in his own way, by his tariff board. Isn't the method of more importance to him than the substance? In spite of his apparent amiability and undoubted good intentions, he will presently have the House aroused against him in his tariffplans as he has the Senate unfriendly to his peace-plans. If he could stir up public opinion to support him vigorously, Congressional opposition might be turned into an advantage; but public opinion does not come to his rescue.

Again, his enforcement of the Sherman law (and it is his bounden duty to enforce it) displeases the world of "big business" without satisfying the world of "little business." Mr. Taft even in his most emphatic and vigorous declarations does not wholly convince the people. They believe him sincere; but he and they speak a somewhat different langauge and they are not quite sure that he means what they would mean if they used his same words. His thought moves in formal ways: theirs runs straight to conclusions.

Again, as in the Ballinger case, the President's postponement of decisive action could not change the inevitable course of events, but it continually made a bad situation worse until it ended as everybody knew it was bound to end; so in the case of the Agricultural Department a similarly unfortunate delay has a similarly unfortunate effect. The aged Secretary of Agriculture, like the former Secretary of the Interior, does not see the logic of events, and the President mistakes a personal loyalty for a public service. Yet the inevitable cannot be prevented by any such mistake. Everybody knows that this great Department must be reorganized under a new head. The President does not face difficulties decisively.

Yet no man has more patriotic intentions. The explanation seems to be temperamental — that "he ain't one of us."

11

Mr. Taft's interview that appeared in *The Outlook*, explanatory of his work and purposes as President, had the tone of an apology. His amiable personality showed in it, as in everything that he does or says. But there was the tone not only of apology but even of a sort of helplessness. The very illusion of leadership was stripped away in a perfectly commonplace explanation that somehow seemed to do offence to the great office. Nothing to stir the imagination, nothing to rally men — one can hardly help wishing that the President had not made such an explanation.

THE TIDE OF SOCIALISM

HE extraordinary strength shown in the fall elections by the Socialist party does not mean that thorough-going Socialism is likely to win in the United States — certainly not at any early time — very considerable power. Yet the number of persons who accept this creed is constantly increasing, and among them are an increasing number of men of thought and character. The American Socialist is no longer a creature of hoofs and horns. He may be a man who, as you look at it, holds an impracticable and dangerous doctrine. But he is no longer necessarily a red-handed revolutionist. He may be a popular preacher in an orthodox pulpit or the instructor of youth in an important university, "a gentleman and a scholar" and not a leader of a destructive mob.

The growth of the creed measures the growth of the protest against the present economic and political order. Old wrongs are so hard to root up that every man sometimes becomes impatient and indignant and rebellious, except the man who knows and has long pondered on the very slow ascent of human society to every higher level that it has reached.

Historical knowledge is the best restorer of patience, and historical knowledge is got only by considerable labor. Any good man who loves his fellows, when he looks out over the world and sees it as it is, is pretty certain at times to accept some revolutionary plan unless he have a pretty good historical perspective.

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Socialism, then, is a convenient protest and many men vote a Socialistic ticket who do not accept a thorough-going Socialistic creed. They mean, for instance, that they had rather entrust their city government to any determined enemy of the old gangs and rings than to the old gangs or rings themselves. Especially does the Socialistic programme of more rigid supervision of public utilities, its promise of more attention to the regulation of women's and children's work and recreation, and better attention to the public health — its generally more humane programme — appeal to good men who have become weary of the tweedledum and tweedledee commonly called Republican and Democratic municipal administrations.

But even this does not wholly account for the great increase of the Socialist vote. The party now holds nearly five hundred elective offices in the United States. It has been successful especially in winning municipal offices, and it is strongest in the Middle West. Many of these local victories have been won by the excellence and earnestness of local organizations. They work compactly and intelligently.

The strongest reason of all is what may be called the humane appeal of Socialism. Parks, playgrounds, medical examination of school-children, sanitary inspection of places where women and children work — all the comparatively new public activities that the old parties are slow to take up — these make a strong pull on all good men's sympathies, and men who wish these humane things done do not hesitate to vote for a Socialist mayor because a Socialist Congress, if we should have one, might try to abolish the Constitution. In fact it is silly to maintain that such helpful public acts commit a community to the state owner-

ship of all productive industries. Thus Socialism has gained much from the conservative stupidity of its enemies.

Of course, too, it gains because it promises a root-and-branch solution of the trust problem. There are very many men who are willing, if it come to that, that the Government should take over productive industry, merely because this would be a "new deal." They feel that nothing could be worse than the present system and they are willing to try any change. For this feeling, as far as it exists, "big business" and the privileged classes have themselves to thank; and to this extent they are a direct encouragement to Socialism.

But this growth of the party and all these overlapping causes of its growth give no reason to suppose that there is going to be a Socialistic party in the United States strong enough to hold the balance of power between the two old parties. Long before it reaches any such strength it will have so scared one or both the old parties into action against old abuses that much of the reason for protest will disappear. Such protests have a human-izing and liberalizing influence; and it may very well be that for this reason the Socialists are playing and will play a good part in preventing the fossilization of the old parties. This, in fact, is the reason why many men who utterly reject the creed see the party win minor victories with complacency - the reason why, too, the word "Socialism" no longer frightens them.

THE PENSION BUREAU'S "INVESTI-GATION" OF ITSELF

THERE are now 892,098 names on the Federal pension list. Among them was distributed last year \$157,325,160.35. The distribution of this cost \$2,517,127.06. Thus the pension bill last year was only a few thousand short of 160 million dollars. This is for the year 1911. In the year 1866, the pension bill was 15 millions. In the year 1876, it was 28 millions. But that was only ten years after the Civil War; it is now forty-five years.

However, \$2,407.94 of the 160 millions

was last year recovered from fraudulent recipients. Fifty-one pensioners were convicted of fraud, and cases are pending against 109 more. One hundred and forty-seven names were dropped from the roll.

The year was one of unusual activity on the part of the Bureau in the direction of uncovering fraud. The authentic cases laid before the country by THE WORLD'S WORK made it absolutely necessary that something should be done.

The steps taken by the Commissioner of Pensions were not heroic. They were hardly those which a private individual under charges would have taken to vindicate himself. The head of the Pension Bureau did not ask for a committee of investigation. He did not suggest that disinterested parties examine the charges and the evidence. He did not invite this magazine to submit the facts that had come to its knowledge. He obtained permission for the Pension Bureau to investigate itself, that is to say, to check up its own list — as the Commissioner explains (See page 30 of his Annual Report, lately issued) — to go from pensioner to pensioner and ask each if he were the right man. He says:

Last fall it became apparent from letters received in the Bureau and certain press articles that the impression obtained in some parts of the country that the pension roll was honeycombed with fraud. To settle the question beyond all controversy by determining whether the pension roll was a roll of honor or otherwise, I obtained verbal permission from those in authority over me to check up the pension roll. I mean by that, ascertaining whether every person drawing a pension is the person entitled to it. The task is no small one, as the Bureau must first get the names and last-known post-office addresses of the pensioners from the pension agents, and then field men must go from pensioner to pensioner to learn whether the proper persons are drawing pensions.

When the Commissioner prepared his report he had not been through the whole list. Hardly. He had "investigated" about one-twentieth of the nine hundred thousand names. "Up to this date, 47,181 pensioners have been seen and questioned as to their identity, and their certificates examined."

A thief is not to be caught by asking various people to show their visiting cards. Nobody has ever charged that pensions were being drawn on forged certificates. It is not charged that false impersonations are very commonly at the bottom of pension frauds - if they were, they would very seldom be discovered by the plan of asking everybody if they had given their right names. All this is a deliberate, and a very dull and stupid evasion of the whole thing. The WORLD's WORK has exposed a score of tricks by which the Government has been, and is constantly being, defrauded by wholesale; (false impersonation was but a single, minor one) - tricks by which men and women not entitled to pensions, get certificates and get pensions. Most of these tricks rest on the simple device of false affidavits. But you do not apply to a perjurer to learn whether or not his affidavit is true. Mr. Davenport's "investigation" is worthless. Gravely to offer it to the country is a piece of casuistry worthy of the best days of pension graft.

Naturally, the "investigation" resulted much to the Commissioner's satisfaction:

As a result of this checking up, 5 widows' names have been dropped from the rolls for violation of the act of August 7, 1882, 1 on the ground that she is not the legal widow of the soldier, and the names of 2 invalid pensioners because it was shown that they deserted from former services and received bounties for reënlistment. There are now under consideration with a view to dropping, the names of 10 widow pensioners for violation of the act of August 7, 1882; 2 on the ground that the pensioners are not the legal widows of the soldiers; 3 who have remarried and have continued to draw pension; 1 invalid pensioner found to have been a deserter; and 2 invalid pensioners who served in the Confederate service and enlisted in the Union Army subsequent to January 1, 1865; making 18 more whose names will probably have to be dropped, a total of 26 in all out of 47,181. There are a few other cases where doubt exists as to title which will have to be specially examined to determine the facts.

The special examiners on this work have succeeded in causing the arrest of two bogus special examiners, as well as in ascertaining the names of two others, for whom a thorough search is now being made.

Up to date it has been found that 210 pensioners are dead whose names had not been reported to the Bureau.

A few irregularities in executing vouchers were discovered. A large number of pension certificates with blank vouchers were found in the hands of a pension attorney.

So it seems that even the harmless, childish inquiries made of 47,000 pensioners themselves, resulted in the dropping of 26 names. At this ratio, the complete pension roll would be relieved of about five hundred bogus pensioners — constituting a saving (calculable according to the Bureau's arithmetic at \$86,000) in consideration of which the Government could well afford to pay the cost of a real investigation.

A *real* investigation would save the country possibly as many millions as Mr. Davenport's "investigation" would save it thousands. And it would make the pension roll again a roll of honor.

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There is no escaping the conclusion that the pension roll must be made public the names and residences of all pensioners, why pensioned, the amounts they receive, the agents who secured their pensions, and other such main facts — made public so that the people in every community may know whom to honor as right and worthy pensioners and whose names have unworthily been put and kept on the roll by reason of its secrecy.

Consider two incidents like these:

In one of Mr. Hale's articles last winter the case of a deserter was cited whose name was put on the roll by a private pension bill. The member of Congress who introduced the bill then investigated the case. That's what he ought to have done before he put in his bill. He found the facts as presented in this magazine true — the pensioner was a deserter. Now what has that Congressman done? Confessed his mistake and introduced a bill to remove the man's name from the roll? Not yet. Well, will he ever do so?

Again, at a private dinner in Washington not long ago, at which men in high

official position sat, one gentleman remarked: "I know and you know and you know that I know and I know that you know and we all know that the pensionroll contains so many shameless and degrading scandals that it smells to heaven." Somebody suggested that perhaps the number was exaggerated. Then facts were cited that answered this objection. The whole company, many of them high Government officials, then assented to the shame of it. Yet nobody in official life lifts a hand to remove it.

The pension-roll must be made public. Mr. Charles Francis Adams shows this necessity so plainly that the scandal does cry to heaven in fact.

WOMEN AND COUNTRY LIFE

A NUMBER of city men, out of the many who now write to this magazine about buying farms, say that they would straightway go to the country but for the unwillingness of their wives. One man writes that but for this reason vast numbers of salaried men would seek country life. Does this argue a reprehensible bondage of women to town life, its conveniences, its companionships, its diversions, and frivolities?

Not necessarily reprehensible. Farmlife in the past has been very burdensome to women. As a rule it is very burdensome yet. Its loneliness and its lack of conveniences and diversions and, in many communities, the lack of first-rate schools have made its hardships very real — so real that no woman who has a comfortable town home may be blamed for oreferring it to a farm.

But may farm-life now not be made more attractive and comfortable and wholesome for women and children than town life? The rich of course can do what they will, even duplicate their city establishments in the country; and the really poor will have much discomfort wherever they are. But need the women and children of a fairly well-to-do family fare worse in the country than in the town? Yes, as farm life has been; but not as it may easily be made. And this is the point — the possibility now of bringing about this change. There are country regions — perhaps not many yet - where the schools are as good as in the cities, where roads are good enough to make one's neighbors accessible, where telephones and trolleylines prevent isolation, and especially where, by gas engines or in other ways, running water may be put into residences. With these conveniences, no woman of reasonable intellectual and social resources need suffer by going from the town to the country if she go to a fairly prosperous region. Most of the strong women who reared most of the strong men in our history were country women who did not have these advantages and conveniences. Running water, a good road, and a good school, however, come as near as any other three things to making the difference between civilization and the state of the pioneer.

A FRUITFUL AND BEAUTIFUL ME-MORIAL FOREVER

A MOVEMENT is on foot to make a worthy memorial to the late Dr. Seaman A. Knapp, the promoter of demonstration farm work in the Southern states, a method of teaching better agriculture that the West also is beginning to adopt. Dr. Knapp organized and set going a veritable revolution; and no man of his generation did a greater service to so large a part of the people nor a service that called forth a heartier appreciation.

Now what is the natural form for a memorial to such a man? Busts and statues and buildings are common, and they sooner or later lose their meaning. But the soil will remain. It was by the right use of the soil that Dr. Knapp bettered the fortunes and lifted the characters of hundreds of thousands of men. The soil itself is the instrument of instruction that he used. The most natural memorial of such a man and of his far-reaching work would be a piece of perfectly tilled soil a farm so well cultivated and made so beautiful and bountiful that all men who till the earth could get instruction and inspiration from it. We do not yet know what a single acre in Texas or Louisiana or Georgia or the Carolinas or Virginia will do under perfect treatment over a

long period. Why not find out what a few acres would do and dedicate it to the memory of the man to whom agriculture in those states owes its chief debt of gratitude?

It might be made a place of pilgrimage, profitably kept forever as a model to all the world. It would become more profitable and more beautiful every year; and it would be a new kind of memorial — the Knapp Farm, to commemorate the life and labor of the man who taught these great commonwealths the value of their land and taught the land-worker how to become a better man.

THE MORALS OF THE PRESENT AGITATION

OR A TIME the trusts and the governmental regulation of business is receiving undue emphasis. There is not going to be, there cannot be, any sudden turn for better or for worse in the experience that we are going through. Neither the repeal of the Sherman law nor its amendment, neither the continuation of prosecutions nor the cessation of prosecutions, nor any other event would suddenly change conditions.

For we are going through an experience that is more fundamental than any statute or action-at-law can express. We are examining the economic and moral soundness of our business life and addressing ourselves to the problem of putting it on a fairer basis.

The prosecution of trusts, the examination into the business of the express companies, the growing agitation for a parcels post, the struggle, in many forms, to get rid of unnecessary middlemen, the sale of potatoes and turkeys by the Mayor of Indianapolis — a thousand such events, little and big, all have one meaning; and that meaning is this: in the organization and the conduct of business, many conditions and practices arose in our rush that are uneconomic, unfair, immoral; and we are now going about the task of finding out these wrong situations and practices and the correction of them.

We are passing out of a period of headlong production and are coming into a period of fairer distribution alike of products and of opportunities.

Now a democracy does not remove old conditions or change old practices gently, or always fairly. We use rough tools and sometimes abolish injustice by unjust methods. But the general movement is a commendable movement; and it is a short-sighted man who does not recognize We its earnestness and its moral purpose. shall continue to have trusts and tariffs, express companies and middlemen, because we have need for them. But we have entered upon an era of effort to reduce them and other privileged or parasitical agencies to their proper place of service. Whatever is good economics is good morals. Good discipline also makes for good morals. This is a disciplinary, economic movement that we are witnessing and that we are a part of; and we must endure its embarrassing incidents for the larger good.

EVERY SHOP A SCHOOL

EVERY shop a school and every shop a place of health. That is an ideal toward which a great many industrial institutions look and for which they are, in one way or other, working.

An example of such a step forward is the opening this month of a new industrial hall that cost \$100,000, with a large auditorium and smaller rooms for classes and committees, that has been built by the National Cash Register Company at Dayton, O. It will be used for all kinds of instruction of the workers - in their own work, and in health, and in whatever else is useful - free, of course, and under a thoroughly organized plan. The inventions department will hold meetings there. the foremen, the sales department, and so on and so on, every one for discussion and instruction by illustrated lectures, 'with the idea of increasing the efficiency of the people and making them more useful not only to the factory but to themselves and to their families.

This great building, perfectly appointed, thus becomes the home of organized instruction in a great factory group of workers. And such an example is sure to be followed. It ought to be followed by very many industrial companies.

THE CONSTRUCTIVE SIDE OF THE SHERMAN LAW

W E CAN now see with some certainty whether the Sherman law as interpreted by the Supreme Court in the oil and tobacco cases means the destruction of our large trade mechanism. The Standard Oil Company of New Jersey has complied with the mandate of the court and distributed to its stockholders their pro rata shares of all the stocks of the companies controlled by it. The American Tobacco Company meets the decree of the court by splitting itself into four companies and distributing to the holders of its securities their pro rata shares of the stocks of these four companies.

Thus the mechanism of commerce in these two great staple trades is readjusted. These existing and continuing companies are not new machines. They are simply the parts of the old machines approved in each instance by the courts. The real question now is whether these machines, as separated under the courts' direction, will efficiently perform their proper trade functions in the future without violating the Sherman law and at the same time produce for those who hold their stocks, profits in due proportion to the original investment.

Upon the answer to this question the future of the Sherman law hinges. If these new commercial machines can produce profits for their owners without violating the law, there will be no check or hindrance to industrial growth by giant But if, in actual practice it industries. is found that these new machines are extravagant in operation, wasteful in method, and, therefore, unprofitable to their owners, the whole industrial world will halt and wait until another form of commercial machine is designed which will do the allotted tasks as cheaply and as efficiently as the old illegal industrial machinery did them, or until the law is changed.

Many critics, including Mr. Roosevelt, fear that these oil and tobacco companies now doing business are no better than the old consolidations, so far as the violation of the law is concerned. These gentlemen fear that the new forms are as monopolistic and as capable of abuse as were the old; and they regard the readjustment as a mere change in form and not in substance.

Others, especially in the financial world, declare that this new machinery will not work, that the holders of securities will be disappointed in their profits, and that the consumers will be obliged to pay at least as much if not more for the products of industrial activity under the new system.

In spite of this double criticism, the process of reconstructing the great trusts goes forward. If you take up the trade reports and the market reports, you will find evidences that, no matter what critics may think, the owners of oil and tobacco stocks believe that the existing companies will perform their tasks efficiently under these new conditions and produce abundant profits. The old common stock of the American Tobacco Company is still worth, in the open market, well over \$500; and the old stock of the Standard Oil Company of New Jersey closed its career at a value close to \$650 a share. The new stocks, distributed in lieu of these issues, are really based on these prices. It is evident, therefore, that there are many persons interested in these great companies who do not see in the enforcement of the decrees any probability of ruin.

As for those who think that the change will make no difference in commercial morals or methods - they yet seem to have only personal opinions and not facts to support them. No matter what form the new combinations may take in time, there is a disciplinary effect during this period of agitation and adjustment which will tend very strongly toward the prevention of monopoly and unfair practices. It is impossible to believe that in the oil and tobacco trades we shall see again in many years the reprehensible methods and the secret and defiant making of prices of both raw material and finished products that marked the history of the great combinations that have been dissolved. lf within the next few years competition is not free and open in these trades, it will be only because the legitimate trade machinery of these companies is too strong for free, independent competition. If there are monopolies they will be based upon efficiency in legitimate trade and not upon unlawful methods and practices.

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The Sherman law, then, as now interpreted, means that no monopoly shall be based upon ruthless restraint of trade. It does not mean that every combination will be broken up into little independent plants and factories, or that there shall be a return to eighteenth century methods It recognizes the big corporation of trade. as an efficient and legal engine of commerce. It places no burden upon a corporation merely because it is big, nor does it eliminate the right of men in trade to make contracts with one another for the more efficient and economical carrying on of business. But it does say that no such contract is lawful if it strikes at the constitutional and common-law rights of a third party, whether he be an independent manufacturer or a consumer. It strikes only at contracts that bring into play destructive competitive methods in trade and usurious prices in commerce.

The ground which has thus been cleared by the Sherman law is sufficiently broad and sufficiently solid for the full and complete up-building and carrying forward of American industry. No man can say that the Government is opposed to corporations and combinations as such. There is no penalty put upon bigness, upon strength, or upon the possession of great wealth. It is doubtful if there is a single restriction imposed upon the tobacco manufacturers which is not recognized in the laws in every civilized commercial nation.

The Supreme Court and the Government have done, or seem to be in a fair way to do, the task that seemed impossible of accomplishment, namely to rid the commercial world of its greatest abuses, its greatest dangers, and its wickedest practices without stopping, or at any rate setting back for many years, the advance of industrial America. Of course it will take time to demonstrate, even in the case of these companies that have already gone through the process of adjustment, what the actual commercial results will be; and it will probably take more time to *readjust* dozens of other concerns to the principles now nearing a clear and concise definition. Investors, therefore, may well be cautious, but the dangers of industrial adjustment now seem very much less terrible than they seemed even three or four months ago.

THE ALDRICH CURRENCY PLAN AS IT NOW STANDS

THE Aldrich plan to reform our currency and banking, as it is now presented, involves few new features not in its original draft. It still provides for the establishment of the National Reserve Association which shall exercise the note-issuing function, and which is designed to extend automatically and to contract the supply of money according to the commercial and financial needs of the country.

The members of this Association are to be the National banks and the state banks and trust companies which conform to National bank methods, these banks becoming shareholders in the National Reserve Association. It still provides that National banks shall be empowered to open and operate savings departments and to lend money on real estate; and it still provides for doing away with our present currency secured on Government bonds, and for the establishment of a sort of foreign branches of our great banks.

The crux of the whole question from a public point of view is whether or not the National Reserve Association is to be free, first, from political control and, secondly, from control by Wall Street. There is probably no other question in connection with this proposed reform upon which the public will put more than a passing attention. It is, therefore, important to outline clearly how the National Reserve Association is to be organized and conducted.

This Association is to have \$300,000,000 of capital which is to be owned by the banks, and these banks and the United States itself will be the sole depositors in the Association. This is what is miscalled a "central bank." It is an association, not a bank.

The country is to be divided into fifteen districts. The machinery of administration of the Central Association is as follows:

THE GOVERNOR OF THE ASSOCIATION.— Appointed by the President of the United States from names submitted by the Board of Directors.

THE BOARD OF DIRECTORS.— 39 members elected in three classes.

Class A. 15 directors elected one from each district by the members of the association.

Class B. 12 directors elected by shareholding banks, not more than three from any one district.

Class C. 12 directors elected by classes A and B. Class C is not to include bank officers but is to represent commerce, trade, and industry.

THE EXECUTIVE COMMITTEE.—9 members composed of four *ex-officio*, the Governor and two Deputy-Governors of the Association, and the Comptroller of the Currency, and five, chosen by the directors, not more than one from any one district.

The purpose of this Association is to provide a supply of money to meet the demands of commerce. Its membership is not individual, but consists only of banks. It shall have the right to discount for any of its members notes or bills of exchange rising out of commercial transactions. The words used in the plan are notes and bills "issued or drawn for agricultural, industrial, or commercial purposes, and not for carrying stocks, bonds, or any other investment securities." It is, therefore, to be part of the commercial and industrial machine of the country rather than of the purely financial machine.

The issuing function of the Association is to consist of the power to issue notes up to \$900,000,000 against which there shall be a reserve of at least one third in gold or other lawful money. Above \$900,000,000, the notes must either be covered by lawful money or pay a special tax to the Government of 1½ per cent. a year. If the issue runs over \$1,200,000,000, such part of it above that figure that is not covered by lawful money must pay a tax of 5 per cent.

These provisions are intended to enable the Association, in a time of extreme stress, to meet a temporary money stringency; but the tax is heavy enough to make it practically certain that, once the stringency is past, the amount of money will automatically contract so that there shall not be an excess of currency afloat.

The plan, as a whole, is undoubtedly a long step forward. The most serious fear is that the actual control of this Association, and, therefore, of the money supply of the country, will fall into the hands of the great banking interests. Competent critics deny the possibility of this; but it still remains a subject for debate and it will be the centre of much controversy in Congress and out of it during the coming year. Every possible precaution has been taken that every section of the country and every important branch of commercial activity shall be represented in the organization of the Association. Theoretically it seems proof against local control. Its critics have the burden of proving that in practice it may fail.

PRESIDENTIAL GUESSES

REDICTIONS about nominations for the Presidency six months before the conventions are somewhat hazardous. Perhaps it is their uncertainty that gives zest to the making of them. However that may be, you yourself indulge in them in conversation, and so do most of the men you meet.

As public opinion stands now among the mass of Republicans, Mr. Taft's nomination is taken for granted and acquiesced in with increasing regret. A nomination for a second term has become so much a matter of course in recent times that a refusal of it would be a sort of confession, not only that the President had failed, but that the party also under his leadership had failed. This traditional reason, together with the influence of Federal office-holders of every degree, gives a very great advantage over any competitor.

The only competitor whose friends are engaged in organized activity is Senator La Follette; and he would be a very formidable rival if his dramatic method of fighting had not made him a bugaboo to many conservative men. They regard him as too radical. Many so regard him who are as radical as he is. The public conception of a man is always false in some respect, but no man can easily escape the image of himself that public converion throws on the screen. The nomination of Senator La Follette is conceivable but improbable, unless the convention should give way to an extreme progressive impulse.

Yet there is no denying the ever-waning confidence in Mr. Taft as a successful candidate. If there should be Presidential primaries in enough states to reveal the extent of the fear of his leadership so that the convention should hesitate to nominate him, either one of two things might happen: any available Progressive might be nominated; or the convention might be stampeded by the friends of Mr. Roosevelt. If Mr. Taft should fail of the nomination on the first ballot, he is likely to be dropped at once and for all. Mr. Roosevelt is not a candidate. He has sincerely requested his friends not to speak of him in connection with the nomination. But suppose, in a moment of doubt about Mr. Taft, some influential member of the Convention should say:

"Why do we hesitate? Hesitation means defeat. We have one great leader whose dash means victory, the man who has already written his name large in our history and on our continent, the most conspicuous and courageous citizen of the Republic who lifted our political life to such a high level of achievement and efficiency that other leaders seem commonplace. Conservative and Progressive alike would rally under our banner borne again by Theodore Roosevelt." His nomination might be made in a minute. Could he decline?

On the Democratic side, there is no longer any doubt of the overwhelming popular preference for Governor Woodrow Wilson. If the Convention reflect or respect the preferences of the masses of the party, his nomination seems as certain as any such further event can be.

His so-called "radicalism" also is in some quarters held against him. But it is a two-edged weapon. The conversation turned on this subject at a lunch-club in the financial district of New York a little while ago. One man asked: "Isn't Wilson radical?" "I hope so," was the quick reply of one man after another in the company. "Radicalism" is relative and it means what you will. If it mean doing the public business in the open, if it mean dethroning bosses and giving the people themselves a direct controlling voice in public affairs, if it mean the restoration of popular government and the consequent abolition of special privilege, he is radical. There would otherwise be no sufficient reason for his political existence or his swiftly won popularity. But if "radicalism" mean the arraying of class against class, or a destructive programme of any kind, there is nothing in his public career or in his often expressed opinions to warrant his being called radical.

Unless the present tide of feeling turn, Governor Wilson would defeat President Taft; but President Taft or any other reasonably conservative Republican would defeat any other Democrat. If the nominees *should* be Roosevelt and Wilson (and stranger things have happened in politics), we should have the most exciting campaign within recent times; and the third-term might very well be the determining incident. Most likely it would be.

Whatever turn events take, therefore, in our very uncertain political world, as the game now stands, Governor Wilson seems at least as likely as any other man to be the next President.

PRESIDENTIAL PRIMARIES

The rising demand of the people that they shall nominate as well as elect the President is a just demand, a wise one, and one certain to succeed.

Our method of electing a President is cumbersome and antiquated, but it serves the purpose. The Fathers who wrote the Constitution never intended that the people should choose the President; they did not believe the people wise enough for that; the people were to choose Electors, who would choose the President. It did not take the people long to reduce the Electors to a purely mechanical function, and take the whole affair into their own hands. So far as the election is concerned, the people perform it — that is, they themselves choose between two or three nominees.

But who makes the nominations? Who

names the two or three men-- usually two — between whom the people may choose? Everybody knows that those that those nominations are often made by the professional politicians. An overwhelming sentiment among the members of a party may successfully require the nomination of a popular man, but even when such a sentiment prevails it is only by grace of the politicians. A national convention is made up of delegates, most of whom are put on the slate by the state bosses the night before the state conventions, they go as the bosses' men; they vote as the bosses order them to vote. The convenbosses order them to vote. tion system, state and national, necessarily puts the management of parties into the hands of the politicians. As long as parties are managed and nominations made by conventions, they will be managed and made, not by the people, but by the politicians.

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The agitation for the direct nomination of presidential candidates in primaries is a phase of the movement so rapidly gaining ground, for direct action by the people in all their political affairs; and it is the most striking phase of that movement, alike in sentimental and dramatic interest and in actual importance. The presidency has come to be a position of immense, collossal, prodigious power. Perhaps never has the whole body of the people been so concerned over the election of "the next President" as they are to-day. The sense of social crisis is upon the soul of the people as in the great historic moments of national existence.

In this hour the people will not tamely brook the rule of bosses; and the raising of the cry that to the rank and file of the party belongs the right to name the party's candidate, has called forth a sudden response that is troubling some of the old-line politicians and politicians' candidates. If a majority of Republicans prefer someone else to Mr. Taft, why should they be obliged to cast their ballots for him next November, or vote for a Democrat? Why should a progressive Democrat be required to vote for Mr. Harmon, if a majority of the party are for Mr. Wilson? These are very simple questions, but the masses of the parties have thought them up and thought out the answer — and a change is desired in our political methods.

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It may come sooner than most of us expect. It is not generally realized that five states have already established, by law, the direct presidential primary. These five are Oregon, New Jersey, Wisconsin, Nebraska, North Dakota.

One other state, South Dakota, has a permissive provision for a presidential primary, and it is certain to be taken advantage of.

Delegates to the National Conventions from these six states will this year and hereafter be chosen by the vote of the rank and file of the parties, and will go pledged by law to the presidential candidates for whom the people instruct.

It is an off year for legislatures, for only ten of them will be in session this winter; but it is quite possible that the presidential primary may be this winter established by law in Massachusetts, Maryland, Virginia, Kentucky, South Carolina, and Mississippi.

The California legislature is to hold a special session in which a presidential primary bill will be debated and probably passed.

The Governor of Kansas is considering the advisability of calling his legislature in special session for various purposes, including the consideration of a presidential primary bill. Senator Bristow, of that state, is urging it upon his party there that, in the absence of a law, Republicans should hold a voluntary presidential primary in the spring.

For, of course, in order to secure presidential primaries, it is not necessary to enact state laws requiring them. Parties may voluntarily decide, each for itself, to elect national delegates by popular vote. The Democrats will do this in Louisiana, and probably they will do it in Texas and in Delaware, if not elsewhere. The Republicans may do it in Ohio. It will be strange if the popular demand for the right to nominate as well as elect Presidents does not prevail in other — perhaps many other --- states, either through party organizations or through the legislatures.

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IV

Objection is made to extra-legal primaries, primaries, that is, established merely by party rules, that they would cost a good deal, that there is nobody to pay the bills, and that (being surrounded by no legal guarantees) they would not yield trustworthy results anyhow.

The answer is that the cost would be slight and would be gladly borne by voluntary subscribers; Senator Bristow, who has perfected a careful plan for Kansas, thinks that a primary in that state would not cost more than \$1500 -- a sum which may be considered negligible where so many are interested. As for the value of the result, it is true that informal, extra-legal primaries would not afford the exact certainty that attends elections guarded by law. Yet they would be much harder for corrupt bosses to manage than conventions are, and they would generally give a dependable result. The people of most sections of the country have long been familiar with voluntary primary elections and have managed them pretty well on the whole. It is absurd to talk as if it would be the work of years of legislation to give the people of the parties a chance to name their nominees for the Presidency. They can and they will nominate the candidates for President at the next election if they are thoroughly minded to do it.

THE GROWTH OF COMMISSION GOVERNMENT

HE movement for commission government of cities has been so rapid that no one has been able to keep up with it. There have been published several lists purporting to be complete indices of the municipalities which have adopted the commission plan, but no list has been complete. There is reason to believe that there are at present under commissioners at least 200 cities. Below are given the names of 182 which have adopted the plan, and we cannot claim that the list is complete. It does not include cities like Boston, St. Joseph,

Mo., Seattle, Wash., and Charlotte, N. C., where a semi-commission government prevails, and it probably omits a number where commission government is in full force.

There are few things more significant of America's political progress than the fact that, where ten years ago with but a single exception our cities labored under partisan political machinery, to-day an honest non-political system has been adopted by such cities as Birmingham, Salt Lake, Mobile, Spokane, Tacoma, Chattanooga, Memphis, Knoxville, Trenton, Sacramento, Lynn, Des Moines, Dallas, and 21 other Texas towns, Springfield and 17 other Illinois towns, and Topeka heads a list of 28 in Kansas. The 182 cities are as follows:

Alabama — Birmingham, Cordova, Hartselles, Huntsville, Mobile, Montgomery, Tal-ladega, Tuscaloosa.

California — Berkeley, Modesto, Monterey, Oakland, Sacramento, San Diego, Santa Cruz, San Luis Obispo, Vallejo.

Colorado-Colorado Springs, Grand Junction.

Idaho — Boise, Lewiston. Illinois — Carbondale, Clinton, Decatur, Dixon, Elgin, Forest Park, Hamilton, Hillsboro, Jacksonville, Kewanee, Moline, Ottawa, Pekin, Rochelle, Rock Island, Springfield, Springvalley, Waukegan.

Iowa — Burlington, Cedar Rapids, Des Moines, Ft. Dodge, Keokuk, Marshalltown, Sioux City.

Kansas — Anthony, Abilene, Chanute, Cof-feyville, Cherryvale, Caldwell, Council Grove, Dodge City, Emporia, Eureka, Girard, Hiawatha, Hutchinson, Independence, Iola, Leavenworth, Kansas City, Manhattan, Marion, Newton, Neodesha, Parsons, Pittsburg, Pratt, Topeka, Wichita, Wellington.

Kentucky — Newport. Louisiana — Shreveport

Maine - Auburn, Gardiner.

Maryland — Cumberland.

Massachusetts-Gloucester, Haverhill, Lynn,

Taunton, Chelsea. Michigan - Fremont, Harbor Beach, Port Michigan — Fremour, Huron, Pontiac, Wyandotte. Clarksdale, Hattiesburg.

Mississippi — Clarksdale, Hatties Minnesota — Faribault, Mankato.

- Montana Missoula. Nebraska Omaha. New Jersey—Irvington, Ocean City, Passaic, Ridgewood, Trenton.

New Mexico - Roswell.

North Carolina — Greensboro, High Point, Wilmington.

North Dakota — Bismarck, Mandan, Minot. Oklahoma — Ardmore, Bartlesville, Chickasha, Duncan, El Reno, Enid, Guthrie, Lawton, Miami, McAlester, Muskogee, Oklahoma City, Purcell, Sapulpa, Tulsa, Wagoner.

Oregon — Baker City.

South Carolina — Columbia.

South Dakota — Aberdeen, Canton, Chamberlain, Dell Rapids, Huron, Lead, Pierre, Rapid City, Sioux Falls, Vermilion, Yankton. Tennessee — Bristol, Chattanooga, Clarks-

ville, Etowah, Knoxville, Memphis.

"AS ITHERS SEE US"

WW HILE we are thinking of possible Presidents, why not gather a little light from the views of disinterested outsiders? A person named Mr. H. Hamilton Fyfe has visited us, listened and observed with the usual acuteness of the middle-class Englishman, and now, in a Fortnightly Review article, has given the world the results of his survey — which are indeed remarkable in many particulars.

Mr. H. Hamilton Fyfe takes note of



THE 182 COMMISSION GOVERNED CITIES IN THE UNITED STATES THOSE OF MORE THAN 25,000 POPULATION ARE NAMED AND THOSE WITH LESS ARE SHOWN BY BLACK DOTS WITHOUT NAMES. THERE ARE SEVERAL OTHER CITIES WHICH HAVE A SEMI-COMMISSION FORM

Texas — Amarillo, Aransas Pass, Austin, Barry, Beaumont, Corpus Christi, Dallas, Denison, Ft. Worth, Galveston, Greenville, Harlingen, Houston, Kenedy, Marble Falls, Marshall, Orange, Palestine, Port Arthur, Port Lavaca, San Antonio, Sherman.

Utah — Salt Lake, Logan, Murray, Ogden, Provo.

Washington — Chehalis, Granger, Hoquiam, North Yakima, Spokane, Tacoma, Walla Walla. West Virginia — Bluefield, Huntington, Parkersburg.

Wisconsin — Appleton, Eau Claire. Wyoming — Sheridan. the movement in behalf of Woodrow Wilson, "Governor of New Jersey and Principal of Princeton University." The "Principal of Princeton University" is, we learn, a sardonic man, with an expression hard and cynical. There is nothing picturesque about him, nothing to touch the imagination. He is not a man of ideas; he does not even assimilate other people's ideas readily; he cautiously waits to hear whether an idea is "going well." However, when he speaks, "he punches out the words" [no, not Mr. Roosevelt;

he is talking about Principal Wilson, the man with the harshly moulded face and the eye with a steely glint in it] "he punches out the words as a machine in a shipyard punches holes in a steel plate." All who have seen and heard Mr. Wilson will recognize the genius of this picture.

We learn from Mr. H. Hamilton Fyfe's valuable article that "Mr. Taft's energetic action [in vetoing the tariff bills passed at the last session of Congress] made a good impression," though the Insurgents "looked sadly on." There are no misprints or transpositions in the above quotation. Another candidate, Senator LaFollette, apart from his increasing deafness [and a few other things], is not regarded as dependable. As to dependability, there is little choice between Principal Wilson and Governor Harmon a gentleman chiefly remarkable for the fact that he plays golf every Saturday afternoon, "a relaxation by no means usual [*Fortnigbtly* English] in American cities," and whose slogan is "Guilt is always personal"; a phrase which Mr. H. Hamilton Fyfe confesses puzzles him.

Another likely candidate is Mr. Gaynor, Mayor of New York, whose "chance of nomination was greatly improved by the attempt on his life last year." Mr. Gaynor is as remarkable for his sweetness of disposition as Principal Wilson is for his cynicism; even the fact that Mr. Gaynor was once a judge is "scarcely enough to account for his even balance of temper." Moreover, Mr. Gaynor is characterized by "a cautious habit of mind. He is so cautious as to be uninteresting." This of a man whom New York managing editors mistakenly regard as the most entertaining personality who ever furnished copy!

But what avails it to discuss candidates? From his proud pinnacle of authority, Mr. H. Hamilton Fyfe informs the world that "unless the American ship of state should unexpectedly glide into calm waters, Theodore Roosevelt will be again found at the helm." In the meantime, Woodrow Wilson is probably the man he would most gladly see elected to the Presidency.

Inasmuch as in all the above there is not a single sentence which an American reader will not understand as a piece of delicious irony, one is induced to pause and wonder how we could have gathered such wrong impressions regarding men whom we thought we knew, until the English observer revealed the truth about them. The sardonic Wilson, the sweettempered and uninteresting Gaynor, the deaf [though not dumb] La Follette, the politically energetic Taft, and the sad Insurgents, the Republican ex-President who wants a Democrat elected at what the Fortnightly writer, in his admirable mastery of American slang tells us is known as "the Presidential"—these characters all are strangely new to our apperceptions. Can it be that we are too close to the truth to see it?

SHERMAN WAS RIGHT

A GOOD many people have been grievously shocked and horrified by the circumstantial accounts and photographs of Italian atrocities in Tripoli. They read, with deeply wounded sensibilities, of scores of non-combatants driven into a shed in relays of half a dozen to be shot to death till corpses covered the floor three-deep; and of wounded children and old men and women left in the hot sun to die in anguish of thirst while the invaders watched them and photographed their contortions.

Yet why should there be any particular surprise aroused by such scenes? The world which permits war legalizes butchery like this. It is idle, and it is either foolish or insincere to talk as if war could ever be anything but cruel. Every soldier and correspondent who has seen battle knows that once the "noble" fighting blood is aroused (as it is aroused by uniforms, music, noise, the sight of the enemy, all acting together on the peculiar sensibilities of an armed multitude) men lose their reason and become savages. Else they would not kill. And, while they are killing, the desire to kill more and to kill more terribly, flames up. It is insane work, inhuman, beastly, and inglorious, always and inevitably. "Rules of war" are a ridiculous insincerity; the nobility of the soldier's trade is a superstition; war is always war and what war is, General Sherman accurately declared.

THE TRUSTEE WHO WENT WRONG

OME years ago in a little town up the state of New York, a middle-aged business man. dying, left the administra-tion of his affairs entirely in the hands of another man about his own age who had been his own legal adviser in life. No injunctions were laid upon the trustee as to what he should do with the money, for the man knew that by nature the trustee was a conservative man and an honest man. The estate was left in trust for two children of ten and eight years. During the life-time of their mother the entire income, except an allowance for maintenance and education of the children, was to go to the wife, a relatively young woman. The trustee at first followed his natural

The trustee at first followed his natural bent. He bought some good local mortgages, kept the house as it was before, and invested the rest in good solid bonds, bought through his bank.

One day the woman visited him at his office. She started by asking him to repeat to her the terms of the will, which he did in full detail.

"It means," she said, "that whatever you make this money earn with the exception of \$250 a year for each of the children and \$100 a year for you, belongs to me."

"That is exactly it," he answered.

"What per cent. does it earn?" was was her next question.

He told her that, on the whole investment, it had earned a net average rate of 4.80 per cent. and produced an itemized account to show her how the income came. She studied over it a long time, finally she said:

"If this part of the money that earns 6 per cent. is perfectly safe, why not have it all invested at 6 per cent. instead of nearly half of it in bonds that only seem to pay a little bit more than 4 per cent?"

He answered vaguely. The next day he called at the bank and put the same question up to the bank president. The president had been in office about four years and up to that time had been a merchant.

"There is a good deal of sense in that," he said, "but the fact is that the bonds are supposed to be safer than any mortgages that you can get around here; and if you got mortgages just as safe as these bonds, you wouldn't get any more income on them than you do on your bonds. With my own money 1 don't buy either these little mortgages that yield 6 per cent. or these bonds which the savings bank buys. I buy good bonds and stocks that yield me a fair income and give me a chance for business profit."

The trustee went away not much wiser than he was before. Within a week he was visited again by the woman who told him that she had been reading about investments in a paper and that she saw no reason in the world why he should not get at least 5 per cent. on all his investments. He was at a loss how to answer her but said he would look it up. He did, and within a month he had sold all his gilt edge bonds and had a selection of good solid securities that yielded on an average a little more than 5 per cent.

This lasted a year. At the end of that time she came in with a complaint. She said that the cost of living had gone up wonderfully, and as he looked her over from hat to shoes he was not surprised. The gist of her complaint was that, while half a dozen of her friends had money invested in stocks and other securities that yielded them all the way to 10 per cent., she had to be content with about half as much income as she needed. She was not unfriendly but she was decidedly critical.

The trustee was uncomfortable and began to wish that somebody else had his job. He contented himself with the reflection that his main trust, after all, was the principal and not the interest of the bonds. This contentment did not last long, for the woman came regularly and did not seem to accept with good grace his explanation of what a trust fund meant to the man in whose hands it rested. One day she came with a companion, a visitor from New York who had been a friend of her husband and still maintained his friendly relationship with the family. She explained that she had asked him to look over the list and to collaborate with the trustee to see what could be done to get a larger income.

The trustee did not want to collaborate, but felt delicate about saying so. The visitor, as it turned out, had very definite ideas of his own. He was a business man of some standing, and he stated emphatically that his own money was invested in business enterprises and yielded him well over 10 per cent. at all times. Amongst other things, he was treasurer of a cotton mill company and president of a manufacturing company in New Jersey. Both these companies had preferred stock outstanding, one of which paid 7 per cent. and the other 8 per cent. The 7 per cent. stock carried with it a bonus of common which would probably pay dividends in a year or so. He knew other securities in which he was not interested which were equally good from the standpoint of income, and he did not see why any sensible man would lend money at 5 per cent. or less to a great corporation when he might just as well and with equal safety lend it at 7 or 8 per cent. to a corporation that he could look into himself and know all about from the inside.

The trustee had a bad half hour; but it was only the beginning. Within six months, under the constant pressure of the woman and her friend, he had sold all the bonds the trust owned and had instead of them blocks of stock in seven industrial enterprises, two trolley lines, and one gas company. This happened in 1905. The trustee began, after a little while, to feel comfortable again, for the dividends came in all right, and in 1906 the common stock of one company, which he had received as a bonus, paid a dividend of 2 per cent. The woman ceased to trouble him and everything went well.

At the beginning of December, 1907, he

was due to receive a check for a dividend from the manufacturing plant with headquarters in New Jersey. The check did not come. After a while there came instead a letter to the effect that, in view of the unsettled manufacturing condition and a scarcity of money, the directors had decided to postpone the dividend for a few months. It was a great shock. The trustee sat down and wrote a letter to the woman about it. She came down in a hurry to explain that she had to have the money because it was her Christmas fund and she could not get along without The trustee loaned it to her, on the it. understanding that he was to get it back out of the dividends that would come in January.

The January dividend came all right, except that the common dividend was not declared. Therefore, the woman paid back only half of her December loan, the rest to be paid in April. During 1908 two additional dividends were stopped, and the actual net income of the trust dropped down below the level of the original 4 per cent. investment. The trustee grew a month older every week through this year. In 1909 none of the dividends were resumed and one more dropped off. In 1910 the biggest investment of the lot, a very good Massachusetts industrial, ceased paying dividends, and the whole fund lost a third of its badly depleted revenue.

It was after that that the trustee took the bull by the horns. He called the woman down to his office and read the riot act to her. It was an unpleasant scene and one that probably did nobody any good. The net result of it was that the trustee dumped overboard all the stock that he owned and went back in desperation to mortgages and bonds. At the end of 1910, when he came to count up his fund again, and when he brought the whole subject up for discussion with the writer, his original fund had shrunk in value of principal 42 per cent., and the woman was living in half a house and trying to get reconciled to it. So far as I know this is the situation at the present time.

This story is told here in detail for a

purpose. The reason it is told at this time is that the number of letters coming to this magazine talking about very high income securities is too big in proportion to the total number of letters received. Too many people seem to desire to reach for lofty income without due regard to the fundamental factor of investment, which is safety of principal rather than very high income. This is particularly true in the case of men who are handling money for others. The life tenant of an estate, whether it is the estate of one who has died or one who still lives, has certain specific rights; but he has no right to insist that he shall enjoy a large revenue no matter what the ultimate consequences might be.

In handling other people's money, the principal must be kept intact. If, as a trustee, those to whom you are responsible insist upon an income which you in your heart know cannot be obtained without taking some slight chance, give up the trust without hesitation. There is no more bitter experience through which an honest trustee or executor can pass than the rendering of an accounting for a lost or depleted trust. No reason or excuse can weigh for an instant against the actual result which he faces. A single slip in the handling of funds like this may doom all future generations of that family to lives of poverty. This is the greatest responsibility ever laid upon a trustee, an executor, a banker, or an adviser, and no honest man should assume it unless he is prepared to endure for the sake of the future all the criticism that may centre upon him on account of extreme conservatism in the present.

This article is not addressed to trustees and executors alone; for the conservation of your own principal for the use of yourself and your family is every bit as important as the conservation of a trust. I have known a case where a man of ordinary business common sense sat down with a banker to discuss the investment of his fund. They talked for an hour. The banker, a man of the old-fashioned school, urged upon the business man the principal of conservation rather than the idea of making money. Finally the banker

began to name certain bonds. He named, for instance, Illinois Central Refunding 4's, then selling at 96. "How much do you think they will go

up?" asked the visitor.

The banker explained that if there were a great broad booming bond market they might go up to 101; but he added that his reason for advising the buying of this stock was not that he wanted it to go up, but that he wanted to be absolutely sure of his principal and income. The talk continued along this line a little longer, the visitor making it plain finally that what he wanted the banker to do was to get him about 7 per cent. and absolute safety, and that if he was going to do business with the banker the latter would have to assume all the moral responsibility for the safety of the investment.

The old banker finally leaned back and said with a smile:

"Mr. Blank, you will have to find another banker who is willing to assume a grave responsibility for very much less return than I should exact. I cannot buy for you bonds and stock that yield 7 per cent. or more, and assume the responsibility for the choice. I do not make enough out of business to make such a transaction profitable to me. You will have to find a house where moral responsibility is quoted at a lower premium than it is here. I am perfectly willing to get you as high as 7 per cent. on a part of your fund, letting it be understood that in that part of it you are yourself assuming some slight business risk; but I will not undertake to get a high rate on all your funds and endorse them unqualifiedly as gilt edge."

The buyer of bonds, stocks, and mortgages must recognize the principle which lost this customer to this old banking house as a sound substantial principle. It is the most ordinary common sense that there must be an intrinsic difference between the bond which has sold for years to yield the buyer 4 per cent. and the bond or stock which sells at 7 per cent. The man who shuts his eyes to this difference, particularly in handling the money of others, is either a rogue or a fool.

MOTOR TRUCKS—THE NEW FREIGHTERS

QUICKER AND MORE RELIABLE SERVICE. CLEANER AND LESS CONGESTED CITIES. CONCRETE EXAMPLES OF SAVING

BY

ROLLİN W. HUTCHINSON, JR.

HORSELESS city and therefore a city of clean streets, a city in which the heavy traffic takes less space on the street and also moves more quickly than it does now, a city with a good delivery service to all the territory within twenty-five miles — such are the conditions which the motor truck builders believe in.

The passenger automobile has been condemned as an incentive to luxury, praised as an influence for good roads, and lauded for helping the farmer out of his isolation and for taking many city people to the country. But in the last few years the other kind of automobile the motor truck has become a large part of the industry. In 1910 the sales of pleasure cars (including many of course used for productive service of various kinds) amounted to \$307,000,000. By the beginning of 1911, \$60,000,000 worth of business vehicles had been sold since the inception of the industry. These 30,000 trucks mean usefulness and increased efficiency. There is no criticism of luxury against these cars, and they, as well as the pleasure cars, argue for good roads, and have made it easier for men and for businesses to move to the country.

The motor truck bases its claim purely on utilitarian grounds — that it gives better service than horse-drawn vehicles or that it does work cheaper, or both; that it is increasing efficiency. One of its chief advantages over the

One of its chief advantages over the horse and wagon is in the greater territory which it can cover. A single horse with a one-ton wagon, for instance, has a very restricted radius of action, averaging twenty-two miles a day—and to attain *this, one-half* the distance is generally covered without load. In other words it has a productive mileage of eleven miles for a day's service. The two-horse, threeton wagon will average twenty miles a day, or a productive service of ten loaded miles. The three-horse, five-ton wagon. which is the largest practical unit for city service, is limited to a working radius of eighteen miles a day, or nine miles with load. It is interesting to compare the daily average mileage of power vehicles of equal and larger load capacities with these figures. A first-class, one-ton power truck is easily capable of travelling eighty miles a day. The three-ton truck can cover sixty miles and, if well built, is capable of repeating the performance six days a week without material yearly depreciation. A good five-ton truck will average fifty miles a day while a ten-ton truck can make thirty-eight miles.

While the ordinary horse and wagon is going four miles in an hour, the one-ton truck will cover eighteen miles. It can make a delivery ten miles from the store very nearly two hours quicker than the wagon. Where time is money in delivery, such a saving is most important. Even a five-ton truck, which is the largest size needed in most businesses, can go ten miles in an hour, or about three times as fast as a three-horse wagon's speed. Besides its greater speed the motor truck has the added advantage of being able to work all day and every day in rush periods without rest. It can run night and day continuously when need be. It costs much less to store than idle horses; it takes less room. A garage 35 by 60 feet will hold five heavy trucks. Thirtyfive or forty horses and eight or ten wagons would need three or four times this space.

Moreover bad weather affects motor truck deliveries very little.

With the coming of deep snows and glassy pavements the limitations of the horse are forcibly impressed on the minds of every urban dweller. The efforts of horses to stay on their feet in drayage service in our Northern cities, much less to pull heavy loads, is so exhausting and so laming that their efficiency is badly impaired and the reliability of delivery of merchandise by animal power is reduced. The power vehicle, on the other hand, has only to attach chains or some other form of anti-skidding appliance to the tires and go on as well as ever. The use of the power vehicle in winter does necessitate, however, a certain degree of care by the driver to obviate freezing of the radiator of a water-cooled gasolene machine; but with ordinary care this disadvantage of the internal combustion motor is a negligible factor.

The thorough reliability of the gasolene motor business-truck in the winter season was forcibly demonstrated in an extraordinary performance with a three-ton truck last winter. A large motor-cycle manufacturer in Massachusetts had an important shipment for exhibition at a London show to forward to New York, and it was necessary to get it on a certain steamer or be debarred from showing his product abroad. The heavy snows had congested freight traffic so badly that the railways could not promise a car in time to catch the steamer. In despair the motor-cycle maker appealed to a power-truck builder to get the shipment to New York within the time limit - three days. Although the roads were badly blockaded with snow and ice the power truck made the journey, 150 miles, to New York in less than two days, and the shipment went on its way to Europe.

But to an even greater degree does the boiling heat of summer demonstrate the superior efficiency of power businessvehicles over horses in the actual service performed. When the heat brings down the normal efficiency of draught horses, causing sickness and heavy mortality delays in delivery and the spoiling of perishable products cost the public hundreds of thousands of dollars. Those who are disposed to weigh with overnice discrimination the last dollar and cent of trucking expense, who see in the power business vehicle nothing but "How much can I save?" or "How much will it cost me?" are gradually being forced to face the issue on its rightful basis and to appreciate that service and not saving alone is the true standard of value of the power wagon (but saving is usually a concomitant of service). The power vehicle will give just as good service on the hottest summer day as in ordinary times and, moreover, will perform work which no animal team can possibly do.

The extraordinarily warm weather of the early part of July, 1911, was a striking object lesson to the owners of horse-drawn vehicles. In New York City, which has the largest number of horse teams (as well as power trucks) in service, there are normally 140,000 horses hauling loads. In ten days, commencing with the excessive heat period of July 3 last, the Society for the Pre-ention of Cruelty to Animals reported that 1,200 of these horses dropped dead in harness, or a ratio of nearly one in a hundred. In addition to this heavy mortality, which is nearly double the ordinary death rate, thousands of animals were wind broken or ruined for hard service.

A New York wholesale grocer who formerly had seen only the monetary side of machine delivery, very ably and forcefully sums up his opinion of the advantages of power vehicles in the summer season:

"I will never again say a word about what my trucks cost after having seen them go right ahead in this boiling weather, just as they do in ordinary times. We have a lot of trade down at Coney Island which we formerly tried to hold with horse-drawn vehicles, but it would be cruelty to horses to expect them to attend to it in weather like the past week; in fact, all we could expect would be one trip a day, and if we had made that this week our horses would have had to lay off the next day. As a matter of prudence, I wouldn't dare to send horses down there, and, when cost

is considered, it would have been almost prohibitive to use a pair of horses all day for that one trip. But our little two-ton truck has been making three trips a day easily without trouble.

"On some of the stuff we have been taking down we formerly had to ice the goods to prevent spoilage on the trip. It meant paying high prices for ice at a time when there was mighty little ice to be had, and adding that much more weight to the load, and by the end of the trip the ice would be gone. Now we merely cover the stuff over with wet burlap and it arrives at the Island hardly any warmer than at the start. I understand that the marketmen who use trucks have found a big advantage in the ice saving, to say nothing of the milk companies and the ice cream manufacturers. I can't see what the element of cost has to do with delivery at times like this, and even what slight difference there is against our trucks is nothing compared with our maintaining service. Our horse trucks — for we still have many of them — have been less than half as efficient as in ordinary times, and within a week two of our best horses have been prostrated by the heat."

Merchants, manufacturers, farmers, public and private service corporations all have been benefited by the motor truck. In truck farming zones where quantities of perishable produce must be quickly gotten to market, enterprising men have invested in motor trucks, and make it their business to collect loaded wagons of fruit and vegetables at stated points, which are hooked on as trailers. On Long Island one can sometimes see as many as eight loaded wagons composing a truck train going to New York to market.

In municipal service the motor wagon and truck are replacing horses for ambulance, patrol, street cleaning, garbage removal, and fire engine service. A single month's reports (August, 1911) disclose expenditures, contracts, or appropriations aggregating a total of nearly \$425,000 for self-propelled apparatus in seventy cities and towns, scattered through 24 states. New York City alone will spend \$710,000 in 1912 to motorize its fire department.

As an extraordinary example of the reliability of the motor truck, the American manufacturers of a well known truck of Swiss origin took a 41 ton demonstrating truck that had already been run 3500 miles, loaded it with a 7,000 pound cargo, and sent it across the United States over the worst route they could select, and at a season of the year (March, 1911) when the roads were very much worse than their average bad condition. In spite of ice and snow, body deep; mud and sand over the hubs of the wheels; boulder strewn water courses doing duty as highways; freezing, thawing, and "boiling" temper-atures; hills that rose one foot in every three; rivers that washed the flooring of the chassis when the truck was driven across the fords - in spite of every hindrance that had been foreseen and many that had not --- the "Pioneer Freighter" as this Ocean-to-Ocean truck was called, overcame every obstacle and pushed its way through without a minute's faltering of the mechanism, without the bending or breaking of a part, except the buckling of leaves of the forward springs when the truck broke through a light bridge in the dark. This was the first motor truck that ever accomplished such a feat; it did what had been declared impossible for a motor truck. A more exacting test of the power and endurance of a modern machine could not have been devised.

With the growth of our cities and the increasing density of traffic on our streets, the day is not far distant when no system of traffic regulations will prevent the congestion which is already costing us hundreds of thousands a year in delayed deliveries. The utilization of power wagons for delivery would bring about prodigious economy in the available street capacity, but its importance has not been generally recognized, except by a few students of urban transportation. The streets of our cities contiguous to docks or freight terminals especially, present to-day the most disorganized, chaotic, and disgraceful scenes - a crying need of modern system and efficiency. The use of power trucks would help to remedy this, especially if the owners of piers and

freight yards would admit power trucks to their loading platforms, because a power truck moves faster and takes less space.

Mr. Charles E. Stone, a prominent truck expert, has presented some interesting figures which show the great economy in space on our streets which would result from the substitution of trucks for horses. A horse delivery-wagon has an over-all length of about eighteen feet and occupies ninety square feet of area. To stable the horse and wagon requires about one hundred and fourteen square feet of area. The motor of like carrying capacity will average an over-all length of about ten feet, or sixty square feet of area, whether on the street or in the stable, a saving of practically one-third on the street, and nearly 60 per cent. in the stable, where the high rental value has to be considered.

The comparison with larger drays is even more striking. The five-ton horse truck will require about twenty-five feet on the street, or 200 square feet of surface, and the stable space for this equipment would represent 281 square feet. A motor of equal capacity would require only 176 square feet.

While these figures show a very decided saving for the motor as against the horse, conservative estimates prove that it is doing two and a half times the work of the horse, making a saving of street space of no less than 73 per cent.; so the same amount of work could be done with only about one-quarter of the street congestion, or four times the present volume of traffic could be accommodated before relief measures would be needed.

We have legislated against the housefly and the mosquito in our cities as enemies to man's welfare, health, and hygienic comfort. The congesting conditions of centres of population now demand that we legislate the horse off our streets. The horse as a purveyor of filth which serves as the breeding or culture medium of flies and a variety of noxious germs is doing more than any other agency to prevent the proper sanitation of cities. He is costing us hundreds of thousands — millions, even, to keep our streets tolerably decent, and he is spreading contagious diseases at a frightful rate.

In economy of space, in cleanliness, in the rapidity of delivery, and in reliability in all weather, the power truck is far ahead of its horse-drawn competitor. One is the twentieth century method, the other belongs to the centuries preceding.

But then comes the question of cost. The cost of operation of a gasolene truck (which is taken for illustration because it is considered more expensive to maintain than an electric truck, but is capable of doing service for which the

	IO TON	5 TON	3 TON	I TON
Chassis cost	\$6,000	\$5,000	\$3,000	\$1,500
With stake body	. 6,300	5,250	3,225	1,700
Average miles per day	38	50	60	80
	PER YEAR			
Depreciation (15% less cost 1 set tires)	\$ 780	\$ 695	\$ 421	\$ 225
Interest, 5%		262	161	85
Driver, \$16 to \$22 per week		1,040	936	832
Garage		300	240	240
Tires	1,650	930	620	300
Yearly overhaul and current repairs		450	400	300
Gasolene at 12c		450	375	275
Oil at 30c	120	90	60	40
Insurance		200	150	125
Cost per year	\$5,520	\$4,417	\$3,363	\$2,422
Cost per day	~ ~	14.72	11.21	8.07

GASOLENE MOTOR TRUCK COSTS

SINCE THIS DATA WAS COMPILED THE PRICE OF TIRES HAS GONE DOWN ABOUT IN PER CENT.

latter is unfitted) is composed of nine separate and distinct items. The first group is made up of four items which are practically constant in all makes of trucks of equivalent or nearly similar sizes. These are interest on investment, insurance, drivers' wages, and garage charges. The second group of operating cost items, consists of outlays which are of less importance — gasolene, oil and grease, and depreciation. Good engineering, design, and construction affect all these four charges; but, while the quantity of gasolene and oil consumed should be reasonable for the service the machine does, the quantity consumed is not necessarily vital to the success or failure of motortruck operation. Depreciation more properly should be figured in the group of constant or fixed charges. Manufacturers differ in their estimates of what should be charged off for depreciation as no sufficient number of well-built power trucks have been in service long enough to figure accurately what the yearly depre-ciation should be. A figure of 15 per cent. is conservative for the annual depreciation of a standard, well-made business motor vehicle. The third group, operating cost, comprises tire maintenance, and machine overhauling or up-keep. If a truck or delivery wagon is fitted with the proper sized tires and is geared to the right speed, the tire cost can be predetermined in a similar manner to the fixed-charge items. Tire manufacturers now guarantee a specific number of miles for each tire. A power vehicle owner has merely to figure out his daily mileage, divide that into his guarantee, divide this quotient into the price of a set of new tires, and set the amount aside every day as a tire-amortization fund. This fund should be kept distinctly to itself the same as the gasolene fund, drivers' wages, or any other expense.

A business vehicle should be thoroughly overhauled once a year in the manufacturer's or dealer's shop by workmen familiar with its construction. At this time worn parts can be renewed, new bearings put in where necessary, and every part examined for flaws. Theoretically the annual overhauling should make the life of a machine indefinite, but its practical result is to double or even treble the life of the vehicle over what it would be without overhauling.

The tables below made by Mr. A. N. Bingham, a prominent motor truck expert, were compiled from the experiences of a large number of business firms extending over a five year period.

COMPARATIVE COST OF HORSE AND MOTOR Horse Drawing Wagon

	COST PER DAY	TONS PER LOAD	DARLY AVENAGE MILES	MILES	TON	COST PER MILES LOADED ONE WAY ONLY
1 Horse	\$4	1	22	11	11	36c
2 Horses	6	3	20	10	30	200
3 Horses	8	5	18	6	45	18c

Motor Truck

INI OLOT I TUCK							
1 Ton	\$8	1	80	40	40	200	
3 Ton	12	3	60	30	90	13C	
5 Tons	15	5	50	25	125	120	
10 Tons	18	10	38	19	190	9łc	

Let us further inquire into the economy of machine hauling by citing a specific example from the experience of users of business power vehicles for (1) heavy delivery; (2) light delivery; (3) city transportation and (4) suburban transportation.

The coal business is an example of heavy work which presents singular features. The coal business is neces-sarily a seasonable one. In winter it requires a delivery service of great efficiency and in the summer comparatively little. The disparity between the two conditions has long been the source of much loss, and until the arrival of the power truck there was no remedy. Every fall large companies would be compelled to buy hundreds of heavy horses, use them a few months and in the spring either sell them off or turn them out to "eat their heads off" in idleness. In either case, those horses were a source of large loss for which there could be no return. A certain large coal firm in New York solved the problem by buying thirteen ten-ton power trucks, and it estimates that one such truck displaces nine horses. When the summer dullness comes in coal delivery, this firm lays the

MOTOR TRUCKS-THE NEW FREIGHTERS



THROUGH THE SNOWS

power vehicle up in its own garage, overhauls and paints it and carries on deliveries with horses. Instead of sacrificing about one hundred and twentyfive horses or keeping them at heavy expense, this firm now stores the power trucks at the cost only of interest and insurance. According to carefully kept records the average performance of these



AND SLOUGHS OF COLORADO

trucks was as follows during the winter of 1910-1911:

THE COAL TRUCK RECORDS

Average no. of trips a day8.88Average no. of tons delivered93Average no. of miles traveled32.33Average cost of delivery20 cents a ton

The operating costs per day of these trucks averaged on each one:



THE "PIONEER FREIGHTER" ON THE PLAINS THE TRUCK THAT MADE THE TRANS-CONTINENTAL JOURNEY WITHOUT A HITCH (EXCLPT WHEN A BRIDGE GAVE WAY)

THE WORLD'S WORK



A FAST EMERGENCY WAGON FOR REPAIRING TROLLEY WIRES, ETC.

THE COST OF THE COAL TRUCKS

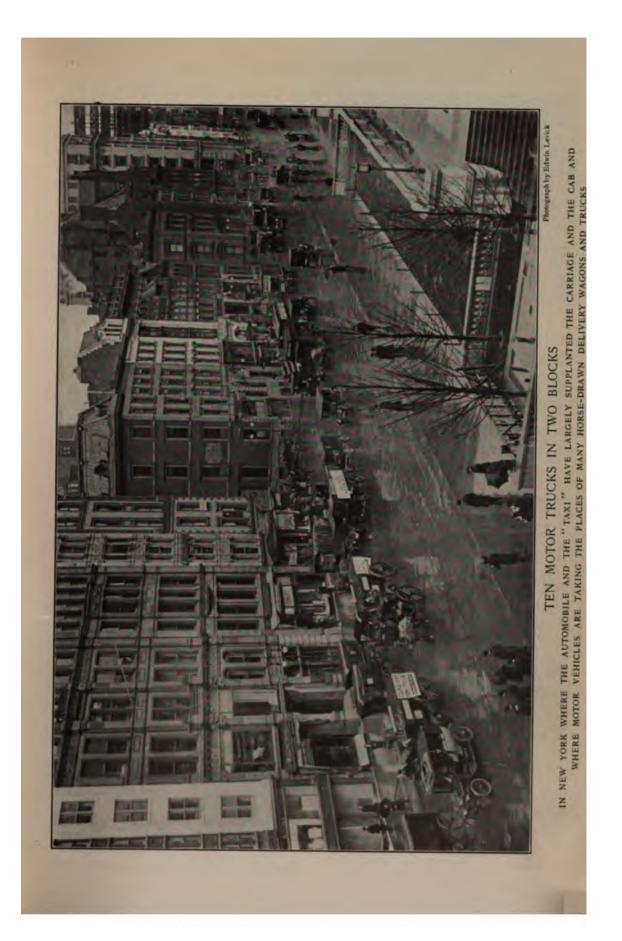
Deprecia	atio	n ar	nd	inte	res	t				\$ 6.17
Garage	cha	rges	(at	t \$3	5 a	mo	nth).	+	1.17
Gasolen	е.					*	-		-	1.95
Oil .		3.	+	2	+	3	4		-	. 56
Driver	5	2	1		14	1			14	3.39
Amortiz	atio	n fu	nd	for	tire	san	id r	epa	irs	5.00
										Q.Q

The tires lasted seven and a half months, including two months of night work, or an equivalent of more than nine months in all. The depreciation was figured high because the trucks were used day and night during the winter. During this time the saving over the cost of horse delivery amounted to 50 per cent. At other times it

amounted to 30 per cent. In the city of Indianapolis a proprietor of a vault cleaning company is operating a three-ton gasolene truck which is effecting a saving of \$103.44 a month over his former horse drawn wagons. The machine displaced four wagons and eight horses, which with harness, etc., had cost \$1,808, and which cost \$424.73 per month



THE MODERN FIRE ENGINE WHICH IN MANY INSTANCES CUTS IN HALF THE TIME TAKEN IN REACHING THE FIRE, MOTOR WAGONS REPLACE THE HORSE ALSO IN AMBULANCE, PATROL, STREET CLEANING, AND GARBAGE REMOVAL SERVICE



THE WORLD'S WORK



A FOUR-TON COAL TRUCK AND TRAILER ONE LARGE DEALER SAVED BETWEEN 30 AND 50 PER CENT. OF THE COST OF DELIVERY BY BUYING THIRTEEN TEN-TON TRUCKS

to operate. The itemized cost of operating the truck was:

COST OF OPERATING THREE-TON TRUCK (PER MONTH)

One driver at \$75				\$ 75.00
Three Helpers at \$45				135.00
Gasolene bill	-	4		38.23
Lubricating oil and grease		4	4	5.40
Recharging storage battery	-	÷.		.50
Repairs to (steel) tires .			14.	5.00
Tire depreciation (set aside)				6.00
Interest on \$2,500 at 6 per	cent			12.50
Depreciation at 20 per cent.	. pe	r ye	ar	41.66
Painting and re-lettering.				2.00

Total cost per month . . . \$321.29

The experience of a large laundry constitutes a good example of the economy of light delivery service. The power wagon of 500 pounds capacity leaves the laundry at 7 A.M., and returns at 3 P.M., averaging 36 miles and making 139 stops. The route



FOR MAIL AND PASSENGERS THE MODERN WAY, IN COUNTRIES STILL WITHOUT RAILROAD FACILITIES

of this wagon is made up of unpaved streets for half the distance which makes much slow speed work. In covering the same route with a horse, it is necessary to leave the laundry at 7 A.M., the first stop being six miles away. At noon a relief wagon is sent out with a second load which is transferred to the first wagon. The second wagon then works all the afternoon and returns to the laundry between 6 and 8 p.M. With the auto-wagon the return trip is made to the laundry for the second load, thus saving the work of an extra horse and driver. Analysis of the statistics show the total cost of operating two one-horse wagons in one



A CONTRACTOR'S TRUCK PARTICULARLY ADAPTED TO BUILDING THE GOOD ROADS WHICH THE COMING OF THE AUTO-MOBILES AND MOTOR TRUCKS DEMAND

day to be \$5.11, including wages for two drivers at \$2 per day each, hay and oats for two horses at 75 cents, depreciation at the rate of one cent per mile, 36 cents. The total cost of operating the delivery automobile is \$3.19 a day including one driver's wage at \$2, total operating cost of 47 cents, with depreciation figured at 2 cents per mile, or 72 cents. The saving is thus \$1.92 per day for the auto-wagon over the horse wagon, a sum which would nearly pay the first cost of the power wagon in one year's service.

An example of city transportation drawn from the experience of a milling company in a large city delivering flour to the trade, furnishes valuable data for the comparison

MOTOR TRUCKS - THE NEW FREIGHTERS

of a horse-drawn vehicle and gasolene power truck delivery service. The first test covered eighty-eight consecutive working days in the months of October, November, December, and January. The second consisted of an eighteen-day test in which a horse truck and a motor truck were used side by side, each vehicle carrying the same kind and weight of load. During the 88 day test, the power truck made 2,171 deliveries in 621 hours, aggregating 925,623 pounds, which is an average of less than 17 minutes per delivery, 25 deliveries per day, and 426 pounds for each delivery. The mileage covered in the four months' test was 2,784, which is an average of nearly a mile



BUILDING ROADS IN WASHINGTON



THE HEAT THAT KILLS HORSES DOES NOT AFFECT THE TRUCKS DURING THE TEN-DAY HOT SPELL FROM JULY 3, 1911, THE SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS REPORTED THAT 1,200 HORSES DROPPED DEAD IN HARNESS IN NEW YORK

for each delivery. The consumption of gasolene was 290 gallons, and of oil 25 halfgallons, the cost of which averaged 2 cents per mile delivery of 426 pounds. On the 18 day test of horse versus power truck, the latter made 418 deliveries in 114 hours, covering 560 miles at a total cost of \$8.76, or an average of 2 cents per delivery; whereas the horse truck made only 132 deliveries in 133 hours covering 110 miles at a total cost of \$7.49, or an average cost of approximately 6 cents for each delivery.

The experience of a large Brooklyn, N. Y., department store is of particular interest to the prospective as well as the actual user of power wagons delivering suburban merchandise, as it indicates



OILING ROADS IN MASSACHUSETTS THERE HAS ALSO APPEARED IN SEVERAL CITIES A STREET CLEANING MOTOR TRUCK, AND OTHER NEW USES ARE CONSTANTLY BEING FOUND

THE WORLD'S WORK



HAULING FIVE TONS OF GRAIN UP A HORSE-KILLING HILL NEAR KANSAS CITY, MO.

just what may be expected under actual service in all kinds of weather, and it affords an excellent basis of comparison by which to check up expense accounts for transportation. Eleven trucks (one three-ton and the remainder one-ton) displaced thirty-three horses. The cost for six months was \$8,709 for the horse delivery, and \$7,349 for the electric trucks, a saving of \$1,360 in favor of the machines, which, itemized, shows the following interesting tabulation.

		POWER	MAINT.	OVERHEAD	TOTAL
TRUCK	MILEAGE	COST	COST	COST	COST
A	7808	\$141	\$348	\$465	\$954
В	7722	147	361	469	977
С	8157	151	277	459	887
D	7935	149	201	474	824
E	8727	158	323	470	952
F	7677	146	241	474	860
G	8071	150	250	455	854
H	7406	134	290	458	882
1	7864	147	281	459	887
J	8584	152	281	470	904
K	6041	100	539	471	1111

The figures are for a six months period from August, 1910, to February, 1911, covering exactly the same service that had been performed a year previous by horse-driven vehicles over eleven of the long routes of the company. In both cases, the salaries of drivers and helpers were the same and, therefore, not a part of the comparison. The horse service on one route was formerly assisted by shipment of the goods by express ten miles out to a distributing point from which the wagon operated, whereas the



TAKING ITS PLACE AMONG THE FREIGHTERS STEAMERS, FREIGHT CARS, AND A FIVE-TON TRUCK AT THE BOSTON WATER-FRONT

MOTOR TRUCKS - THE NEW FREIGHTERS



PART OF THE \$60,000.000 WORTH IN SERVICE A LINE OF TRUCKS REPRESENTING A TELEPHONE COMPANY, AND MILK, STORAGE, BREWERY, AND GROCERY BUSINESSES

power wagons cover this twenty miles by starting from the main store, thus saving the express charge.

The item of "power cost" in these figures is materially reduced in this firm's case by using charging current for the batteries of these wagons from its own plant at only two cents per kilowatt, whereas the usual commercial charge is about six cents. Maintenance cost includes garage and other labor, supplies, and any work done on the cars, and "overhead cost" is made up of such items as rent, insurance, interest, and salaries. Further analysis of the table discloses a cost per package by machine delivery of $3\frac{3}{4}$ cents. Excluding the three-ton truck, the cost per mile by machine delivery is a trifle over 11 cents.

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"We are not disposed to attribute to automobiles any of the extravagant economies one hears of sometimes in that connection," said a member of the firm in discussing the matter, "but it cannot be denied that the service is decidedly better than the service that horses gave, and we find that the results are more than we had expected. Ten years ago we bought four electric cars and tried the experiment, but it came to a dismal failure, and we were glad to sell the cars for less than to per cent. of what they cost us. Since then there have been marked improvements in cars and batteries, and we have been



THE DELIVERY WAGONS FOR A GREAT STORE WHICH TAKE LESS BOOM IN THE STREET, ARE MORE SANITARY IN THE CITY, GIVE A WIDER AND QUICKER SERVICE, AND COST NO MORE THAN THE HORSE DRAWN WAGONS THEY SUPPLANT

much interested in working out the present experiment with the fleet of eleven cars.

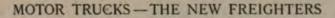
"I am still of the opinion that horse trucks have their own value and may still be relied on very strongly, but we feel that a reasonable proportion of automobiles can be intelligently made use of to great advantage. Our service is more extensive, more expeditious and more relidelivery was made. Goods sent by express formerly involved 12 per cent. expense, whereas we now cover it with our own truck for about 8 per cent. A careful comparison of our figures leads to the conclusion that the experiment proves the value of the automobile for the longer runs of our service; we have not applied it to our nearer city deliveries as yet."



IN THE SAN JOAQUIN VALLEY, CAL. A FIRST CLASS FIVE-TON TRUCK CAN AVERAGE FIFTY MILES A DAY AND A TEN-TON TRUCK AS MUCH AS THIRTY-EIGHT, OR MORE THAN TWICE THE DISTANCE OF A THREE OR FOUR MORSE WAGON

able, and we discover on compiling results that there is also a real saving in money. Our trucks are making in some cases fifty to sixty miles per day and our limits of service have been considerably extended.

"I have been especially impressed by the cost of making deliveries by express, which we formerly found necessary between the store and one outlying district station from which our house-to-house The motor truck is being used to-day in 125 separate and distinct lines of trade and industries, and newer fields of adaptability are constantly being found for it. Practically every business and industry in which transportation is a necessity and there are few in which hauling materials or goods is not required — has been invaded by the horseless wagon. The Government has authorized the





SUCCEEDING THE ARMY MULE THE GOVERNMENT HAS APPROPRIATED \$125,000 FOR TRUCKS FOR THE COMMISSARY DEPARTMENT



CLEARING THE WAY FOR THE HORSE A MOTOR SNOW PLOW THAT DID THE WORK OF 200 MEN IN SHOVELING SNOW

purchase of 1,200 motor trucks to displace mule teams in the commissary department.

The motor driven street cleaning machine has already appeared in several cities. Last winter a city contracting firm in New York took their seven ton motor truck, fitted a type of board snow plow to its front end in diagonal fashion so as to sweep the snow aside in a continuous heap, and, in an eighteen-hour use of it for the city, did as much work as 200 street sweepers would have been able to do in the same time. Figuring the wages of the sweepers at \$2.00 per day, the machine earned \$800 for its owners, and as its cost was but \$15. per day to operate, it is obvious what a tremendous saving such a machine can effect.

In the metal mining districts of the West the motor truck is slowly but surely coming into its own both as a single unit



IN THE NEW HAMPSHIRE WOODS



ON A ROCKY ROAD IN THE WEST

to haul ore to smelters and the refined metal to shipping points and as a "road locomotive" to haul "trailers" of loaded ore wagons. With loads of more than thirty tons these mining" truck-trains" are operated at speeds of five to six miles an hour, and they travel the rough trails of Arizona in places on grades as high as 12 per cent.

In mail service the motor wagon and truck are daily growing more common. For express service the four leading American companies have already invested \$1,500,000 in motor trucks to faciliate the prompt and economical handling of packages. In this age of speed even the undertaker has motorized his funeral cars to hasten our transportation to final resting places.

This is the uncolored status of the motor truck. Service first — it is faster and more reliable. Saving second — but usually where modern trucks are installed there is a distinct saving. This is for the owner. For the cities it means cleaner streets and less congestion; for the suburbs, service that was beyond the horsedrawn radius.



DICKENS IN AMERICA FIFTY YEARS AGO

HIS RECEPTION IN BOSTON AND NEW YORK — TRAVELS SOUTH AND WEST — THE NEWLY DISCOVERED ANSWER TO AMERICAN NOTES BY POE



BY

JOSEPH JACKSON

HEN he paid his first visit to this country in the winter and spring of the year 1842, Dickens was universally acclaimed as "Boz." He had made his literary reputation under that name, and it had the double virtue of being both short and irresistible. When the Cunarder Britannia, which had brought him

over, was being warped into the dock at Boston, a dozen newspaper men of that city "at peril of their lives," Dickens noted, sprang over the rail and took Boz by storm. He seemed to enjoy the experience, but showed some fastidiousness; for he mistook these men. with great bundles of papers under their arms and wearing worsted comforters very much the worse for wear," for newsboys.

The scene, he wrote to his friend, John Forster, put him in mind of London Bridge; and the reception was so violent that he began to object, especially to the custom of these editors (as Dickens says he discovered they were) "tearing violently up to him and beginning to shake his hands like madmen." His power of observation did not abandon him at this critical moment. He noted that one man, whom he hated for it, had very dirty gaiters, and very protruding upper teeth. Boz was exasperated at hearing this person remarking to all comers after him, "So you've been introduced to

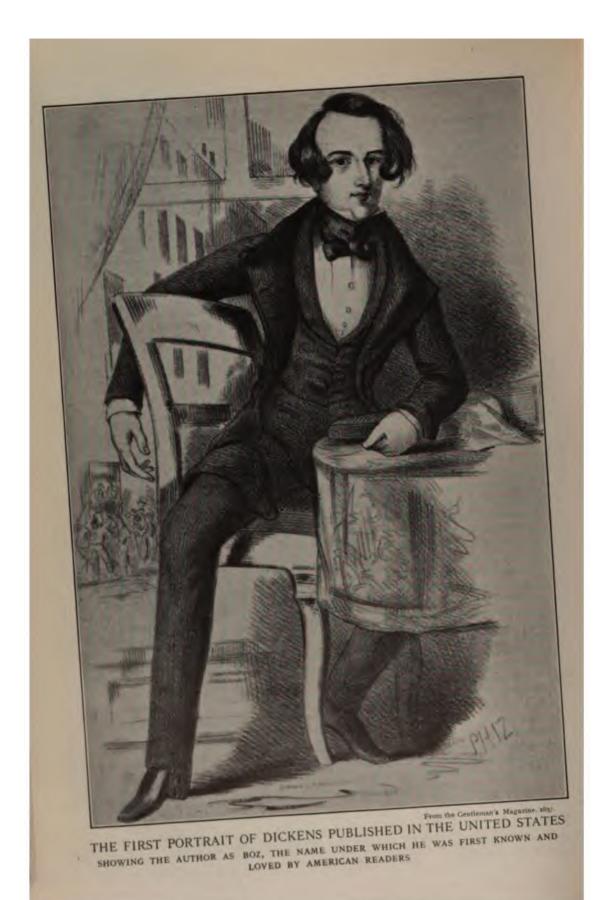


CHARLES DICKENS IN 1842 FROM A PAINTING BY FRANCIS ALEXANDER OF BOS-TON, MADE ON DICKENS'S FIRST VISIT TO AMERICA WHERE HE RECEIVED THE MOST TRIUMPHAL WELCOME EVER GIVEN A FOREIGNER

our friend Dickens — eh?"

Boz was met at the ship by Francis Alexander, a Boston portrait painter, to whom he had promised to sit for a portrait when he came to America. Alexander stepped on board the Britannia as soon as the gang plank was in position. Hesought out Dickens and took him and his wife and the Earl of Mulgrave, who was one of Boz's fellow-passengers, off in a carriage to their hotel.

It was early in the evening of a stinging cold January day, that Dickens stepped on shore in



DICKENS IN AMERICA FIFTY YEARS AGO

the United States. The ground was covered by a thick enameling of hard snow; but the stars shone brilliantly, and the darkness was tempered by a fine moon. Among the young men in Boston who were overjoyed at the prospect of seeing Boz in the flesh, was the late James T. Fields, subsequently a prominent publisher in the immortal author of Pickwick, of Little Nell, and of Nicholas Nickleby. As the carriage stopped in front of the house, Dickens stepped out, cast one glance at the fine, hospitable, warm glow of light that flooded the entrance, and shouted, in his buoyant way to those in the carriage, "Here we are!"



CHARLES DICKENS IN 1868 ON HIS SECOND AMERICAN TOUR, DURING WHICH HE GAVE READINGS FROM HIS BOOKS TO PACKED HOUSES IN ALL THE LARGEST CITIES

that city, and at the time of Dickens' death, his representative in America. He has described how he lingered to see Boz; how he followed him up the street, his rapture rendering him immune to the nipping cold; how he stood in front of the hotel as the carriage drove up, and how gratified he was by hearing the voice of And young Fields was on hand later that evening toward midnight to see Boz come bounding out of the Tremont House, with Lord Mulgrave for a companion. Dickens was muffled up in a shaggy fur coat, and heedless of the bitter weather, putting at naught the frozen surface of the pavements, ran lightly over the snow almost





DICKENS'S RECEPTION IN AMERICA THE AUTHOR PLEADING "NOT AT HOME" TO A HOST OF HIS FORMER ACQUAINTANCES. FROM A CON-TEMPORARY SKETCH IN "HARPER'S WEEKLY"

DICKENS IN AMERICA FIFTY YEARS AGO

like his own Bob Crachit, wisely selecting the middle of the street. "We boys," said Fields, describing the scene, "followed cautiously behind, but near enough not to lose the fun. Of course the two gentlemen soon lost their way, emerging into Washington from Tremont Street. Dickens kept up a continual shout of uproarious laughter as he went rapidly forward, reading the signs on the shops, and observing the 'architecture' of the new country into which he had dropped as from the clouds. When the two arrived Even the triumphal progress of Lafayette, fifteen years earlier, seemed tranquil in comparison. Had Dickens enjoyed the strength of a Goliath he could not have attended every dance to which he and his charming wife were asked. To have eaten all the dinners, suppers, and banquets to which he was invited would have been physically impossible. He early found that even to have attempted to reply to his daily mail would have left no time for anything else, and would have kept him out of bed until late at night.



"CHARLES DICKENS AS HE APPEARS WHEN READING" FROM A SKETCH BY C. A. BARRY IN "HARPER'S WEEKLY," 1867, SATIRIZING THE AUTHOR'S SCRUPULOUS REGARD FOR HIS STAGE EFFECTS

opposite the Old South Church, Dickens screamed. To this day I could not tell why. Was it because of its fancied resemblance to St. Pauls or the Abbey? I declare the mystery of that shout is still a mystery to me."

The following day all Boston knew that Boz had landed, and then began those demonstrative exhibitions of genuine affection and curiosity which never ceased to accompany Dickens on his travels for the following four months. No such reception had been given any foreign visitor to these shores before that time. "How can I give you the faintest notion of my reception here?" he asks, writing to Forster. "Of the crowds that pour in and out the whole day; of the people that line the streets when I go out; of the cheering when I go to the theatre; of the copies of verses, letters of congratulation, welcomes of all kinds, balls, dinners, assemblies without end?" Again he wrote: "I have the correspondence of a secretary of state, and the engagements of a fashionable physician. I have a secretary whom I take on with me. He is a young man of the name of Putnam;

was strongly recommended to me; and does his work *well*. He boards and lodges at my expense when we travel; and his salary is ten dollars per month — about two pounds five of our English money."

And Dickens, although then only a young man just completing his thirtieth year, kept his head in the presence of all this indiscriminate adulation. His secretary, E. W. Putnam, in his account of He began joyously by admiring everything and everybody. He took the nicest pains to send an answer to every correspondent; even to write his autograph for sentimental young ladies who had sought it — although he did make a determined stand against those who wanted one of his dark brown locks to accompany his signature. He soon found himself, however, placed on the defensive. He suffered



OUR ONLY PUBLIC MONUMENT TO DICKENS THE STATUE OF DICKENS AND "LITTLE NELL" BY F. EDWIN ELWELL, IN THE CLARENCE CLARK PARK, PHILADELPHIA

his tour with Dickens, declares that Boz had been an invalid before his voyage to this country and that the frightful roughness of the passage had made it imperative for him to take a rest. But it does not appear that Dickens, in spite of his occasional voluntary indispositions which relieved him at times from attending functions arranged for lionizing him, took much rest during the whole time he was in America. from the rapacity of some hotel proprietors. He wrote in one of his first letters to English friends that American hotels were terribly expensive. One hotel charged him nine dollars a day for the board of himself and Mrs. Dickens for a whole week while they were in another city, and this in addition to a handsome charge for their rooms, which they had not occupied. He was welcomed as a prince of literature and the hotel pro-

prietors seemed to believe he should be charged royally.

In New England, he made life-long friendships with Professor Felton of Cambridge, Charles Sumner, Longfellow, and Jonathan Chapman, Mayor of Boston.

He stayed two weeks in New England, was charmed with all he saw and heard in Boston, Cambridge, and New Haven, and he always gracefully acknowledged the attentions paid him everywhere.

In spite of his apparent good will toward everybody, however, he flatly refused to bow to national sentiment. When, after he had unexpectedly in a speech in Boston made some very pointed references to the justice of international copyright, he insisted upon making public reference to the same thing again in a speech at Hartford, in spite of the protests of his friends that his words, though true enough, were undiplomatic. His independence and his strong sense of his own righteousness would not suffer him to use tact in his public addresses.

Once out West, in St. Louis, he was approached by a literary man who believed he had acquired a sufficient intimacy with Boz to entice him craftily into his camp. He asked Dickens how he liked our "domestic institution, slavery" in such an insinuating manner as to expect an agreeable reply, if not an honest one. Dickens's eyes blazed in an instant. He took in the situation at once. "Not at all, sir," cried Dickens, "I don't like it at all!"

"Ah!" returned his visitor, who showed some evidences of being abashed by the frankness of the reply, "you probably have not seen it in its true character, and are prejudiced against it."

"Yes, I have seen it, sir!" said Dickens, "all I ever wish to see of it, and I detest it, sir!"

After the presumptuous visitor had left, Dickens turned to his secretary and, burning with passion, exclaimed, "Damn their impudence! If they will not thrust their accursed domestic institution in my face, I will not attack it, for I did not come here for that purpose. But to tell me a man is better off as a slave than as a freeman is an insult, and I will not endure it from any one! I will not bear it!" After this encounter and several others like it, Dickens, although he had originally had no intention of referring to slavery, changed his purpose. Being personally so utterly opposed to anything that was inconsistent with personal liberty, he was aroused to a fever heat, and when he, returned to England he determined to depict this "domestic institution" in its most abhorrent form, and consequently "Slavery" forms a whole chapter in "American Notes."

That Dickens was indiscreet in stirring up a discussion on international copyright at a most inopportune time and in asserting his views on slavery with so much candor, cannot be denied. It has been asserted that his tremendous efforts on behalf of international copyright actually postponed for nearly two generations the American acceptance of that doctrine. His views of slavery only added fuel to the subterranean fires already started by the abolitionists. Certain newspapers and periodicals began a campaign of retaliation against him, and this combination. which was continually circulating spiteful and untrue paragraphs about him, resulted in eventually souring his early appreciation and love for America.

New York as well as New England was restless for Boz to appear, and as soon as it learned he had arrived in this country, preparations for his entertainment were quickly made. An invitation signed by every well-known man of letters, many leading merchants, and others of prominence in that city, with Washington Irving's name heading the list, was forwarded to him, asking him to be the guest of honor at a dinner. At the same time the citizens of New York arranged for a great ball at the Park Theatre, and he was asked there so that he might be gratefully entertained.

Dickens, although so delighted with his stay in and around Boston, was impatient to reach New York, because there he was to meet for the first time the man above all others in America he most craved to see — Washington Irving. It has not been sufficiently understood that Irving was indirectly responsible for the fact that Dickens's name has become so inseparable

from thoughts of Christmas literature. Those chapters on Christmas, which could be less spared than any other part of Geoffrey Crayon's Sketch Book, were read by Dickens long before he became a writer. He has himself left it on record, in his letters to the American author and in his inimitable speech at the Boz Dinner. that he was fascinated by Irving's beautiful prose. How delighted he was, when, after the appearance of "Old Curiosity Shop. ' he found among the hundreds of admiring letters from America one from Irving! He answered it in his rapturous, impatient manner, and the two were instantly friends. From that time forward there was a strong bond of sympathy between the two writers.

Dickens had not been half an hour in New York before Irving called on him at the Carlton House, where the English novelist had rooms. "Just as we sat down to dinner," Dickens wrote to Forster, "David Colden made his appearance; and when he had gone, and we were taking our wine, Washington Irving came in alone with open arms. And here he stopped until ten o'clock at night."

To run over the names of those who visited Dickens during his New York stay would be to give a list of virtually all the men connected with literature in that city at the time. Bryant was a frequent visitor; even N. P. Willis who had described Boz so unflatteringly in one of his papers from London, came in to see him with an air of assurance and virtue. Fitz-Greene Halleck, the poet, and Lewis Gaylord Clark, then editing the Knickerbocker Magazine, were often seen at the Carlton. On one occasion when Dickens had a few of his choice spirits to dinner, as they passed into his apartment the clerk of the hotel, who seems to have been a great lover of literature, buttonholed Boz's secretary long enough to exclaim with a kind of reverential awe; "Good Heaven! Mr. Putnam, to think what the four walls of that room now contain! Washington Irving, William C. Bryant, Fitz-Greene Halleck, and Charles Dickens!"

But the "Great Boz Dinner," and the "Boz Ball" were the crowning events of the visit. The dailies and the weeklies had constant references to them. The dinner committee wisely placed the price of a place at the table at fifteen dollars. Had it been much smaller no building in New York would have accommodated the diners. The Ball was given first, and as a result of the hospitality and attention lavished on him, Dickens had to remain four days in his hotel while he nursed a sore throat, dozed, and drank hot lemonade.

Incidental to the Ball, which was held on February 14, was a series of tableaux virants picturing seven scenes from Dickens's books. There were two scenes from "Sketches by Boz," two from "Pickwick," and one each from "Oliver Twist, "Old Curiosity Shop," and "Nicholas Nickleby." Although the papers of the time contain extensive and illuminating accounts of the great crush - there were three thousand persons crowded into the old Park Theatre - the victim's own account of the glorification of Boz presents the scene in fewer and more expressive words. "At a quarter past nine exactly (I quote the printed order of proceeding), he tells Forster, "we were waited upon by David Colden, Esquire, and General George Morris; habited, the former in full ball costume, the latter in the full dress uniform of Heaven knows what regiment of militia. The General took regiment of militia. The General took Kate (Mrs. Dickens); Colden gave his arm to me, and we proceeded down-stairs to a carriage at the door, which took us to the stage door of the theatre, greatly to the disappointment of an enormous crowd who were besetting the main door and making a most tremendous hullabaloo. The scene on entrance was very There were three thousand peostriking. ple in full dress; from the roof to the floor, the theatre was decorated magnificently, and the light, glitter, glare, show, noise, and cheering, baffle my descriptive powers. We were walked in through the centre of the centre dress-box, the front whereof was taken out for the occasion; so to the back of the stage where the mayor and other dignitaries received us; and we were then paraded all round the enormous ball-room, twice, for the gratification of

the many-headed. That done, we began to dance — Heaven knows how we did it, for there was no room. And we continued dancing until, being no longer able even to stand, we slipped away quietly, and came back to the hotel."

The "Great Boz Dinner," was given at the City Hotel on February 18, and Irving, as the acknowledged dean of American letters and as the friend of Dickens, was selected to preside.

Dickens, always the readiest of after dinner speakers, made the most felicitous speech of his whole tour. What a beautiful tribute he paid Irving! He said, in his inimitable manner, that he did not go to bed two nights out of seven without taking Washington Irving under his arm, and when he did not take him he took Irving's own brother Oliver Goldsmith! And how loyal Dickens remained to his American friend is shown by the fact that, in his most intimate letters to Forster, there is not a mention of the fact that Irving broke down in his speech at the dinner.

The dinner committee, having some apprehension lest Boz should speak plainly about copyright, appealed to him before the function not to do so. He declared he should, but his reference when the time came to speak it was so slight, so gentle, and in the form of an "appeal by one who had a most righteous claim" to assert his right, that actually the sentence was followed by cheers.

From Henry Clay at Washington, came a warm letter of encouragement; he wrote to approve Dickens's "manly course" and mentioned his desire to "stir in it if possible." But Clay had already forwarded his resignation from the United States Senate to the Legislature of Kentucky, to date from March 31 of that year.

When he reached Philadelphia, which he found "a handsome city, but distractingly regular," he was completely taken in by an unscrupulous political leader in that city. This man, who had a pleasant address and was locally prominent, was introduced to the distinguished visitor, and before leaving, received Dickens's permission to bring a few friends to see him. The following day the hotel literally

was mobbed. The street in front of the house was impassable; the corridors of the hotel were packed, and the landlord was distracted; for Dickens refused to receive this mighty army. Finally the landlord prevailed upon him to hold a levee, urging that, if he did not accede, a riot very probably would result. The humor of the situation overcame Boz's former decision; he relented, and for two hours he received this crowd. He then learned that the crafty politician had inserted a note in the newspapers that Dickens would receive the citizens who would call at a certain hour. As for this ingenious person, he stood beside Dickens introducing by name almost every man in the line, and making political capital out of his assumed intimacy with the novelist.

Washington, where he subsequently journeyed by boat and railway, Dickens described as "a city of magnificent intentions," but he was deeply interested in Congress. He had the privilege of appearing on the floor of both Houses, and went to the Capitol every day. He complained of much bad speaking, but found "a great many very remarkable men, such as John Quincy Adams, Clay, Preston, Calhoun, and others," with whom he was placed in the friendliest relations. Adams he found "a fine old fellow seventy-six years old, but with most surprising vigor, memory, readiness, and pluck." Clay is "perfectly enchanting; an irresistible man." He was on the most friendly terms with Clay, then the leader of the Senate, and it was due to Clay's suggestion that Dickens did not proceed further south than Richmond.

The remainder of his stay in the United States, Dickens found more to his liking. He grew fond of Americans, found the women beautiful and the men chivalrous, but their expectorating habit aroused his wonderment. Americanisms to his unpractised ear incited merriment, but he began to overlook many national characteristics as he proceeded on his journey. President Tyler's predicament in finding all political parties against him, won Dickens's sympathy, but he nad to decline a dinner invitation to the White House

for want of time to attend. He parted from Irving, who had just been appointed Minister to Spain, in Washington, and during the interview the American author wept heartily. Dickens found the most comfortable hotel in Baltimore; likened the Potomac steamboat to a Noah's Ark; discussed slavery in Richmond; bought two accordions, and learned to play *Home, Sweet Home* with feeling; and was so much pleased with his treatment everywhere that he responded agreeably to a petition of the most influential men in St. Louis to visit the West. Traveling across part of the country in canal boats, he also had a taste of the steamboats on the Mississippi and Ohio, and although he frequently had to put up with great inconvenience in the hotels in the back country, took the experience good naturedly, and made jests of it in his books. He went to Cairo, Ill., then a young "boom" town, where, it is said, he had purchased lots. He was in Louisville, Chicago, Cincinnati, Columbus, Pittsburg, Buffalo, and then went to Canada, sailing from Montreal for England, in May.

Dickens had been an unknown name in the United States until after the first four monthly parts of "Pickwick" had been published in England. Even "Boz," the name under which he then wrote, was unfamiliar in spite of the fact that two volumes of his "Sketches" had been published in London, and the first series had been reprinted here. But long before the twenty numbers of "Pickwick" were completed, American readers, like their tardy English cousins, discovered the advent of a new power in literature.

Carey, Lea & Blanchard, then (in 1836) the leading publishers in Philadelphia, had an agent in London, as indeed, was customary for prominent American pub-lishers in the East, whose duty it was to forward all the latest publications likely to be suitable for reprinting on this side of the Atlantic. When the fourth part of "Pickwick" arrived, the firm no longer hesitated. Sam Weller had made his appearance, and the novelty of the character and the general improvement in the tale decided them to issue a volume ir ul style — a 12 mo in green

boards, cloth back, and paper label. Thus, in November, 1836, "Pickwick" appeared for the first time in book form.

To those who may have thought it remarkable that neither in Forster's "Life of Dickens," nor in any of the three volumes of his letters which the novelist's daughter and his sister-in-law published after his death, is there any mention of Edgar Allan Poe, the certainty that Poe wrote a most scathing answer to "American Notes" may give the needed explanation. When Dickens was in Philadelphia in March, 1842, among those who wrote to him asking for an appointment was Poe. That an interview actually took place cannot be doubted. Dickens alludes to it in a letter to Poe written from London eight months later.

This letter was dated November 27, 1842, and by the time it was received, almost at the time it was written, a Boston publisher had brought out the most incisive attack on Dickens that had emanated from this country. This work was entitled "English Notes, Intended for very Extensive Circulation! by Quarles Quickens, Esq." It is a sixteen page pamphlet in the form of a small quarto newspaper of the time, and bears the imprint of the Boston Daily Mail. And there can be very little doubt that the author of it was Poe.

The probability is that, during the interval between the time of Dickens's visit and the receipt of this letter, Poe, then an editor at a small salary on Grabam's Magazine, had finally convinced himself that he had been entirely forgotten and neglected by his English contemporary, and he had not hesitated to take revenge.

Apart from his tales, "English Notes" is probably the cleverest bit of prose writing Poe ever did. While in the main it is a travesty, it also is a rather impish retort. There is a parody of Dickens's manner that is as excellent burlesque as anything of Thackeray's, and the satire which occupies a large part of the work, is as sharp as a hypodermic needle. Sa far as I have been able to see, no review of Poe's "English Notes" ever appeared. The only other answer to "American

Notes" was a dull, stupid piece written

in England entitled, "Change for American Notes"; yet by the inscrutable laws of chance, this uninteresting production is fairly well known and Poe's retort passed unnoticed.

I think I should explain that in assigning the authorship of "English Notes" to Poe, I have done so on my own authority. Of course the pamphlet did not bear his name, but he appropriated part of its pseudonymic — "Quarles" for his signature, when he first published "The Raven" in the American Whig two years later. For this reason and as a result of other careful investigations I was satisfied that Poe was the author, but I was unwilling to make the decision ar-bitrarily; and so I have had the facts reviewed by others whom I believed to be competent. These, I need not state here, have been unanimous in supporting my conclusion. That the book has been unnoticed by any of Poe's numerous biographers is not remarkable when it is considered that the work was of the most ephemeral character and the copy in my possession is the only one I have ever seen.

Dickens replied to his critics in America by giving other unpalatable pictures of life in the United States in his novel "Martin Chuzzlewit," which followed close upon the heels of "American Notes," but this did not interfere with the writer's popularity on this side of the Atlantic. The people here as a rule, were not more offended by his criticisms than they were by those of some other visitors. They by those of some other visitors. did not continue to read them, to tell the truth, but enjoyed the novels and the matchless Christmas stories as they came forth at almost regular intervals from that master's pen; and when a quarter century had passed, a new generation of readers had come to join their elders, and it was unprejudiced save in favor of the mighty humorist. So, when, in 1867, the newspapers reported that Dickens was coming to America to read his works, his host of friends - and they numbered every one of his readers - were impatient for his arrival.

On the occasion of his first visit, Dickens was treated practically as "the literary guest of the nation." His passage through

the East, South, and West was one continual triumph, yet he came as a private person. His second tour, in the winter and spring of 1867-8, was in an entirely different This time he came announced character. as a public reader, an entertainer, in fact, and his welcome was none the less warm and hearty. That this tour was not in one sense, so triumphal as the former, was due to the fact that during almost all the time Dickens spent in the United What he describes as States he was ill. American catarrh forced him to abstain from many functions intended for his honor.

His readings from his popular novels were the most successful entertainment of the kind ever given in this country. Readers, dramatic readers, there were in numbers here at the time, but how differently Dickens read! He did not, in fact, read — he related the descriptive passages and when he came to scenes he acted them.

With a trained appreciation for stage management and theatrical effect, Dickens saw to it that no accessory was lacking, although he was the sole occupant of the stage. He carried with him a staff consisting of half a dozen men, including a gas man, whose duty it was to erect the miniature "border" light, which was supported over Dickens's head and which threw his fine, expressive face into relief. Back of him, on the platform, was a white screen, and before him a curiously designed reading desk, arranged with a high rest for his book, and a lower convenient shelf for his water bottle and glass. Always regarded as a showy dresser, Dickens appeared on the stage at his readings, wearing large shirt studs, a massive ring, insistent sleeve buttons, and a heavy gold chain fastened by a locket in the middle "and leading in double festoons to either watch pocket, as if he wore two watches.³ In his buttonhole was the invariable scarlet geranium.

From November, 1867, to the middle of April, 1868, Dickens toured the larger cities in the East, giving in all seventy-six readings. The demand for tickets which usually were sold a fortnight before the readings were given, was so enormous that. the supply was always exhausted in a few hours. People stood in line all night in the biting cold of winter to be on hand when the ticket office was opened, and it was useless to expect to purchase a ticket on the night of a reading. The receipts of the tour were \$228,000, according to George Dolby, who was Dickens's manager, and of this amount \$190,000 went to Dickens as his share.

His reception wherever he went was just as hearty, just as demonstrative as if he never had written "American Notes." The people of all classes paid him homage in every possible manner, and Dickens was not unmoved by these exhibitions of good will. He seemed to feel that he owed these people something and in his speech at the New York press banquet at Delmonico's, made just before he sailed for England for the last time, he gave ample satisfaction for anything he had written that had been regarded as unjust. He said that he had found that the country and its people had changed for the better in the intervenening quarter century, and he felt that he too, must have changed in that time. He also declared that thenceforth, in justice to the American people, his latest views on America should be inserted in the introduction to those books of his that treated of the United He was as good as his word and States. new editions of "American Notes" and "Martin Chuzzlewit" were issued shortly after he arrived in England, each of them containing an extract from his New York speech.

DRIVING TUBERCULOSIS OUT OF INDUSTRY

THE OVERLOCK AGREEMENT THAT PROTECTS 2,000,000 WORKERS

BY

MELVIN G. OVERLOCK

T THIS moment, as I write, I have before me more than a hundred letters asking in substance: Kindly describe what is known as the Overlock Tuberculosis Agreement. How long has it been in operation and what is the bearing of this agreement upon the great question of tuberculosis?

I believe that the agreement provides a simple method by which this scourge of humanity can be driven from the factory districts in this country where it now chiefly flourishes. The agreement originated in the following manner: I was appointed State Inspector of Health of the Eleventh Massachusetts District in 1907, and a part of my duties was the regulation of pure air and general cleanliness in factories and workshops. I was convinced from the outset that I should find many cases of tuberculosis. I was convinced, also, that, whenever I did find such cases, the percentage of those able to enter sanatoriums would be small because \$4 a week was required for entrance to any of the sanatoriums in the state. The average boy or girl and, perhaps I may add, the average individual who is employed in a factory or store, if stricken with tuberculosis, has not laid by money for the so-called rainy day. Therefore some provision must be made for them if they were to have a chance of being saved from the ravages of this disease which carried off more than 400,000 of our people in 1900.

The records of the Rutland Sanatorium for a periodof ten years (this, by the way, being the first sanatorium established by any state in the union for the treatment of incipient cases) showed that if the cases were taken early, in what is known as the incipient stage, about 60 per cent.

could be cured. The problem was to find some means of getting the money to keep the incipient cases at a sanatorium; the purpose being not only to save many of the patients' lives but also to prevent them from being centres of contagion.

If I may digress for one moment I can easily make the reading public see why the great war against tuberculosis is being

waged at the present time. Our Civil War was one of the bloodiest and deadliest in history. Yet four years of consumption from 1904 till 1908 killed more than three times as many people as were killed during the four years of the Civil War. Every six years we lose in the United States from consumption as many people as would populate the City of Philadelphia. Three years ago Governor Hughes, addressing a great antituberculosis meeting at Albany, N.Y., said:

If we had through the misfortune of war, or the sudden rise of pestilence or through some awful calamity, the destruction of life that annually takes place on account of the spread of this disease we should be appalled. Mass meetings would be held in every community and demand would be made that the most urgent measures should be adopted. It is only because we are accustomed to this waste of life that we look calmly on and go about our business, paying no attention to this enormous death toll, which our American people are paving.

But now to return to my history of the movement which began in Worcester, Mass., in 1908 and which has spread with lightning rapidity, until, at the present time, it embraces more than 1,200 mercantile and manufacturing establishments, employing approximately 2,000,000 people. I had made up my mind that this campaign against tuberculosis must be a campaign of education, and 1 hit upon the idea of establishing what I afterward termed Noon-day Talks to Factory Folk. The first of these was given on November 12, 1908, at the Royal Worcester Corset Company, which employs twelve hundred women and girls. To the best of my knowledge, this was the first of a series of lectures on personal hygiene ever given in factories in the United States. During this lecture I was pointing out in

a simple fashion in lay language the fact that tuberculosis was a preventable and curable disease; that, if taken early, when certain symptoms were manifest to the individual, and if a physican were consulted, and entrance made to one of the state sanatoriums, in 60 per cent. of the cases the patient would be cured. After this lecture, I was approached by a young girl employed in the factory, who said that she had been told that she had tuberculosis and that, if she could obtain admission to the Rutland Sanatorium, she could be cured. I asked her why she did not apply at once for admission and she said that even if she could gain admission she had not the necessary \$4 a week to pay for her care and that therefore she could not go. I told her I would take up this question with the president of the company for which she worked. I therefore sought Mr. Fanning and told him of the conversation. He at once, without any hesitancy, said to me: "Why, Doctor, I will not only pay for this young girl at any sanatorium, but I will pay for any of my people who are so unfortunate as to be stricken with this disease."

l asked him if he would not give me a letter setting forth this offer. On November 14, 1908, he sent me the following:

DR. M. G. OVERLOCK,

91 Chandler Street, Worcester, Mass.

DEAR SIR:

Referring to my conversation with you a few days since, I desire to say that should any of the employees of the Royal Worcester Corset Company be so unfortunate as to contract tuberculosis, our Company will pay their expenses at the Rutland Sanatorium for a period of three months or longer if necessary.

Yours very truly, (Signed) David H. Fanning, President.

The young girl referred to was admitted to the Rutland Sanatorium where she remained from November until the following June, when she was discharged as a cured or an arrested case. She returned to her former occupation and has since remained well.

This was the beginning of what is now known as the Overlock Tuberculosis

Agreement. With Mr. Fanning's letter I went to Mr. John Sherman, president of the Sherman Envelope Company, and he at once gave me a similar letter. I then took up the question with Mr. James Logan, general manager for the United States Envelope Company, which has three large factories employing approximately two thousand people. Mr. Logan was at that time mayor of Worcester. His letter made it easy for me to secure similar letters from other manufacturers, not only in the city of Worcester but throughout Worcester County. l put these letters in my pocket and when I visited an establishment, I showed them to the proprietors. In every instance I secured a similar agreement. By the fall of 1909 I had secured about one hundred agreements. By this time the movement had begun to attract attention outside of Worcester. In January, 1910, I received a letter from Mr. Harry R. Wellman, Secretary of the Committee on Prevention of Disease and Accident of the Boston Chamber of Commerce, asking me for a full explanation of what was known to him as the Overlock Tubercu-A Committee was losis Agreement. appointed presumably to verify my state-This Committee reported its ments. findings to the Chamber with the result that, on March 10th, the Chamber, without a dissenting voice, adopted the following recommendations:

Your Committee recommends that the Chamber of Commerce recommend to its members a measure already adopted by many of the large manufacturing plants in Worcester County as their contribution to the campaign against tuberculosis. The management of the factories just referred to acting upon the advice and through the initiative of Dr. M. G. Overlock, State Medical Inspector of the District, have agreed to be responsible for the expense of boarding at Rutland or some other hospital or other place suitable for the cure of tuberculosis, any employee in whom the disease is discovered. This system has already been put in force by some members of the Chamber of Commerce and your Committee is of the opinion that if, through the recommendation of the Chamber, the system is adopted by all its members, Boston will have taken a long step toward the solution of the problem of

tuberculosis. And that Boston Manufacturers generally be requested to make conditions more sanitary in workshops, factories and stores and to begin a system of education which will protect employees while at work and will teach them how to care for themselves at home and when away from their occupation.

I then began to interest merchants' associations and boards of trade in different parts of New England. The Worcester Merchants' Association in a body adopted a similar recommendation to that of the Boston Chamber.

But far better than this is the realization of the possibilities of the movement by the working people themselves. Day by day they were thrown in contact with some fellow workman who had been sent to a sanatorium and cured. How deep this feeling was, can be seen by the fact that they held a mass meeting in Mechanics Hall in Worcester, December 18, 1910, presided over by the mayor. At this meeting they presented me with a set of resolutions bearing the signatures of nearly 15,000 people employed in the various industries in Worcester County. It was said at the time that they were the first of their kind ever presented to an individual, being signed by the millionaire and the water-boy.

In this movement against tuberculosis, two salient points stand out prominently. The first is that the attack is not for today or to-morrow, but continues until this disease is wiped out. A concern that has cared for its people this year will do so next. The whole trend of the times is toward a wider coöperation between employer and employee. The second point is that, instead of keeping a tubercular patient at work until it is too late for him to get well and until he has succeeded in thoroughly infecting his fellow workmen, the employee under this agreement is removed at the first evidence of the disease, and the economic efficiency of the entire establishment is always kept at a high water mark. Not only this, but, as the sanatoriums teach sanitation as well as cure people, a returned patient is a centre of contagion for sanitary knowledge instead of tuberculosis germs. They become ac-tive forces for good. I claim nothing

for this contribution to modern economics other than the desire to make it known. To David H. Fanning belongs the credit for its launching. This vigorous old man who, on August 4, 1911, celebrated his eighty-first birthday — the head of a great business the ramifications of which extend through both hemispheres, carrying on his shoulders a burden that might stagger a man of half his age — is the author of this plan. Many establishments have adopted profit sharing plans by which they hope to incite the workmen's help to extra exertions and hence greater dividends. Some indeed have established pensions for their aged; but none have gone higher than David H. Fanning, when he declared that his responsibility to his employees extended to the protection of their health, and that he would no more allow disease to steal away their employment than he would allow old age to do so.

Nearly 2,000,000 employees in New England have now this insurance against tuberculosis. A simple agreement is driving the plague from 1,200 factories. Enough has been done to show that tuberculosis can be driven out of our industries.

WOODROW WILSON—A BIOGRAPHY FOURTH ARTICLE

WHAT HAPPENED AT PRINCETON

BY

WILLIAM BAYARD HALE (AUTEOR OF "A WEEK IN THE WHITE_BOUSE WILE PRESIDENT ROOSEVELT")

OCTOR WILSON had served five years as President of Princeton University before he reached the point of irrepressible conflict. So long as he confined himself to the strictly educational workings of the school he had been allowed to have his way without much opposition. But now, when his constructive mind reached over to the student's social life and undertook to organize that and bring it into proper relationship with the other elements of university life, he found that he had put his hand upon what the guardians of the aristocratic institution were really interested in and what they were not disposed to see changed. Having revised the system of study, and having refashioned the teaching plan, he had now reached the point where he believed it necessary to reconstruct the extracollegiate relations — that is, the ordinary living arrangements of the place — taking them in as a necessary part of the total university plan. He felt the necessity of assuming charge of the housing and boarding of the students, and of doing this in a way most advantageous to the young men.

In brief, his idea was the organization of the university in a number of "colleges" or "quadrangles" — practically dormitories, each of which should harbor a certain number of men from every class, with a few of the younger professors. It was not a new idea with President Wilson; people remembered that he had talked of it at least ten years before he became president. It was precisely in line with the preceptorial plan; indeed, it was the necessary culmination of that plan. President Wilson had no notion of dividing Princeton University into colleges at all like those which constitute Oxford University or Cambridge, for example. The university was still to carry on all instruction and maintain its authority everywhere. The "quads" were to be merely residence halls, each of which with its dining-room and common-room was to be a little world in itself — such a world as the university by reason of its size could no longer be.

President Wilson secured the appointment of a committee consisting of seven of the trustees to investigate the merits of the "quad" proposal, and at the June, 1907, meeting the committee reported on "the social coördination of the university," endorsing Mr. Wilson's plan. The report of this committee was accepted, and its recommendation adopted, with only one dissenting vote, twenty-five of the twentyseven trustees being present, at the June meeting.

meeting. Now, it is probable that President Wilson did not hit upon his "quad" plan primarily as a means of reforming the social life of Princeton. He reached it rather as a student of education. It was very clear to him that fifteen hours a week out of one hundred and sixty-eight is not enough in which to "educate" a young man. It was further evident to him that the association of new students with older students and professors was exceedingly to be desired; he knew that a freshman learned far more from the classmen above him and from association with his instructors between lectures than he learned from the lectures themselves; he became convinced of the advisability of cutting across the lines of class isolation; his proposal was to divide the university

perpendicularly rather than horizontally. What was amiss with the "quad" proposal?

This — that it cut into the aristocratic social structure which the dominating element in Princeton had erected for itself.

If, visiting Princeton, you will proceed to the top of a street known as Prospect Avenue, and pass down it, you will see something which probably is not paralleled at any seat of learning in the world. Prospect Avenue is lined with club-houses, twelve of them, with handsome buildings, beautiful lawns, and tennis courts, and, in the case of the more favored clubs on the south side of the street, a delightful view across the valley to the eastward. Some of the club-houses are sumptuous, comparing very favorably with the best city clubs. Their aggregate value must be much more than \$1,000,000. The clubs house, on an average, thirty members each - fifteen Juniors and fifteen Seniors. about 350 in all, Juniors and Seniors alone being eligible. Three hundred other members of those classes can get into no club. Freshmen and sophomores can only look forward to admission to them.

Princeton has long forbidden the formation of fraternity chapters; students are required on matriculation to take oath that they will join no fraternities. The clubs are the comparatively recent outgrowth of eating-associations. The university has never provided any eatingplaces for the students. Some thirty years ago the members of an eating-club which called itself "The Ivy" conceived the idea of perpetuating itself. From this idea has grown up this dominating feature of Princeton life, estranged from the university and yet having more to do with the real forming of its students than any other feature of the college life.

No one can reflect for a moment upon this club system without understanding its essentially vicious character. Perhaps only those who have lived at Princeton thoroughly understand how extremely vicious the system is. At the outset it ought to be made clear that no reflection of any sort or kind is or can be cast upon the morality of the clubs. They are well managed; they are delightful homes; they assemble groups of undoubtedly fine and gentlemanly men. No drinking is allowed, and in no particular has there ever been the slightest scandal about their conduct.

The trouble is that they necessarily constitute an aristocracy, in the midst of a community which should, above all things, be absolutely democratic. It may be all very well for the three hundred youths who enjoy the delights of the

"Ivy," the "Cap and Gown," the "Colonial," "Tiger Inn," and the rest (though such luxury is of questionable value to a boy who has yet to make his way in the world) but what of the three hundred young men who have not been able to "make" one of them? They feel themselves ostracized and humiliated, and the seeds of social bitterness are sown in their souls. There is no provision for them outside of common boarding-houses. Not a few leave the university.

Worse yet, rivalry for admission to the clubs is so great that it injures the work of the freshmen and sophomores. The first term of the sophomore year, especially, is considered to be entirely wrecked by the absorption of the students in candidating for the club elections held that spring. True, from time to time the clubs enter into treaties pledging themselves to abstain from soliciting desirable Sophomores - and the result of that, when the treaties are lived up to, is to make impossible any friendship, no matter how natural or desirable, between a Sophomore and an upper classman; and when they are not lived up to, to supplant free natural intimacies with secret politics. So highly is membership in a swagger club regarded, that parents of prospective students have been known to begin visits to Princeton a year or two before their son entered college, with the purpose of organizing a social campaign to land him in the club to which he aspired.

It may easily be seen how the existence of these select coteries minister to snobbery; how they foster toadying; how they introduce a worldly, material, and unnatural element into what is naturally one of the finest things in the world a democracy of boys; how they set up at the outset of a student's career a mistaken ideal, an unworthy aim; and how they divide students along unnatural lines. Over and over again, Princeton sees a group of congenial fellows of the incoming freshman class gravitate toward each other in the first few weeks of the term, and then, in obedience to some sudden, mysterious influence from Prospect Avenue, dissolve. The members of this group soon, perhaps, find themselves

in friendly associations in some other direction, but again these associations also are broken up. The spirit of the place does not allow men to form friendly and natural associations in accordance with their tastes and dispositions; they must always strive to become friends of those particular classmates who have the best chance of "making" the best clubs, and as "the hunch" passes "down the line" from Prospect Avenue, the prospects of one and another student wax and wane, and the character of the coteries in which he finds himself goes up and down. The social life of the two lower classes presents such a picture as would a layer of iron filings over which a magnet is passed, forming groups now here, now there, and keeping all in constant confusion. So Princeton's clubs continually agitate the under-graduate life, prevent the forming of natural friendships, beget snobbery, set up an aristocracy, condemn half the student body to an inferior social position, and make the chief prize of the student's career, not the attainment of an education, but membership in a favored group. In the words of President Wilson, the sideshow had swallowed up the circus. Nothing could be more un-American; nothing could be more opposed to the true principles of education.

We approach now one of the most dramatic, as it is one of the most involved chapters in the life of any American institution of learning - indeed a chapter, if it could be rightly told, not often excelled in interest in any story of American life. To appreciate the emotions which were stirred, the passions which were aroused, the bitterness engendered, the life-long estrangements created, by what outsiders may easily regard as a slight academical question, it is necessary to consider that a university town con-stitutes a peculiarly isolated microcosm in itself. Its own affairs loom very large to the members of a university, and, indeed, very large in their expansive influence they are. In such a place as Princeton are gathered men of ability and force of character much above the average; men likely to be of strong convictions, which they are well able to express. Ambitions have their play, too, in the college world; jealousies are easily aroused, as well as extraordinarily devoted friendships cemented.

In Princeton, too, there had grown up a certain duality of thought and ruling The town had become the chosen ideal. residence of a number of families of wealth, some of them of very great wealth. Having been for a number of years a school very easy-going as to scholarship and discipline, it had become a favored resort of rich men's sons. Over against the wealthy residents (none of whom, it should be said, were vulgar of display; most of whom, on the other hand, were cultured Christian people of high instincts, the unconscious habits of whose minds only it was that separated them instinctively from sympathy with the less wealthy); over against the students with automobiles who ran over to Philadelphia or New York at week-ends or entertained small parties at the lnn - there was a body of somewhat slenderly paid professors and of students who had been enabled to take a college course only through the sacrifices of their parents. The Princeton world was a fair epitome of modern America; there was little vice in it; there was little conscious estranging pride; there was no acknowledged dislike of the rich on the part of the less fortunate; but there was the growing prominence of wealth and an increasing exhibition of its necessary power, and the gradual assertion of that power in forgetfulness of the needs of the poor. In short, there was at Princeton all the elements that go to make up the drama of life, and these so assembled in a small community that their action and reaction could be easily watched. A novelist might have found at Princeton in the years 1907-11 material for the American novel.

A circular setting forth in outline President Wilson's "quad" proposal was sent to the various clubs and was generally read there on the Friday night before Commencement, 1907. Princeton alumni, particularly those from the Eastern cities, *come back* in large numbers to their

alma mater and usually "put up" at the club-houses, where the Friday night preceding Commencement is given over to a jolly dinner. The "quad" proposal, it was instantly seen, contemplated the doing away of the clubs; it was even said that Wilson proposed to confiscate The wrath of the alumni jollifying them. that night in Prospect Avenue was instantly aroused, and the shout of battle was raised. No decent consideration was ever given the new idea. The grieved graduates went home to spread stories of the attack on Princeton's favorite institutions and rally the old boys to their defense. Old Princetonians wrote distressed letters to the Alumni Weekly expressing their grief and astonishment that a Princeton president should so far forget himself as to try to "make a gentle-man chum with a mucker"; they wanted to know what the world was coming to when a man was to be "compelled to submit to dictation as to his table companions"; in the holy name of liberty and the good old Princeton spirit they swore to preserve for the student "the right to decide for himself whom he will associate with.

The trustees, who had voted the plan through with but a single dissenting voice, now frightened by the alumni howl, were persuaded to reconsider. On October 17th, the Board requested President Wilson to withdraw the proposal.

The inalienable right of the American college youth to choose his own hatband (and compel other youths to wear untrimmed head-gear) was thus triumphantly vindicated. But the saviours of the club system were not generous in victory. They continued to hurl insults upon President Wilson. It was now discovered that he was a domineering, brutal, bigoted, inconsiderate, and untruthful demagogue. The preceptorial system, which had been in operation for two years, with everybody's approval, was now also attacked. President Wilson was charged with having inaugurated it over the heads of the faculty; various classes among the alumni withdrew their subscriptions for the support of preceptors. It took only a few months of this sort of thing for the board of trustees, the faculty, and the alumni to find themselves divided beyond compromise. Life-long friendships were broken. Life-long associates parted in bitterness. Charges and countercharges were exchanged. The chasm deepened, and passions so violent that it would not have been deemed possible for a collegiate to possess them, were aroused.

It is a little difficult to see why the question should have provoked the astonishingly bitter fight which now broke out at Princeton. To find the real cause of it all one must go deeper than the issue presented on the surface, much deeper than the mere personality of the president. As to the latter, it is quite possible that Doctor Wilson's positive character, the certainty of his convictions and his aggressiveness in expressing them, may have been distasteful to men long accustomed to other methods. It is even possible that the president was not as gentle in his manner, perhaps not always as tactful, as he might have been, as he has since become. Undoubtedly a man of exceeding charm of personality, he had his grim side - no man descended from a line of Scottish Presbyterians has not — and, once aroused in a fight, he was a ruthless opponent. It seems to be the case that the president's reform programme grew primarily out of his convictions as a teacher of young men. He did not, for instance, deliberately set about to attack the Princeton clubs; he only found that they were in the way of a better educational plan, the adoption of which he deemed necessary. But when the host gathered for the defense of an aristocratic institution because it was aristocratic, when they denounced him as a confiscator, a leveler, and a Socialist, the innate democracy of the man flamed up, and the fight ceased to be a debate over educational ideals, having become an irreconcilable conflict between democracy and privileged wealth.

President Wilson continued to expound his ideas on the subject of the social organization of the university when invited to do so at gatherings of the alumni in various cities, but he made no aggressive campaign. The preceptorial system, in spite of the growing prejudice against it, continued in vogue, the necessary funds being voted by the trustees.

Before we turn from the events of '07, it may be worth while to note that, though his plan was for the present defeated, Mr. Wilson was still meditating on the necessity of making Princeton democratic. In October, a graduate, Mr. E. B. Seymour, called on President Wilson and had an interesting talk. Though he disagreed with the President's conclusions, Mr. Seymour thus reports Mr. Wilson's views:

He felt that in this country at the present time there was too strong a tendency to glorify moncy merely. That with the increasing wealth of the country this tendency would be accentuated. In short, he feared that we would rapidly drift into a plutocracy. To meet this condition he felt that the corrective of an education along purely democratic lines should be given to our boys in our institutions of higher learning. At Princeton, whither come many sons of millionaires, he felt we should so impress these boys with ideas of democracy and personal worth that when they became, in the ordinary course of nature, masters of their fathers' fortunes, they should so use their undoubted power as to help, not hurt, the commonwealth.

The story now becomes complicated through the injection of another issue, that, namely, of the graduate college.

that, namely, of the graduate college. Some time before the election of Professor Wilson to the presidency, Professor Andrew F. West, a brilliant and persuasive member of the faculty, with ambitions, had been given the title of Dean of the Graduate School, together with an appropriation of \$2500 to be used in studying graduate systems of instruction in various universities. Dean West went to Europe for a year, returned, and published a sumptuous little volume containing an elaborate and highly illustrated scheme for a graduate college. It was never seen by the faculty, although President Wilson, in off-hand good-will for the general idea of graduate development, contributed a preface; the book was sent by Dean West to likely con-tributors among the alumni. In 1906 Doctor West was invited to the presidency of the Massachusetts Institute of Technology. A meeting of a trustee's committee adopted a resolution, expressing the hope that he remain, as the Board had counted upon him to put into operation the graduate school. Dean West declined the call to Boston.

In December of that year, Mrs. J. A. Thompson Swann, dying, left \$250,000 'for the beginning of a graduate college; among the conditions of the gift was the provision that the new college should be located upon grounds of the university. The trustees decided to build it on the site of the president's house, "Prospect," and the university's consulting architect, Mr. Cram, was instructed to draw the plans.

In the spring of 1909, through the influence of Dean West, Mr. William C. Proctor, of Cincinnati, offered \$500,000 for the graduate college, on condition that another half million dollars be raised. Mr. Proctor's letter seemed to imply that the money must be used in carrying out the scheme formulated by Dean West; it also condemned the site chosen for the graduate college by the trustees. In his second letter, addressed to President Wilson, Mr. Proctor named two locations which alone would be acceptable to him.

So long as Dean West's scheme for a graduate school was a paper plan only, it had received no special examination. But when these two bequests made its realization possible, the plan was given scrutiny. It was apparent to many of the trustees and faculty that Dean West's elaborate plan was not one to which they were prepared to commit themselves definitely. A special committee of five appointed by the president of the board of trustees, reported (February 10, 1910) against the unconditional acceptance of Mr. Proctor's gift. They felt that grad-uate work at Princeton was still in its formative period; conditions surrounding it were as yet experimental, and it would be a mistake to let the organization, development, and conduct of a graduate college pass in any measure outside the control of the university faculty and board.

The sites which Mr. Proctor insisted upon were remote from the university centre, and the committee felt that this was a vital mistake. It was an extremely delicate matter to look the gift-horse in the mouth, but so plain was their duty that they, therefore, called Mr. Proctor's attention to the fact that Dean West's plan was merely a tentative one which had never been adopted in its entirety and that the matter of the location of the graduate college seemed to them to be so important that it could not be decided offhand by a donor, however generous; in short, they desired to know whether the prospective gift was to place in the hands of the authorized guardians of the university a sum of money to be used according to their best ideas of the needs of the university, or to be spent precisely as the donor desired.

Mr. Proctor's answer was a withdrawal of his offer.

The withdrawal naturally caused a sensation and brought down upon the head of President Wilson all the vials of wrath that had not been already emptied upon him. It was inconceivable to some in the board of trustees, to a large number of the alumni, and to a portion of the faculty, that a gift of half a million dollars (carrying with it indeed the assurance of another half million — for this had already been nearly subscribed) could be rejected, on any consideration whatsoever. Anyone who knows how eagerly funds are sought by the trustees of philanthropic and educational institutions can perhaps understand the amazement with which many of the graduates of a college heard that its president had actually turned down the prospect of getting a million dollars. But in view of the perfectly clear position taken by President Wilson, backed at that time by the majority of the trustees, the passionate outcry against them shown by some Princetonians of general repute for intelligence and conscience, does seem inexplicable. It was a perfectly clear case. President Wilson and the trustees were no doubt infinitely obliged to Mr. Proctor; they were eager to accept his gift, but they simply could not abrogate the duties of their office -

they simply could not surrender to any donor the right to determine the university's policy in so grave a matter as that of its graduate school. It was they who were charged with the duty of administering the university — not Mr. Proctor. It would have been fatal for them to admit the principle that a rich man who was willing to give away money should, therefore, be given the right to dictate the educational policy of the institution of which others were the elected officers. They were not there to allow a private plan to be imposed upon the university, determining its future.

Furthermore, the particular plan which unconditional acceptance of Mr. Proctor's gift would have forced on Princeton was one utterly opposed to the principles in devotion to which the university under its president's guidance was now so happily advancing.

To President Wilson its details were altogether obnoxious. Since the subject of graduate study had been taken up, the dean and the president had moved in opposite directions: one toward segregation and exclusiveness; the other toward an organic whole, coöperative, shot through with a common motive and spirit, and stimulated by a common life of give and take. Doctor West now . proposed the erection, in a distant part of town, of a sumptuous building where a selected group of young gentlemen of peculiar refinement were to live in cloistered seclusion the life of culture. President Wilson had his own plan for a graduate school — a plan that sprang naturally out of the new system of studies and the preceptorial organization — but it was a plan that contemplated a corps of highlycompetent graduate instructors, proper laboratories, an adequate library, and the practical essentials of study - rather than the embroidery of fine buildings and seclusion. "A university does not con-sist of buildings or of apparatus," he said. "A university consists of students and teachers." He looked on Dean West's teachers." plan as frivolous and unworthy of an American university conscious of its duty to the nation. He argued that, graduate stucents being generally mature men

minded to pursue practical professional studies, an elaborate and peculiar and ornamented scheme like Dean West's would repel rather than attract them.

The fact of the matter is, he didn't want a hundred nice young gentlemen to come to Princeton and live apart pursuing the higher culture. The notion violated the ideal of democracy, deliberately set about to create a scholarly aristocracy, introduced a further element of disintegration when what Princeton needed was integration. His own thought was aflame with the picture of a great democratic society of students in which undergraduates and post-graduates should meet and mingle, the contagion of education flying like sparks struck out by the clash of mind on mind, beginners discovering that scholars were vital men with red blood in their veins exploring the magical regions of still-undiscovered truth, while specialists were constantly reminded of the common underlying body of truth and so prevented from growing isolated,

unsympathetic, and idiosyncranized. This was of the essence of the whole programme which President Wilson had been permitted to initiate and to bring so far toward success. And now the university was asked to abandon it for a million dollars! Mr. Wilson exclaimed:

The whole Princeton idea is an organic idea, an idea of contact of mind with mind no chasms, no divisions in life and organization — a grand brotherhood of intellectual endeavor, stimulating the youngster, instructing and balancing the older man, giving the one an aspiration and the other a comprehension of what the whole undertaking is — of lifting, lifting, lifting the mind of successive generations from age to age!

That is the enterprise of knowledge, an enterprise that is the common undertaking of all men who pray for the greater enlightenment of the ages to come. If you do anything to mar this process, this organic integration of the University, what have you done? You have destroyed the Princeton idea which for the time being has arrested the attention of the academic world. Is that good business? When we have leadership in our grasp, is it good business to retire from it? When the country is looking to us as men who prefer ideas even to money, are we going to withdraw and say, "After all, we find we were mistaken: we prefer money to ideas?"

This may be as good a point as any at which to make it clear that the anti-Wilson sentiment was far from general among the alumni; it was practically confined to the cities of the East. In the board of trustees, fourteen out of the thirty took their stand against him; the deciding few wavered. The five strong men who had belonged to the class of '79 were '79 we**r**e splendidly loyal members of the board. The fine body of faculty members engaged in graduate work were practically unanimous in their support of the presi-dent's sound, scholarly, and practical plans, and entirely unsympathetic with the ornate dreams of the dean. As for the students, never for a moment did he have reason to doubt their essential soundness; they were caught in the toils of a vicious system, but they furnished the best of material for the development of a true American university along democratic lines. Throughout the graduate school controversy they were ardent Wilson men, though, of course, powerless to influence the result.

With the Proctor offer withdrawn, the original plan was reverted to for a modest graduate school beginning, financed with the Swann bequest. And it was in such wise as this that the President spoke justifying his position:

It is a matter of universal regret that anything should have occurred which seemed to show, on the part of the university authorities, a lack of appreciation of Mr. Proctor's generosity and love of the university. It is to be hoped that the mere progress of our plans will show that no purpose was entertained by any one which need have led to any misunderstanding. Our gratitude to Mr. Proctor on behalf of the university is not in any way diminished or clouded by his decision to withdraw the offer he so liberally made.

The thought which constantly impresses and leads us at Princeton, and which I am sure prevails among the great body of her alumni, is that we are one and all of us trustees to carry out a great idea and strengthen a great tradition of national service. We are not at liberty to use Princeton for our private purposes or to adapt her in any way to our own use and

It is our bounden duty to make her pleasure. more and more responsive to the intellectual and moral needs of a great nation. It is our duty at every point in our development to look from the present to the future, to see to it that Princeton adapts herself to a great national development, that her first thought shall be to serve the men who come to her in the true spirit of the age and in the true spirit of knowledge. We should be forever condemned in the public judgment and in our own conscience if we used Princeton for any private purpose whatever. It will be our pleasure, as it is our duty, to confirm the tradition which has made us proud of her in the past and put her at the service of those influential generations of scholars and men of affairs who are to play their part in making the future of America.

But the opposition was not to be met on any such ground of quiet argument and high appeal. Mr. Wilson never permitted himself to approach or suggest personalities (however besought by graduates in distant cities to "tell them all the truth,"); the opposition betook itself to sheer slander and abuse. Much may be forgiven earnest men, but it is simply inexplicable that college trustees, professors, and alumni could have indulged in the vituperative bitterness that found its way into privately circulated pamphlets and round-robins and into public print.

The fact is that the discussion of the "quad" system and of the rights of a donor to dictate how his money should be used, had revealed the existence of a bottomless chasm in the ways of thinking, in the attitude of spirit that characterized two sets of Princeton men. It was the chasm that divides democracy and aristocracy, respect for the rights of manhood and submission to the rights of property. It was an ineradicable instinct in President Wilson and the men who supported him that the life of students must be made democratic; the opposition felt no indignation at the existence in college of those social distinctions which they believed must always prevail out in the world. President Wilson and his sup-porters could not brook the idea that a man of wealth should undertake to dictate the policy of a school professedly conducted by men who were giving their lives to the problems of education.

"I cannot accede," he wrote, "to the acceptance of gifts upon terms which take the educational policy of the university out of the hands of the trustees and faculty and permit it to be determined by those who give money."

Those who were enthusiastic for a university in which social lines should be obliterated and a group of coördinate democracies set up, were divided from those who were content to maintain and college independence. When the going is rapid, Wilson isn't the man to bother about a shock-absorber.

At Pittsburg, addressing alumni, he poured out all his soul:

You can't spend four years at one of our modern universities without getting in your thought the conviction which is most dangerous to America — namely, that you must treat with certain influences which now dominate in the commercial undertakings of the country.



"HE HAD SCARCELY BEEN INAUGURATED PRESIDENT OF PRINCETON UNIVERSITY WHEN EVERYBODY BECAME AWARE THAT, FOR GOOD OR ILL, THE JUDGMENT DAY HAD DAWNED"

even accentuate distinctions by a cleavage as deep as any that exists in the world to-day. No wonder that the partisans of the opposition, in the Board and-out, looked on Wilson as a dangerous man; no wonder that he, slowly aroused by their villification, began occasionally to unslip the leash of his tongue, denounce colleges and churches for yielding to "the accursed domination of money" and make impassioned appeals for a declaration of The great voice of America does not come from seats of learning. It comes in a murmur from the hills and woods and the farms and factories and the mills, rolling on and gaining volume until it comes to us from the homes of common men. Do these murmurs echo in the corridors of universities? I have not heard them.

The universities would make men forget their common origins, forget their universal sympathies, and join a class — and no class ever can serve America. THE WORLD'S WORK



THE WILSON HOME DURING HIS PROFESSORSHIP "WHICH BECAME A RESORT HUGELY POPULAR WITH THE YOUNG MEN WHO WERE SO LUCKY AS TO BE ADMITTED TO IT—AND ITS DOORS WERE HOSPITABLY HUNG"

I have dedicated every power that there is within me to bring the colleges that I have anything to do with to an absolutely demo-



"PROSPECT" THE PRESIDENT'S HOUSE AT PRINCETON OCCUPIED BY DOCTOR WILSON 1902-1910

WOODROW WILSON - A BIOGRAPHY

leges are saturated with the same thought, the same sympathy, that pulses through the whole great body politic.

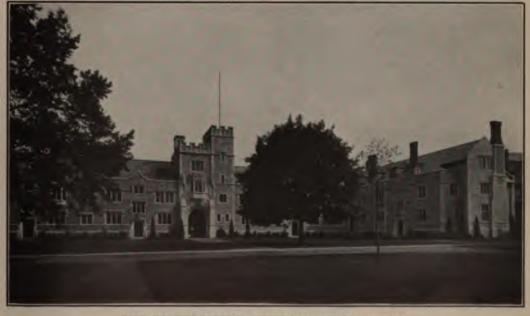
I know that the colleges of this country must be reconstructed from top to bottom, and I know that America is going to demand it. While Princeton men pause and think, I hope — and the hope arises out of the great love I share with you all for our inimitable alma mater — I hope that they will think on these things, that they will forget tradition in the determination to see to it that the free air of America shall permeate every cranny of their college.

Will America tolerate the seclusion of graduate students? Will America tolerate the idea of having graduate students set apart? America will tolerate nothing except unpatronized endeavor. Seclude a man, separate him from the rough and tumble of college life, from all the contacts of every sort and condition of men, and you have done a thing which America will brand with its contemptuous disapproval.

To an utterance like that there could be no reply; in an issue thus clearly defined before the whole world (for the Pittsburg speech got into the papers and all America applauded) no living board of college trustees would have dared separate itself from the bold speaker.



A PRINCETON TOWER



ONE OF THE NEWER BUILDINGS AT PRINCETON PRESIDENT WILSON'S PLAN FOR PROMOTING EDUCATIONAL EFFICIENCY WOULD HAVE PROVIDED A "COMMONS" IN EACH QUADRANGLE WHICH WAS TO HAVE BECOME A SOCIAL CENTRE

No reply? No living men to take issue? Behold how the President of the Immortals jests with us:

In the town of Salem, Mass., lived an old man named Isaac C. Wyman — so old that his father had fought at the battle of Princeton, January 3, 1777. They were rich even then, the Wymans, for the father's father had given General Washington £40,000 for his army, as a yellow slip of paper signed by the Revolutionary commander still attests. Isaac had been graduated at the College of New Jersey one June day in 1848. During the sixtytwo years since that day he had never returned to Princeton. But now, the time having come to die, and he, being of sound and disposing mind, made his will, and paid the debt of nature.

President Wilson's Pittsburg speech was made on April 17 (this was in 1910). A month and a day later, May 18, by the decease of Isaac C. Wyman, the Graduate College of Princeton University became the legatee of an estate estimated at more than three millions of dollars, bequeathed



THE COLONIAL CLUB "SOME OF THE CLUB-HOUSES ARE SUMPTUOUS, COMPARING VERY FAVORABLY WITH THE BEST CITY CLUBS"

in the trusteeship of John M. Raymond of Salem and Andrew F. West of Princeton. There is no quarreling with the dead

At the June trustee meeting the Proctor offer was renewed, and accepted. The president made a polite announcement of his acquiescence in the situation created by the miraculous wind-fall; the gigantic new fund altered everything. The uni-



THE CLUB ROW AT PRINCETON

"IF YOU WILL PROCEED TO THE TOP OF A STREET KNOWN AS PROSPECT AVENUE, AND PASS DOWN IT, YOU WILL SEE SOMETHING WHICH IS NOT PARALLELED AT ANY SEAT OF LEARN-ING IN THE WORLD, PROSPECT AVENUE IS LINED WITH CLUB-HOUSES"

WOODROW WILSON - A BIOGRAPHY



PROFESSOR ANDREW F. WEST "A BRILLIANT AND PERSUASIVE MEMBER OF THE FACULTY WITH AMBITIONS, WAS GIVEN THE TITLE OF DEAN OF THE GRADUATE SCHOOL"

versity architect was put to work on a scheme of magnificent proportions.

Commencement was a season of careful observance of all outward amenities. The President made the speech presenting M. Taylor Pyne, Esq., the leader of the opposition among the trustees, with a gold cup, celebrating the attainment of his twenty-fifth year as a trustee. He attended a dinner given by Dean West in honor of Mr. Proctor. All that a man forced to confess himself defeated by events could gracefully do, he did. What it cost his soul no man could guess. A moral defeat he had not suffered. The principle for which he had stood had not been disproved, discredited, or annulled; the gods had overwhelmed it, that was all.

Of course, he was laughed at, sneered at even by certain alumni, called on to resign. If they had dared, the triumphant party would have dismissed him; they did not dare: Woodrow Wilson was too strong before the country. There was this fly in the ointment of their rejoicing: an alumni trustee was being elected this year as usual, and it was the turn of the West to name him. But Eastern anti-Wilsonists had put up a candidate and made a frenzied campaign for him. At Commencement the result was made known: the anti-Wilson man, Mr. Joline, had been overwhelmingly beaten. But the president himself felt that his work at Princeton was done. He had come to that alternative of the Happy Warrior; of one

Who if he rise to station of command Rises by open means; and there will stand

On honorable terms, or else retire,

And in himself possess his own desire.

He was to retire — but not to obscurity, even temporary. The country had not missed altogether what was going on at Princeton. The state had been watching him. And now there came rolling up from the people, the people outside of the colleges, the citizens for whom colleges exist, a great shout that this man was the sort of man that ought to be leading the fight for their cause out in the world of real affairs. Politicians heard that call,



MR. M. TAYLOR PYNE THE LEADER AMONG THE TRUSTEES OF THE OPPOSI-TION TO PRESIDENT WILSON'S PLANS FOR A MORE EFFICIENT AND DEMOCRATIC UNIVERSITY

and shrewdly joined it. September 15, a New Jersey State Convention — that of the Democratic party — in session at Trenton, nominated Woodrow Wilson for the Governorship. He was at Princeton when they brought him the news; he climbed into a motor-car, and in twenty minutes stood on the platform before a shouting throng and accepted their invitation.

A week later Princeton University opened for a new term, with the resignation of its president in the hands of the trustees —who, in due time voted him all manner of culture planned it, and rare architectural skill is uprearing it. Nothing outside of Oxford will excell it in dimensions, nothing anywhere match it in sumptuous luxury. No doubt it will be the beautiful home of successive generations of young gentlemen who will be a credit to our intellectual life. The clubs on Prospect Avenue still house lucky youths in delightful existence unthreatened now by an impracticable idealist.

But somehow a spirit is departed that for a while moved like a refreshing breeze



THE MODEL FOR THE GRADUATE COLLEGE

"THEY ARE FASHIONING AT PRINCETON A SPLENDID FABRIC OF STONE, WHICH WILL DOMINATE THE LANDSCAPE FOR MANY MILES. THREE GREAT FORTUNES GO INTO IT, REFINED CULTURE PLANNED IT, RARE ARCHITECTURAL SKILL IS UPREARING IT. BUT ——..."

complimentary resolutions, made him still another kind of Doctor, inexpressibly regretted his resignation — and accepted it, on the part of a small majority with thanks unspoken, but infinite in their sincerity. November 8, the people of New Jersey, by a great majority, made him Governor.

They are fashioning at Princeton a splendid fabric of stone, which will dominate the landscape for many miles. Three great fortunes go into it, refined on campus and in hall. Because, for a while, Princeton promised to be something more than a college for rich men's sons.

In days to come, when the ivy is over the Graduate College and the clubs as it is now over Nassau, the most interesting tale that men will tell at Princeton will be the story of a battle — that was lost; and of a leader who was refused and sent away — only to become a captain in the broad field of an historic national struggle.



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SCIENTIFIC MANAGEMENT IN THE ARMY AND NAVY

THE WORK OF NAVAL CONSTRUCTOR EVANS AT MARE ISLAND — NEW MARKSMANSHIP AND COALING RECORDS — THE BIG SAVINGS AT THE WATERTOWN ARSENAL

вү CHARLES S. BREWER

HE subject of "scientific management" was much treated in periodical literature six or eight months ago. The words became familiar even if the principle was not very thoroughly understood. The man who described Fletcherism as the act of taking 720 chews on a raw onion explained that scientific management was a method of shoveling dirt by a stop watch. The newness wore off and the magazines ceased to mention the subject. Yet its progress continued. New instances are constantly coming to light, in manufacturing plants, in railroad management. even in the Government service.

Several of the navy yards have, to a certain extent, introduced the principles of scientific management. The work of Naval-Constructor Evans at the Mare Island yard is noteworthy. In two years the cost of building small boats at this yard was reduced by the application of scientific methods to one half the previous cost; and on the output of new boats a

saving of over \$25,000 was accomplished. The output of the wood-calkers was increased from three and one half to four times the amount accomplished at daywork. The time required for making clothes-bags was reduced from sixty to thirty-six minutes, and for making coaling bags from 390 to 132 minutes. These are examples of but a few of the results accomplished with a consequent increase of about 60 per cent. in the wages of the workmen, all which was done under adverse conditions.

Progress has not been confined to the navy ashore. Mr. Harrington Emerson, one of the members of the civilian board of scientific managers, which at the invitation of the Secretary of the Navy visited and reported on the Eastern navy yards and the fleet, recently said that the work of the Atlantic fleet at target practice was the finest example of scientific management he had ever seen. Since that was written the *Michigan*, winner of the pennant for engineering and gunnery work for 1911, has given an example of

THE WORLD'S WORK

improvement in gunnery, making about fifteen times as many actual hits as were made at Santiago. This with a range of over 10,000 yards against 3,000 yards at Santiago, a rough sea against a smooth sea there, and a target sixty feet by thirty feet high compared with a fleet of Spanish vessels for a target. An increase of fifteen to one is in fact a modest statement if a comparison of the possible effect of the hits is considered. For the 3 per cent. of hits at Santiago was with the smaller guns, there being no record of a single hour; soon after that war the lowa established a record of 100 tons an hour. At present ships take from 200 to 350 tons an hour, and the record for the best hour is 550 tons.

Signaling, fuel consumption, oil consumption, preparation of food, hygiene, and many other parts of the work aboard ship have made similar strides.

In the army also an adaptation of the Taylor system has been in operation in the arsenal at Watertown, Mass. More than two years ago, when the claims



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A BROADSIDE FROM THE "NORTH DAKOTA" MR. HARRINGTON EMERSON, ONE OF THE EXPERTS ON SCIENTIFIC MANAGEMENT WHO REPORTED ON THE EASTERN NAVY YARDS AND THE FLEET, SAID THAT THE WORK OF THE ATLANTIC FLEET AT TARGET PRACTICE WAS THE FINEST EXAMPLE OF SCIENTIFIC MANAGEMENT THAT HE HAD EVER SEEN

hit with a twelve or thirteen-inch gun, whereas all the 22 hits of the 48 shots fired by the *Michigan* were made with twelve-inch shell.

Considering the many mechanical obstacles and the human equation in the coaling of naval vessels, probably no better example of scientific management in its broadest sense could be cited than the development in rapidity of this work. Lieutenant-Commander Tardy, of the recently appointed Navy Yard Scientific Management Board, reports that not long before the Spanish War thirty or forty tons were taken aboard and stored per made by the advocates of scientific management came to the attention of the War Department, a trial of some of the elementary features of the Taylor system was authorized at the Watertown arsenal. The following excerpts from a statement by Lieut-Colonel J. T. Thompson of the Ordnance Department, explain by concrete instances some of the very remarkable results obtained — and the methods by which they were achieved

An expert in shop management was employed, and under his guidance the method of putting work into shops so systematized that orders for manufacture now go from the



THE WORLD'S WORK



Copyright by the Pictorial News Co. PRESIDENT TAFT AND SECRETARY MEYER WHOSE ADMINISTRATION HAS GREATLY INCREASED THE EFFICIENCY OF THE NAVY AND UNDER WHOM SCIENTIFIC MANAGEMENT IS BEING TRIED IN SOME OF THE NAVY YARDS

office to the shops with a much more complete arrangement and supply than formerly. . . The foremen are relieved from much of the semi-clerical and other office work which they used to have to do, and for which they are not well qualified and which they cannot attend to without a neglect of other more appropriate duties. The work of planning the course of component parts of the structures to be manufactured through the shops of the arsenal has been systematized.

. . . For this purpose there has been installed a planning room equipped with personnel and appliances for the regular production of what might be called the time tables of the thousands of pieces which must travel through the various shops on their way from the stage of raw material to that of finished product, without collisions or unnecessary delays. . . .

The practical effect of these methods at the Watertown Arsenal has been a material reduction in the cost of general manufacture at that place. The most important manu-factures at this arsenal are seacoast gun carriages, which are large structures with hundreds of parts, requiring many months for their completion. It is therefore difficult to give at this time many examples of the decrease of cost of production due to the improvements which have thus far been made; but the following are illustrative. Five different orders each for forty sets of parts for the alteration of 12-inch mortar carriages have been given in comparatively recent years. The direct labor cost per set under the old methods was \$480, which was reduced to \$275 per set as a result of the improved methods introduced, while the cost of indirect labor and other shop



PICKING UP THE RANGE OF A TARGET

SCIENTIFIC MANAGEMENT IN THE ARMY AND NAVY



THE WAKE OF A DESTROYER IN BATTLE PRACTICE

expenses was reduced from \$335 to \$332 per set. Similarly, the direct labor cost of 6-inch disappearing gun carriages was reduced from \$10,229 to \$6,590 per carriage, and that of indirect labor from \$10,263 to \$8,956. These satisfactory results have been attained without affecting the pay of the employees or requiring special exertion by them.

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Following the successful installation of the system in the machine shop of the arsenal, an attempt was made to extend the improvement in methods to the foundry. A time study was made upon a mould for the pommel of a pack saddle, of which a considerable number were required. Under the day wage system a moulder had been making these

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THE RECORD BREAKING GUN CREW OF THE AFTER NO. 4 TURRET ON THE U.S. S. "MICHIGAN," WHICH ESTABLISHED A NEW WORLD'S RECORD BY MAKING 17 HITS OUT OF 25 SHOTS AT A RANGE OF 14,000 YARDS WHILE THE SHIP WAS AT FULL SPEED

THE WORLD'S WORK



THE RANGE FINDERS IN THE FIRE CONTROL TOP WHO DIRECT THE SHIP'S FIRE, BY SPEAKING TUBES CONNECTING THEM WITH THE GUN CREWS

moulds in about 53 minutes each. The time study showed that they ought to be made in 24 minutes each, and, in accordance with the usual rule, the earning of premiums was to commence after the time represented by the 24 minutes plus two thirds of the 24 minutes or 40 minutes. Both the moulder and the foreman, however, thought that this time was too short, and the officer in charge of the shop therefore increased it arbitrarily to 50 minutes.

However, although no objection to the time study was made at the time, on the same evening a meeting of the moulders was held, and it was decided that they would not submit to the process, and when, on the following day, attempt was made to carry it on with reference to another man on another job, the moulders all struck, leaving their work. Their places were being filled by other men employed, when, after a few days, they returned to work under the same conditions as those for which they had left, with the information that the whole matter would be made the subject of an investigation.

After the return of the striking moulders to work, the man who had been on the pommel job was again put at it, and occupied the same time as before, about 53 minutes each. One of the new men who had been taken on was therefore assigned to this job, and he made



BESIDES SUCH APPLIANCES ON THE SHIPS, IMPROVED METHODS HAVE LOWERED THE FUEL CONSUMPTION, INCREASED THE EFFICIENCY OF COALING, AND AT THE MARE ISLAND YARD LIEUTENANT-COMMANDER EVANS HAS BY SCIENTIFIC MANAGEMENT MADE GREAT REDUCTIONS IN MANY COSTS

SCIENTIFIC MANAGEMENT IN THE ARMY AND NAVY

the moulds at an average of 20 minutes each; the castings from them not being distinguishable from those made by the former moulder. That this time of 20 minutes each was not difficult of accomplishment is shown by the fact that this man upon one occasion did a whole day's work at the rate of 16 minutes each, and on one occasion was observed to make one of the moulds in 10 minutes. Also, one of the striking moulders after his return made them in 28 minutes each.

When these moulds were produced in 53 minutes each, their labor cost, including helper

per day; when they were made in 20 minutes each, under the premium system, the moulder earned \$5.74 per day.

During the month of September last, 29 men, in the foundry and machine shop, were working more or less time under the premium system. Their total pay for the time that they were so working, at their regular rate, was \$2,121.10; the premiums which they earned amounted to \$279.19. They thus increased their regular daily pay by an average of something over 13 per cent. Is it a pertinent inquiry who was hurt by this process? The



THE ATLANTIC FLEET ON THE HUDSON RIVER THE MOST POWERFUL AND EFFICIENT FLEET OF AMERICAN WARSHIPS EVER ASSEMBLED

and all the direct and overhead charges, was \$1,17 each. When they were made in 20 minutes each this cost was reduced to 54 cents; there was thus a saving of 63 cents on each mould, and as, at the 20-minute rate, 24 moulds were made per day, the net daily saving to the Government upon this one moulder's job was \$15.10. The pay of the time study man, a high-priced specialist, was \$15 a day; so that his entire day's pay was saved on this one job. When the moulds were made at the rate of 53 minutes each, under day wages, the moulder earned \$3.28 men were certainly benefited in their compensation. They were not required to overexert themselves, nor directed to speed up, and the best evidence obtainable is to the effect that the rate at which they worked was not such as ought to have been other than pleasant.

A shortsighted labor union opposition to this system at the Rockford, Ill., arsenal led Congress to authorize a committee to investigate scientific management which should result in its further application to Government work.



A VERY REAL COUNTRY SCHOOL

HOW IT TOUCHES AND TEACHES ALL THE PEOPLE

BY

B. H. CROCHERON (PRINCIPAL OF THE AGRICULTURAL HIGH SCHOOL IN BALTIMORE COUNTY, MD.)

T IS to be a little school on a hillside a few miles from Baltimore"that is what the Voice of Authority said to me. "There's no town nor village near, but the railroad station is only a quarter-mile below the school and the main turnpike a quarter-mile the other side. We want to make it an agricultural high school with all the trend toward rural lif... Schools send too many children to the city. We want at least one school in the Baltimore County system to keep them in the country. There isn't anything there yet but farms and woods and streams and in our office a bunch of blue prints. We want someone to take it who'll create new customs and forget old precedents. If we give you the chance, it will be 'make good or get out.' What do you think of it?" "Well," said 1, "there ought to be a

"Well," said 1, "there ought to be a four-year course in agriculture for boys and a four year course in domestic science for girls. There ought to be a lot of good work in English composition and literature, mathematics, and history; and there oughtn't to be a Latin sentence or a Greek verb in the whole show. There ought to be correlation between all the subjects, and the basic idea ought to be that these children are to live in the country. Everything should tend toward the outdoors as much as possible. Then, too, the school should be for all the folks instead of the school children. There ought to be meetings and lectures and sociables in such a steady stream that they'd keep every class of persons in the neighborhood interested all the time. We'll have women's meetings and farmers' lectures, young people's literary societies and rural teachers' conferences, boys' field day sports and neighborhood picnics with a brass band and a-

"Hold on!" said the Voice of Authority. "Wait till we get started. Besides, nobody has ever succeeded in doing that. It looks fine in the proceedings of the National Educational Association; but the thing hasn't been done, although there

A VERY REAL COUNTRY SCHOOL



THE SCHOOL WAGONS

WHICH HAVE REGULAR ROUTES FOR COLLECTING THE CHILDREN OF THE ELEMENTARY GRADES, AND WHICH, ONE SATURDAY IN EVERY MONTH, TAKE THE WOMEN OF THESE ROUTES TO CAREFULLY PLANNED CLUB MEETINGS AT THE SCHOOL HOUSE

was a lot of talk about it for a dozen years. 'Correlation with Rural Life' and 'Making the School a Social and Neighborhood Centre' are regular subjects for convention talks. But don't think you can do it for that reason. In spite of all the talk, there's been little done. Better get the school running first and then go at it slowly. However, I judge that you're interested in the proposition?" "Interested! I've got plans for five years made already." And then I went home and made plans for another five years.

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One day I walked up the hill from the station to see a small gray stone building with the roof almost on and many workmen swarming over it. Round about were the green fields of northern Maryland. The plans showed five class rooms,



TAKING NOTES FROM NATURE

DURING THE SUMMER THE STUDENTS ARE REQUIRED TO PUT THEIR KNOWLEDGE INTO PRACTICE BY MAKING EXPERIMENTS ON THEIR HOME-FARMS, WITH THE RESULT THAT THE DOCTRINE OF GOOD SEEDS AND IMPROVED METHODS IS SPREAD BROADCAST AMONG THE FARMERS

THE WORLD'S WORK

a science laboratory, a domestic science room, a manual training room, and a farm machinery room. There were also offices, coat rooms, toilet rooms, and the like. Four rural school grades were to be consolidated into two large class-rooms. The other three class-rooms were to house the high school department. To a man fresh from a great university, one lone laboratory looked such a small beginning. It was going to be a problem to demonstrate a four year course in agriculture and four years of science—botany, zoölogy, chemistry, and physics — in one small laboratory. afterward, the school was organized, it was in a neighborhood to which the institution was the outgrowth of an old desire. In order to secure a better school building farmers of the neighborhood contributed work and money for the grading of the grounds, to the value of more than a thousand dollars.

It was decided to advertise the school locally as though it was a new patent medicine or a breakfast food. Posters telling what the school had to offer were hung over the county in post-offices, railroad stations, country stores, on schools,



ANOTHER SORT OF TEACHING

INSTRUCTION IN SWIMMING, IN ATHLETICS OF ALL SORTS, IN WOODCRAFT, AND IN THE LITERATURE THAT DEALS WITH NATURE, HELPS FARM-CHILDREN TO FEEL, WITHOUT SENTI-MENTALITY, THE LURE OF THE COUNTRY LIFE

In Maryland the county school unit prevails so that the school was built entirely by county school funds, at a cost of about twenty-five thousand dollars. It is an integral part of the county school system, not created by legislative edict and placed where political pull demanded, but grown where the people wanted it after a steadily increasing demand that was expressed more than thirty years before the school materialized. Records show that, several years before the school's first principal was born, there was a motion in a farmers' club that the club should agitate for the promotion of a school to teach the les of agriculture. When, years blacksmith shops, trees, and even churches. The local newspapers contributed plenty of free advertising. Everyone knew that an "Agricultural High School of Baltimore County" was to be started.

The first event was to be the dedication of the new building. The management of this affair was put in the charge of two farm clubs, one of women, the other of men, which locally had considerable influence. As the new principal knew practically no one in the county, a card index of three thousand names was made up from borrowed poll lists of voters, account books of physicians, memberships of farmers' clubs and granges, and like sources.

For the dedication of the new building three thousand personal invitations were issued — to persons whose names were on the card index — and a great throng came on a special train and by carriage and wagon to hear the speeches and to see the new building. Of course the school wouldn't hold the crowd so that all exercises were outdoors under the gray November skies. A luncheon was served to a hundred special guests by the women's club. The school didn't yet own any chairs so that all stood during the meal. But everyone believed in the school, you couldn't help it after that good luncheon.

After the dedication came the opening of school. Fifty prospective students registered the first day. Only a dozen had been prophesied. They were a mixed crowd. Some were youngsters with treble voices and short trousers, fresh from rural schools. Some were grown men with hands hardened by days at the plow and faces browned by the summer. All must enter the lowest and only class, for none had the first year's training in science or in agriculture. Ninety pupils comprised the elementary school, filling the two class rooms allotted for their use.

Then began the grind. Text books must be adapted for high school use; for, although agriculture has been adapted for college instruction and exploited for elementary teaching, yet there are no competent texts designed for four-year high school courses. All books are made for collegiate or elementary grades. Secondary schools are chaotic. A scientific equipment had to be selected to teach applied science and it had to be cheap enough to fit the purse of the county schools.

Some pupils had not been to school for six years and had forgotten how to study — if they ever knew. Some came for a good time, some for work. We've still got those who came to labor. Some who came to scoff remained to study. But many fell by the wayside or faded away under the blast of lessons and laboratory exercise. The mortality was awful; but at the end of six months we emerged serene with half of our original number in a devoted nucleus of children who would stand by the school till the last fire. The school speedily developed "student self-government" and the "honor system" in examinations. The students practically manage their own affairs. No teachers are present in class rooms during examinations. The school started without rules or regulations and still has but few. Formal discipline is unknown. The scheme works because the pupils are partners for the good of the school; and then, too, they are good native Americans raised from two centuries on the same soil.

The community work started almost at once. A series of meetings for rural teachers was projected for one Saturday a month. The teachers came in the morning, heard methods of instruction discussed by the county supervisors, and ate luncheon together in the domestic science In the afternoon each teacher room. went through a typical agricultural exercise suitable for use in his school. The meetings were not successful. The teachers scattered throughout the country could not all easily reach the school. Some from their small salaries hired a horse and buggy. Others came across country, riding on the milk wagon to the station and taking the early train. The weather made attendance as difficult as possible. One teacher came thirty miles in a blinding snowstorm to attend a meeting. Ultimately 1 felt sorrier for those rural teachers than for the lack of agriculture in the schools, and 1 stopped the meetings. Another plan is now being tried.

A winter lecture course for farmers was the next project. The plan was for a series of ten evening lectures once a week. throughout the winter. The subject was "Soils" because in that the farmers seemed most interested. Yet there was no definite demand for such a course. Persons when asked whether they would attend, uniformly said either that they "didn't, know" or that they "might come once or twice." The voice of authority urged that the course be limited to five lectures, since, if they were not a success, the fact would not then be so disastrously apparent. Ten lectures to empty seats would be a real disaster; five might be survived. But the posters were issued for a series





HOW THE SCHOOL REACHES THE WHOLE COUNTY THE CROSSES REPRESENT EXPERIMENTS WITH FARMERS, THE DOTS ACRE CORN PLOTS CULTIVATED BY BOYS FOR THE SCHOOL PRIZE, AND THE CIRCLES BOYS' CORN CLUBS IN WHICH SEVERAL HUNDRED BOYS ARE GROWING LESS THAN AN ACRE APIECE.

of *ten* lectures "to be illustrated by experiments in soil physics." The two largest class rooms were thrown together to make a small auditorium. A temporary laboratory table was built fronting the audience and weekly series of experiments ranged on it. Mimeographed outlines of each lecture were prepared and audiences were asked to bring the outlines of all previous lectures with them for reference.

The first lecture was attended by sixty persons, the second by ninety, the third by a hundred, and so forth. For the entire course the attendance averged a hundred and twenty-five at each lecture. For the second winter the lecture course was on "Dairying"; and, while the attendance was not so large as the first year, because of a virulent epidemic which for a time closed the school, yet it was demonstrated that lecture courses for farmers in winter have come to stay in that school.

Almost as soon as the winter lectures were well begun a series of meetings for women was projected. The school wagons, used for the elementary consolidated school, are run over their regular routes one Saturday afternoon a month to bring in any women of the neighborhood who cared to come. Many arrive by train from more distant points. The meetings are opened by a talk from some woman of importance who comes

to address the gathering. She is always someone busy in some vital phase of the work of the world. After her brief talk, there is some good music by one person who usually comes from the city for the occasion. At the end of this general meeting the audience divides itself into four sections. Each person chooses a course of work for the entire year. At the end of each year the sections change. There are sections in domestic science, manual training, home crafts, and modern literature. The basic principle is that everybody shall do something. Every woman of the domestic science section takes an equipment - gas stove, and cooking utensils - and goes to work under the direction of the teacher. They do not attend a "demonstration"; they do the thing themselves. In manual training the women saw, plane, and hammer under the eye of the manual training They make bread boards, ironteacher. ing boards, broom racks and such articles. These women will not have to wait till the men find time to build the chicken crops. In the home-crafts section, rugs, baskets, and hammocks are woven or chairs are caned. Many of the articles are taken home and finished between meetings. In modern literature the section discusses various authors of special interest to themselves. Readings are given at each ses-The literature section is a large one sion. and is said to be helpful. After the meeting is over the wagons take the members home in time to get the family supper.

The women's meetings are very uniform in attendance. Usually from eighty-five to a hundred have been present during the two years they have been conducted.

A young people's literary society was formed by those who were not in school. The community seemed to lack a definite social centre. One farmer said with disgust that "most of the folks crawled in a hole when it came winter and pulled the hole in after them." The literary society was designed as a social nucleus; and, while it is doubtful if it has been conspicuously literary, it has at least been remarkably social. Before two months it had almost a hundred members on its rolls paying dues for the support of the organization.

Toward spring it was decided to hold a corn congress. It was to be a big affair for the whole neighborhood and to last two days with three sessions a day and meetings for both men and women at We put up the posters adeach session. vertising the corn congress and giving a list of the prominent speakers who came from the state experiment station and agricultural college and from the Department of Agriculture at Washington. Corn came in from all over the county, from granges, clubs, schools, and from private individ-The women's cub agrleed to conuals. ducta lunch counter in the building for the benefit of the school and hungry humanity.

People came in and practically camped for the two days, going home only to sleep at night. All sessions and addresses were well attended and a thousand persons crowded the building, seeing the cornshow of eighteen hundred ears — although seats were at a premium and half the people couldn't hear, it was good.

During the summer vacation every boy in the high school was required to undertake an experiment of his own choice on his home farm. This mandate has since been somewhat tempered with justice, since some of the boys haven't any farm on which to experiment. Yet the plan remains practically as started.

Because of the corn congress and its influence, many students wanted to experiment with corn. Others took up an acre of alfalfa, or tested the home herd of dairy cows, or conducted a fertilizer plot test. For the "corn boys," as we called them, the Department of Agriculture supplied four varieties of corn of promise for the locality, in quantities sufficient for each boy to plant a quarter of an acre of each variety. These acres were each carefully measured and planted adjacent to the father's corn with which it was to be compared. The boys were told to treat their corn precisely as their fathers did theirs, for this was to be a *variety* test.

The school principal gave most of his summer vacation and spent his days jogging around from farm to farm seeing these experiments of the boys. Although the boy was usually an optimist, the "old

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man" was almost sure to be a pessimist on the subject of the boy's corn. In some cases the father opposed the boy, so that he had difficulty in taking care of his corn plots. One boy, unable to get permission to cultivate his corn, stole a horse from the barn at night and cultivated the corn by moonlight. But, as the summer went on, my outlook on the world grew more and more cheerful. By fall I could look at those acres of corn and feel happy. When the results came in we found that, compared with the adjacent measured quarter of an acre of the father's corn, every boy had not only beaten the yield once but with all four of the varieties. One fact was of more value still. In every case one variety, "Boone County White," did best of all. As a result of those fifteen corn experiments, we this year have "Boone County White" growing at more than two hundred places in the county, and are preparing to advocate it wherever our new results shall show it to be of special value.

Requests now began to come in for advice of many kinds. I have been asked concerning varieties of roses, corn, wheat, servants, schools; concerning breeds of cows, horses, poultry, mosquitoes and hogs; for methods of treating insect pests, fungus diseases, and all varieties of farm animals. I have been sent for to identify or to inspect soils, rocks, ores, gems, books, insects, fruit, milk, and specimens of other languages. I have been asked to deliver addresses on education, lawns, lime, literature, boys, religion, and my work. Life in such a school is always varied. Among the requests for assistance was one asking that the school conduct a series of experiments with the members of a farmers' club. From this began our coöperative work with farmers.

From the beginning the school had been of practical help wherever possible. The school had conducted Babcock tests for butter fat, had tested clover seeds for purity and viability and had made a mechanical analysis of soils or conducted fertilizer tests of soil samples by the wire basket method. These things were wedged in between classes or during the noon hour. It was not uncommon to

combine a Babcock test and the eating of sandwiches. But to go into the extensive work of experiments with many farmers looked a little impossible with all the other work on hand.

A conference with the state experiment station disclosed the fact that they were willing to cooperate by paying part of the salary of an assistant, provided duplicate results of the experiments were sent them. The county school authorities agreed to furnish the other portion of an assistant's salary because of the additional teaching which he could do in the school. Thus the experimental work with farmers was begun. This season (1911), which is the second summer of the school's existance there are 140 coöperative ex-periments in the county which cover it almost from end to end. Most of these are conducted through various farmer's clubs and granges which almost cover the entire territory. Others are secured through individuals who apply to the school for such experiments. They comprise variety tests of corn, variety tests of potatoes, and fertilizer plot tests.

As the result of the offer of a fifty dollar prize for the best acre of corn raised by a boy under eighteen, seventy boys in the county started an acre prize contest. While many of the agricultural high school boys were debarred because of age, yet, many of the rural schools furnished their most enterprising youngsters for the event. These formed a nucleus for the later corn clubs in each rural centre.

In order to assist the spread of good seed corn through the country, we purchased enough high-grade seed to give each contestant enough to plant his acre. On an appointed day the boys, many of whom had never seen the Agricultural High School, met there to get their seed corn, and at that time formed a county organization of "Boy Corn-Growers," electing a county president and secretary. It happened that both the boys elected were high school pupils so that in the later formation of boys' corn clubs in the rural schools, I was able to take these boys with me, have them meet the rural schools and their teachers, and even talk to the boys. Indeed,

it soon transpired that not I but they formed the clubs, roused the boys' enthusiasm and showed them how to "ginger up and get busy." The boys looked with wonder at the two youngsters who had so rapidly become leaders.

Such sentences came from the Secretary, Russell Lord, as these - "You fellows are ; "The corn plant is the fast asleep" "The most interesting thing l ever saw"; farmer doesn't get a square deal but we mean to see that he will. In a few years we'll have votes and be real citizens; "Get out and get busy." Under such Under such stimulus the boys indeed woke up and went to work, some of them with only ten hills of corn, but all in the game with the rest. One rural teacher said that those two boys had done more in half an hour to interest her pupils than she had been able to do in years of work.

Of course it has been necessary to devote the entire summer to the supervision of the farmers' experiments and the boys' acres of corn. Thus something more than two hundred farms in the county are this summer growing crops under the direct supervision of the school, and all must be carefully observed if we are to get the best results. The boys and their corn are the most interesting. They are sure of success and optimistic all the time. The men are under the influence of other work and other failures and are "not going to believe in a thing if they can help it."

One day 1 came on my list to Willie Johnson, whose post office was a little settlement the most distant in the county. Inquiry developed that he lived five miles up a bad road. After a mile, this degenerated into little more than a trail through the woods, so sandy that the automobile could hardly plow its way, so narrow and winding that tree branches had to be broken off to get through. Finally 1 reached a small clearing in the woods, a truck patch, and a dilapidated house. Mrs. Johnson and a large brood of children told me that Willie was out in his corn field.

Said Mrs. Johnson, "Willie's clean daffy over that corn. He's out there every chance he gets."

"What corn is it?"

"Why it's that tall corn next the woods. We sure will be proud of him if he gets the prize."

While all these forms of community work have gone on, the school itself the classes of boys and girls in the building — have been growing and the course of study opening up from day to day. Boys who "hated farmin'" have decided to take up agriculture for life, and girls who "always did detest cooking" have found domestic science more interesting than any other subject. It is not as spectacular as a corn congress to see a trifling crowd of youngsters change to an interested group of students, but it is far more fun to do it. The success of the school will after all depend not on its community meetings or its farm experiments but on the citizens whom it turns out as its graduates and the use which they make of their knowledge.

Not all the emphasis is placed on agriculture and domestic science. Almost as much interest is taken in literature and history as in the purely vocational work. It is probable that they can both be made as truly an impetus toward rural life as the more direct knowledge of farm things. In many cases it is not the financial side of country life that sends persons to the city, but the social and inspirational conditions which are wrong. If we can show these children that there are both a career and a vision in the country — both a living and a life — there is no doubt that many of them will respond.

Therefore through the best of the old imaginative literature, the classics, and through the best of modern out-of-door and nature literature, attempts are made throughout the entire school to have the children feel the appeal of country life without sentimentalism or cant.

Some correlation has been accomplished which is definite and clear. A production of "The Merchant of Venice," promoted by the students as the result of a dramatic study in class reached unlooked for proportions. The costumes were made in sewing classes — copied after historical prints. The scenery was built in the manual training department by the boys. The rehearsals were held by the children themselves at odd times. The production, given twice at the school with a neighborhood audience, was later taken to Baltimore for the benefit of fifteen hundred children of other schools who had studied, or soon would study, the same play. The whole school became temporarily imbued with the Shakesperean feeling to a degree impossible otherwise. For some weeks they lived in the days of good Queen Bess and with the thoughts of the Bard of Avon.

In manual training, of which four years are given, the work is all centred about country things. A model farm power plant was installed by the boys, whereby are operated from a central engine a washing machine, a feed cutter, a cream separator, a churn, a butter worker, and a grindstone. In carpentry the boys turn out brooders, chairs, butter prints, ironing boards, and other articles useful at home. They have been lately hard at work furnishing the school library with a table, chairs, book cases, and magazine racks, while the girls wove the rugs and made the curtains.

The school has a good time. As one boy expressed it, "there is always something doing.' In the spring, lessons are as likely to be given outdoors as in, classes ramble over the hills on botany field trips, surveying parties signal from hill to hill, the smaller children work in their school gardens, and the good breezes sweep the building from end to end as it rests on its hilltop site. The boys went on a camping trip engineered by the principal. At-tired in khaki, carrying blankets, slickers and with food for three days, they built their own shack in the woods and fished and swam to their heart's content. In-quiry developed that only one of all these boys had ever slept outdoors before, yet they were country lads. The girls, attired in gymnasium costumes, went off for a day in the woods with the distinct understanding that it was a camping party and not a picnic. On a picnic you wear your best clothes and carry things to eat in a pasteboard box. On a camping party you wear old clothes and cook your meals over a smoky fire.

The elementary school delights in its school garden, its flower beds and window

boxes, its lessons in elementary agriculture, sewing, and manual training. Their school garden is not built on the graveyard plan whereby each child has a tiny plot. Their garden looks like the real farm garden that it is. There are no paths or plots. Yet each has a part of his own. During the summer vacation the school wagons bring the children one afternoon every three weeks to till their gardens and harvest their crops. They meet as if for a school day, sing some songs, and then go out to the gardens for the afternoon of The summer meetings are not, of work. course, compulsory but the attendance is fully as good as on an average school day. As the children go home singing in the wagons loaded with vegetables, the summer meetings seem much worth while.

There are many problems yet to be solved before the Agricultural High School will be judged complete, but a few lessons we *bave* learned and on a few points we *are* convinced. These seem to be:

1. The vital school will be one placed where the demand for it is strong. Schools created by legislation and distributed on maps at regular intervals may be handicapped for years by lack of local interest. The folks must first *want* the school.

2. Boys and girls under eighteen should return every night to the farm home. In this manner only will they be educated toward the farm or the farm itself behelped by the new knowledge that they gain.

3. Community work is not only possible but easier of accomplishment than might appear. Unless a school reaches every class of persons in the community it fails to live up to its possibilities. Men and women need the school.

4. Experiments and demonstrations should be made on the farms of the community and not on the school farm. Facts are more convincing when literally brought home.

5. Agriculture and domestic science can be taught in secondary schools as thoroughly and satisfactorily as in colleges or universities, but it needs as competent an equipment and distinctive texts.

6. A rural school of the new type takes the whole devotion of the man who would work it out.

PENSIONS – WORSE AND MORE OF THEM

SECOND ARTICLE

THE MENACE AND MENDACITY OF THE OLD SOLDIER VOTE --- CONGRESSIONAL ORATORY AND IGNORANCE

BY

CHARLES FRANCIS ADAMS

EFERRING, in April last, incidentally and in the course of some remarks on another but cognate subject, to the L Civil War pension system, the present Secretary of the Treasury, Mr. Franklin MacVeagh, observed that it had lost its patriotic aspects and now become a political list. In Washington this fact is understood and appreciated; for, while it is true that all pensioners are not actual voters, it is equally true that those who are not voters, largely women, when it comes to political action are probably more formidable as factors than an equal number of the opposite sex. As petitioners for relief, women are apt to be both tearfully importunate and persistently persuasive; men, when not sympathetic, are notoriously good-natured. As a class the pensioners, whether male or female, act as a unit; and exciting the hostility of the pensioners is to a politician like challenging an organized phalanx actuated throughout by the strongest motives of self-interest. Of this fact Secretary Mac-Veagh afforded a good illustration as a result of his altogether truthful assertion just referred to. It excited a storm of angry protest, which was perhaps best and most typically voiced by a leading orator on the following Decoration Day, who declared that the Secretary had "by recently made himself ridiculous raising an outcry against pensions," adding "if I were President of the United States and had such an ingrate in my Cabinet, I would fire him as far as Chicago so quickly it would make his head swim." Let one example suffice; but generally it may not unsafely be asserted that if any

member of Congress, or indeed citizen in private life of sufficient prominence to excite remark at all, ventures on a criticism, much more an analysis, of the pension roll, he may with tolerable certainty count on a response in no way dissimilar to that visited on Secretary MacVeagh; nor need he hope for either fairness of treatment or moderation of speech. He may, on the contrary, rest assured that the denunciation will be personal, abusive, and mendacious — that usually experi-enced from the sturdy and persistent mendicant to whom alms are denied. То the outsider this, in accordance with the everlasting order of things, matters little; but to him who is playing the game of politics it counts for much. It may to-day safely be asserted that any member of Congress representing a district north of the Potomac, who dares to criticize, much less to challenge a measure involving an increase in the appropriation for pension payments, practically takes his political life in his hand.

Massachusetts furnishes an example. Under the last census fourteen Congressional districts were apportioned to The average number of Massachusetts. pensioners in each district of Massachusetts is just 2,700. At the election in November, 1910, in which the members of the present Congress (62d) were chosen, the vote in Massachusetts, Republican and Democratic, was almost exactly equal, 203,136 Republican, 203,624 Democratic. In five districts casting an aggregate of 182,000 votes, the total of the pluralities of the successful candidates, one way or the other, amounted to only 2806. In those six districts there were probably 18,000 pensioners. The average plurality to a district was 450. Such figures speak for themselves.

It is idle as well as false to assert in this connection that the pensioner, in point of fact, has not made himself actively felt as a political factor. The contrary is susceptible of proof. In recent debates in Congress it was asserted that, during the campaign of 1910, United States Senators went through certain sharply contested districts, throwing their whole weight for or against the respective candidates on the pension issue alone. It was urged in advocacy of one man that he had introduced a "dollar-a-day" pension bill; while against another it was charged that his whole course had been one consistent effort to "fool the soldier." Elsewhere districts were flooded with letters and circulars emanating directly from the organization of pension applicants, advocating or opposing candidates on this issue, and this issue alone. Statements to this effect made openly in course of debate met with no denial. Members of Congress who had been defeated for reëlection attributed that result to these circulars. Thus, when Secretary Mac-Veagh, in the occasional speech which has been referred to, spoke of the pension list as no longer a Roll of Honor, but as a political list, he used language of moderation. He might truthfully and fairly have referred to it as an enormous instance of political robbery of the most far-reaching character, deeply affecting, both in its direct and its indirect outcome, not merely the Treasury, but the political health and lasting well-being of the whole body politic. In plain English, the legislation under that head is to a large extent simply a disguised method of bribery and corruption on the largest possible scale, and with money paid out of the National Treasury instead of from the pockets of candidates.

Take, for instance, the gross abuse of special pension legislation as a political factor. Since 1861 there have been granted to individuals under special acts no less than 32.401 original pensions or increases of existing pensions. In the 30th Congress, that immediately succeeding the close of the Civil War, when exceptional cases of peculiar hardship were naturally fresh in memory or sight, 138 cases only were provided for in this way. Subsequently, it became an understanding in Congress that each member of either House was entitled, as a perquisite or special bit of personal pocket patronage, to two acts at a session - a sort of congressional extra. The custom thus obtained a foothold; the usual result followed. In the second session of the 61st Congress there were 6,063 individual cases provided for by special acts, at rates varying from \$6 a month, of which there were three, to \$100 a month, of which there was a single instance. The great mass of beneficiaries, far exceeding in number all others combined, were those to whom was granted \$24 a month of which there were 2,639, and those granted \$30 a month of which there were 1,921 — in all, 4,560 cases of beneficiaries at either \$24 or \$30 a month. And this by special acts including perhaps 600 beneficiaries in a lump, passed with hardly a word of debate, and no criticism or remonstrance. These figures represent an average of rather more than thirteen special beneficiaries to each member of either house, in a single session thereof. A very respectable bit of patronage, which the average Senator and Representative feels little disposition to forego! The question naturally suggests itself: how would it be under conditions at all analogous were that Senator or Member acting for himself or as the director of a business corporation much more as a trustee, which last a legislator in strictness is? A breach of trust. such action is a travesty of legislation.

Nor, in this respect, is the outlook alluring; for, during the special session of the 62d Congress just closed, the records show what may not unfairly be described as a flood of special cases presented and referred to the proper committees, sometimes as many as thirty by a single member in one day's sitting; and it has been officially stated that 30,000 applications of this character are now on file in the office of the proper House Committee alone.

The condition of affairs existing in the

room of that Committee at the beginning of the last session of the 61st Congress was indeed forcibly set forth in a report presented December 15, 1910, by Mr. Fuller, one of its members, speaking on its behalf. The really curious thing, however, in connection with the report referred to, was its unconscious betraval of the mental condition, as respects what is known as a system of constructive legislation, of the member who drew the document up, and of the committee which authorized its presentation; for it was therein stated that there was not a member of either branch of Congress who was not besieged with hundreds of applications for relief by special act, there being no "existing law to cover these distressing cases." The report then goes on to say: "The pension committees of Congress, working by night and by day, have been able to bring relief to a few thousand soldiers, yet in comparison with the thousands who are still knocking at its doors for help, it is but a drop in the bucket. In this Congress alone, there has been referred to the two pension committees of the House of Representatives, more than 20,000 bills for private legislation.

The committee in question is thus depicted, graphically though unconsciously, as a shifting and necessarily unorganized charity bureau, indiscriminately distributing money not its own.

Under these circumstances, it might naturally be supposed that a committee composed of men of average intelligence and business experience would reach the conclusion that, when the exceptional cases under the system in use had grown to such dimensions and the system itself had fairly broken down, some other system - a system based on well-considered, constructive legislation - was altogether desirable, indeed, quite essential; for such alone would meet the exigencies of the situation. Nothing of the sort seems to have suggested itself. On the contrary, all that the committee had to propose was the passage of yet another "blanket" bill of the customary, indiscriminate kind, raising exist-ing pensions in a lump and to an extent which would constitute an additional fifty-million draft on the Treasury. It was then innocently observed that. though this was a large sum to be added to the present pension appropriation of \$160,000,000 a year, yet it was necessary to grant it if Congress was to be relieved of a vast amount of special pension legislation! That the passage of the proposed bill would only increase the scale but in no degree correct the evil referred to, seems no less apparent than that, just so long as the old system is thus continued, special cases of particular alleged individual hardship will arise, and importunately present themselves. Members of Congress will, moreover, be just as desirous of at once signalizing their fidelity to their duties and incidentally making themselves solid with their constituencies by obtaining consideration for such applications on the new scale as they were on the old. Thus, the whole experience of forty years went in this case for nothing. The general increase proposed was simply, in other words, another entering wedge.

But, in other respects, the debate on the so-called Fuller Bill (January 10, 1911), which accompanied this report, and the speeches — not delivered in the course thereof, but subsequently published by permission in the *Record* (January 12, 1911) — are curiously, and far from pleasantly, suggestive to one who actively participated in the military operations of the Civil War. Rhetorical, and evidently intended for use in the various districts of the Members thus delivering themselves, they certainly are not indicative of close acquaintance with the facts in the case, or even of desire to present those facts with any approach to either accuracy or realism.

It is, of course, to be borne in mind that nearly all those responsible for the utterances referred to, besides being politicians, were born either subsequent to the Civil War, or had not at that time attained an age of distinct memory, much less of accurate knowledge. Accordingly, those engaged in the war are uniformly referred to in somewhat stilted terms as "veterans" and "heroes"; as being "battle-scarred," and invariably as "deserving and worthy"; men who "enlisted at the call of duty with to thought of

They were emoluments, pay, or pension. patriots then and they are patriots now"; - and so forth and so on! Furthermore they are uniformly described as "old and infirm, some blind, some crippled, some bed-ridden; most of them poor and many destitute." It is furthermore alleged of them as a body that those who are not dependent on others or the public for support constitute "so few exceptions as to be negligible.'

To those who themselves personally took part in the struggle, none of these statements or implications commend themselves. They are simply absurd in their exaggeration. Speaking coldly, and bearing witness as one personally acquainted with the facts in the case, the army of the Union, numbering more than two million, was a very miscellaneous body, composed of material of all sorts and conditions; and this, moreover, was a necessary result of the radically vicious and wasteful system pursued in recruiting its loss and waste.

The original enlistments, those of the first eight months following April, 1861, constituted probably as fine a body of raw military material as was ever got together. It was composed of the very pick of American youth of that period. Those men did indeed enroll themselves in a storm of enthusiasm and from a sense of duty. Enlisting for three years, and at the expiration of those three years to a large extent re-enlisting, they formed the nucleus of the Union Army. Too much cannot be said in their praise.

The beginning of a war is always in the nature of a picnic. A stimulating novelty, everyone is anxious to have a hand in it, in some shape or manner. Men almost shed tears if rejected as recruits. But after the glow of the first call to arms dies away, and real war reveals its grim, repulsive aspect, the response to each renewal of that call-to-arms grows less and less in volume; until, in the case of our Civil War, within the very first year of the struggle (April, 1862) volunteering practically ceased. Under such circumstances, as everyone at all informed on that subject knows perfectly well, there is but one true course to pursue - recourse should be had to a system of conscription, exacting, stern, and even cruel. Permitting the fewest possible grounds of exemption, it should accept no excuses. That, however, our Government in the Civil War never dared have a real recourse to. Conscription, in the states of the Confederacy a stern, unrelenting reality, was in the loyal states a scarecrow. Enacted under the pressure of necessity into a law, that law was used as a threat to compel local communities to band together to fill their quotas - somehow! Recourse was then naturally had to the bounty system; and this early in the second year of the war. The frightful losses incurred in McClellan's Peninsular Campaign thus had to be made good.

The communities, local and otherwise, then combined; enlisting agencies were established; and men sold themselves and were bought and delivered singly and in lots at so much a head, like cattle. lt was a wretched system, cowardly, wasteful, inhuman; but, under it — and it was pursued for three years - men were quoted much as bullocks at Smithfield a fair average valuation being, say, three to six dollars a pound — the only difference from Smithfield's being that quality was not considered. Anything went!

Needless to say, the material forwarded to the front under such a system — the bogus conscription system — constantly deteriorated. In the army, this was notorious — notorious not only to every one who held a commission, but to every man in the ranks called upon to associate with those forwarded under guard to fill up the war-worn battalions. Desertion and bounty-jumping," having become a calling, were reduced to a system. As the war went on, the "recruits," recent importations from Europe, or picked up in the slums and from the gutters of the great cities, were notoriously looked upon by the veterans of '61 with averted eyes objects of contempt, they were treated with scant consideration. Yet these, "the with scant consideration. cankers of a calm world and a long peace" to a large extent constituted what are now known as "war-worn veterans," "glorious heroes," and "worthy patriots!" To one who personally recalls the events

of that struggle — its hard, realistic and

mercenary features - the present day utterances concerning it are a constant source of amused astonishment. In skimming over the columns of the Congressional Record, such cannot but marvel at the amount of cant and fustian — nauseating twaddle, perhaps, would not be too extreme a term — deemed useful properly to lubricate the creaking district machinery. Any detailed recurrence to the facts and evidence is, however, apt to be denominated "muckraking," and denounced as such. Perhaps, however, a brief reference in this connection might be permitted to such standard authorities as Mr. James Ford Rhodes' History and Secretary Gideon F. Welles' diary. Mr. Rhodes would inform the gushy members of Congress referred to that "The Government, the states, the counties, and other political divisions were munificent in their offers of bounties, of which a salient example is seen in the advertisement of the New York Volunteer Committee: '30,000 Volunteers Wanted.' The following are the pecuniary inducements offered: 'County bounty, cash down \$300; State bounty, \$75; United States bounty to new recruits, \$302; additional to veteran soldiers, \$100'; making totals, respectively, of \$677 and \$777 for service which would not exceed three years, which was likely to be less, and which turned out to be an active duty of little more than one year - besides the private soldier's pay of \$16 er month with clothing and rations. The per month with clothing and rations. bounty in the county of New York was more than that generally paid throughout the country, although in some districts it was even higher." As respects the "bountythe inevitable product of such iumper. a system, Mr. Rhodes next says: "The Provost-Marshal-General stated in his final report that 'A man now in the Albany penitentiary, undergoing an imprisonment of four years, confessed to having jumped the bounty thirty-two times.' It was stated that 'out of a detachment of 625 lt was recruits sent to reinforce a New Hampshire regiment in the Army of the Potomac, 137 deserted on the passage, 82 to the enemy's picket line, and 36 to the rear, leaving but 370 men.'" (Rhodes, Vol. IV, pp. 430-1.)

Recurring next to the recently published diary of Gideon F. Welles, President Lincoln's Secretary of the Navy, the following is from the report, written down at the time, of a species of council of magnates held at the White House, September 1, 1862, before the war was yet eighteen months old: ". . . In these remarks the President concurred, and said he was shocked to find that of 140,000 whom we were paying for in Pope's army only 60,000 could be found. McClellan brought away 93,000 from the Peninsula, but could not to-day count on over 45,000. As regarded demoralization, the President said, there was no doubt that some of our men permitted themselves to be captured in order that they might leave on parole, get discharged, and go home. Where there is such rottenness, is there not reason to fear for the country?"-(Diary of Gideon Welles, Vol. I, p. 117). Later on, as is well known, Andersonville put an effectual stop to that familiar game; but it went briskly on at first. Lincoln and his advisers called it "rottenness"; but now they differentiate it in Congress as only a form of nostalgial The poor lads, fresh from their innocent homes, labored under such an uncontrollable desire to get back to their mammas and the vine-covered cottage that they instinctively sought the enemy's lines as being the most direct road thereto. They were, however, all good boys, though a bit guileless perhaps; but, all "heroes" now, every one, without discrimination, is to have for life a dollar-a-day pension money!

Historically speaking, it is a fact not to be denied that the bounty-bought material constituted a large percentage of the whole Civil War levy -- how large it is impossible to say; but it certainly sounds strange to the ears of those personally cognizant of the facts, and is, to say the least, an incorrect use of language, to assert that those men enlisted without "thought of emoluments, pay or pension." They did nothing of the kind; nor were they "patriots" either then or now. They patriots" either then or now. They sold themselves for bounty money; and they got it! Simply and avowedly mercenaries, they were constantly referred to by the older and more reliable as the "seven-dollars-a-pound fellows." Astood for powder, such were paid at the time all, and more than all, they were worth. And to the truth of every word of this statement, any officer who had, during the last two years of the war, charge of recruits on their way to the front — and there were many such — can bear testimony still. The great difficulty of preventing these "patriots" and "worthy soldiers" from deserting the moment they had handled their bounty money was one of the problems of the service. Then, far more battle-scared than now battlescarred, they are indiscriminately pensioned as "disinterested heroes!"

Much the same tone of reckless exaggeration is noticeable in the references made to the present condition of those who served. It is little less than a libel to speak of them as a class as prematurely old, or decrepit, or unable to support themselves, or as dependents, or as a band of virtual paupers. As a mass they do not in any of these respects differ from the great body of other American citizens. It was asserted in the recent Congressional debate referred to that there are some 800,000 or 900,000 of these men still surviving. This again was a gross ex-There are in fact somewhere aggeration. in the neighborhood of half a million; but, speaking of the survivors of the Civil War as a whole, wounds and disabilities apart - and such cases are liberally provided for in the pension acts — there was nothing connected with the service or life in the army which differentiated such in any noticeable respect from those who had passed through no similar experience. The drunkard, the "bounty-jumper," the deserter, the malingerer, the "dead beat," after his term of service expired, was just what he was before it began. He in time became a dependent, in many cases a pauper. He was born that way, and traveled to his destined end; but the great mass of those who obtained an honorable discharge, especially those of volunteering days, were subsequently selfrespecting and self-supporting, and such as survive to-day are as well-to-do and quite as sufficiently provided for as the average American. Two years after Cromwell's Puritan army of the British

Commonwealth was disbanded, following the Stuart restoration in 1660, the Royalist office holder, Samuel Pepys, wrote in his diary "of all the old army now you cannot see a man begging about the street; but what? You shall have this captain turned a shoemaker; the lieutenant, a baker; this a brewer; that a haberdasher; this common soldier, a porter; and every man in his apron and frock, etc., as if they never had done anything else." And much the same might have been said of the earlier enlistments of the Civil War during the years that immediately followed its close. Then the politicians and pension-mongering vote-buyers got after them with the usual demoralizing result: but even then they were and are as other American citizens; and surely it would be a libel on the average of American citizens to assert that the greater part of them, or indeed that more than a small percentage, are unable to obtain even the necessaries of life without assistance from the public. Those who composed the bone and sinew of the army of the Union were in these respects certainly not below the American average. To assert of them. as has been asserted in Congress, that 96 per cent. of them would be paupers if they were not pensioners — a grotesque perversion of facts — is remote from the truth.

So also as respects deserters, toward whom, judging by the *Record*, a most lenient Congressional disposition exists - "amending" or "correcting" the record, the wise call it. Bills to effect this result in other words bills seeking by legislative action to set aside court records are introduced by the score on every private-bill legislative day. All duly referred, they were formerly acted upon by committees so carelessly, and consequently so favorably, that the thing grew to be a scandal. The committees were finally notified that the President would feel obliged to veto such acts. Measures looking to a "correction of records" with a view to the extended drawing of pensions have, accordingly, dwindled in number. Nevertheless, our Civil War annals, as respects desertions, are not pleasant reading. As a matter of history, the subject has never been

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thoroughly investigated; but this, together with the bounty abuse just referred to, would constitute for youthful and rhetorical members of Congress a field of inquiry at once fruitful and instructive. If called for, or if the assertions here made are challenged, the record can be produced. That muck-heap would not require much raking to yield malodorous results.

For present purposes it can be briefly disposed of. It has been asserted that, in the whole course of the Franco-Prussian war of 1870, so far as the German army was concerned, there were recorded but seventeen cases of established desertion. The reason is obvious. The deserter from that service had nowhere to go. His apprehension was certain; the consequences thereof, not less so. In our Civil War it was otherwise; and the records consequently show that the de-serters on the Union side numbered in excess of 125,000. But in extenuation of this apparently most discreditable fact, it is sometimes urged that the number was largely, if not in greatest part, made up of men who, having served faithfully until hostilities ceased, then disappeared, or failed to report back for duty, because of their eagerness to return to their families and to civil life. That some such cases occurred is indisputable; but they were only rare exceptions. As any company or regimental officer who served in that war knows and will testify - General Isaac R. Sherwood of Ohio, for example - those men who, having served in the war, served it out, were not indifferent whether the word Deserter" was then inscribed against their names on the last regimental musterroll. Proud of what they had done, they wanted honorable discharge. Beyond this, the deserter forfeited his pay and emoluments; he forfeited transportation to his home. The plea in extenuation just stated shows in fact only the simpleminded ignorance — the charitable disposition perhaps - of him who advances it. Those who witnessed what was probably the most notable display of the nineteenth century — the review of the Union army at Washington after the close of hostilities — cannot but retain a distinct

recollection of the occasion, and of the character and bearing of the men who figured in it. How many of those who there tramped in review before the President and Commander-in-Chief is it supposed subsequently deserted, without pay and transportation, in their eagerness to get back to their families and homes? Safe to say, not one!

But, as matter of history, the deserter was, in the army of the Union, referred to with scorn and treated with contumely; and any one who commanded either a company or a regiment will now bear witness that those who deserted from it were almost invariably of the scum and dregs thereof. As a rule, their absence, unaccounted for, was better than their "Present" at roll-call. One and all, they then deserved to be shot; now, by act of Congress, they are pensioned by the score! More extraordinary still, not infrequently a suggestion has been heard on the floor of Congress to this effect -"Isn't it about time to let up on the deserters?" As respects such, the "blanket" pension bill is unquestionably convenient. Nor was it with undue strength of speech that Mr. Underwood, the leader of the majority in the present House, recently referred in debate to a measure of this description, which it was proposed to introduce out of the regular order, as "a bill to pension deserters who have had the charge of desertion removed by this House; to pension men who were never within five hundred miles of a firing line; men who did not serve over thirty days in the army." And, when his attention was called to the fact that the par-ticular "blanket" bill then in question provided for a somewhat longer period of service, he answered with a manifest sneer: "Yes, it says ninety days instead of thirty days!"

It remains to consider the measure of remedial constructive legislation manifestly called for to meet such conditions. One of those who last winter participated in the House debate on the so-called Sulloway Bill truly observed that, if our National pension system policy were "tested by the pension policy of any civilized government in history, such a measure as that then proposed (the Sulloway bill), ignoring the cardinal factors of merit and need, could never stand. The country has already gone too far in the pension policy in confounding the deserving with the undeserving, and the stupendous expenditures for unworthy cases is sure at last to imperil the cause of the deserving. The time has come when our pension policy is tending to pauperize able bodied men and restrict the funds available for really needy soldiers and their dependents." The facts thus stated are indisputable; but, before considering the remedy, it is necessary to have a clear understanding of the cause.

[Mr. Adams's third article will contain a constructive programme for dealing bonestly with the pension problem.—THE EDITORS.]

THE UPBUILDING OF BLACK DURHAM

THE SUCCESS OF THE NEGROES AND THEIR VALUE TO A TOLERANT AND HELPFUL SOUTHERN CITY

BY

W. E. BURGHARDT DU BOIS

URHAM, N. C., is a place which the world instinctively associates with tobacco. It has, however, other claims to notice, not only as the scene of Johnston's surrender at the end of the Civil War but particularly today as the seat of Trinity College, a notable institution.

It is, however, because of another aspect of its life that this article is written: namely, its solution of the race problem. There is in this small city a group of five thousand or more colored people, whose social and economic development is perhaps more striking than that of any similar group in the nation.

The Negroes of Durham County pay taxes on about a half million dollars' worth of property or an average of nearly \$500 a family, and this property has more than doubled in value in the last ten years.

A cursory glance at the colored people of Durham would discover little to differentiate them from their fellows in dozens of similar Southern towns. They work as laborers and servants, washerwomen and janitors. A second glance might show that they were well represented in the building trades and it would *arouse interest* to see 500 colored girls at work as spinners in one of the big hosiery mills.

The chief interest of any visitor who stayed long enough to notice, would, however, centre in the unusual inner organization of this group of men, women, and children. It is a new "group economy" that characterizes the rise of the Negro American — the closed circle of social intercourse, teaching and preaching, buying and selling, employing and hiring, and even manufacturing, which, because it is confined chiefly to Negroes, escapes the notice of the white world.

In all colored groups one may notice something of this coöperation in church, school, and grocery store. But in Durham, the development has surpassed most other groups and become of economic importance to the whole town.

There are, for instance, among the colored people of the town fifteen grocery stores, eight barber shops, seven meat and fish dealers, two drug stores, a shoe store, a haberdashery, and an undertaking establishment. These stores carry stocks averaging (save in the case of the smaller groceries) from \$2,000 to \$8,000 in value.

This differs only in degree from a number of towns; but black Durham has in addition to this developed five manufac-

turing establishments which turn out mattresses, hosiery, brick, iron articles, and dressed lumber. These enterprises represent an investment of more than \$50,000. Beyond this the colored people have a number of financial enterprises among which are a building and loan association, a real estate company, a bank, and three industrial insurance companies.

The coöperative bonds of the group are completed in social lines by a couple of dozen professional men, twenty school teachers, and twenty churches.

All this shows an unusual economic development and leads to four questions: (1) How far are these enterprises effective working businesses? (2) How did they originate? (3) What has been the attitude of the whites? (4) What does this development mean?

The first thing I saw in black Durham was its new training school — four neat white buildings suddenly set on the sides of a ravine, where a summer Chautauqua for colored teachers was being held. The whole thing had been built in four months by colored contractors after plans made by a colored architect, out of lumber from the colored planing mill and ironwork largely from the colored foundry. Those of its two hundred and fifty students who boarded at the school, slept on mattresses from the colored factory and listened to colored instructors from New York, Florida, Georgia, Virginia, Penn-sylvania, New Jersey, and North Carolina. All this was the partially realized dream of one colored man, James E. Shepard. He formerly worked as secretary for a great Christian organization, but dissatisfied at a peculiarly un-Christian drawing of the color line, he determined to erect at Durham a kind of training school for ministers and social workers which would be "different."

One morning there came out to the school a sharp-eyed brown man of thirty, C. C. Spaulding, who manages the largest Negro industrial insurance company in the world. At his own expense he took the whole school to town in carriages to "show them what colored people were doing in Durham."

Naturally he took them first to the home

of his company — "The North Carolina Mutual and Provident Association," an institution which is now twelve years old. One has a right to view industrial insurance with some suspicion and the Insurance Commissioner of South Carolina made last year a fifteen days thorough examination of this enterprise. Then he wrote: "I can not but feel that if all other companies are put on the same basis as yours, that it will mean a great deal to industrial insurance in North and South Carolina, and especially a great benefit to the Negro race."

The company's business has increased from less than a thousand dollars in 1899 to an income of a quarter of a million in 1910. It has 200,000 members, has paid a half million dollars in benefits, and owns its office buildings in three cities.

Not only is the society thus prosperous at present but, it is making a careful effort to avoid the rocks upon which the great colored order of "True Reformers" split, by placing its business on an approved scientific basis. It is installing a new card bookkeeping system, it is beginning to construct morbidity and mortality records, and its manager is a moving spirit of the Federated Insurance League for colored societies which meets annually at Hampton, Va.

The Durham office building of this company is neat and light. Down stairs in the rented portion we visited the men's furnishing store which seemed a businesslike establishment and carried a considerable stock of goods. The shoe store was newer and looked more experimental; the drug store was small and pretty.

From here we went to the hosiery mill and the planing mill. The hosiery mill was to me of singular interest. Three years ago I met the manager, C. C. Amey. He was then teaching school, but he had much unsatisfied mechanical genius. The white hosiery mills in Durham were succeeding and one of them employed colored hands. Amey asked for permission here to learn to manage the intricate machines, but was refused. Finally, however, the manufacturers of the machines told him that they would teach him if he came to Philadelphia. He went and learned. A company was formed and thirteen knitting and ribbing machines at seventy dollars apiece were installed, with a capacity of sixty dozen men's socks a day. At present the sales are rapid and satisfactory, and already machines are ordered to double the present output; a dyeing department and factory building are planned for the near future.

The brick yard and planing mill are part of the general economic organization of the town. R. B. Fitzgerald, a Northern-born Negro, has long furnished brick for a large portion of the state and can turn out 30,000 bricks a day.

To finance these Negro businesses, which are said to handle a million and a half dollars a year, a small banking institution has been started. The "Mechanics' and Farmers' Bank" looks small and experimental and owes its existence to rather lenient banking laws. It has a paid-in capital of \$11,000 and it has \$17,000 deposited by 500 different persons.

A careful examination of the origin of this Durham development shows that in a peculiar way it is due to a combination of training, business capacity, and character. The men who built 200 enterprises are unusual, not because the enterprises in themselves are so remarkable, but because their establishment met peculiar difficulties. To-day the white man who would go into insurance or haberdashery or hosiery making gathers his capital from rich men and hires expert managers who know these businesses. The Negro gathers capital by pennies from people unused to investing; he has no experts whom he may hire and small chance to train experts; and he must literally grope for success through repcated failure.

Three men began the economic building of black Durham: a minister with college training, a physican with professional training, and a barber who saved his money. These three called to their aid a bright hustling young graduate of the public schools, and with these four, representing vision, knowledge, thrift, and efficiency, the development began. The college man planned the insurance society, but it took the young hustler to put it

The barber put his savings through. into the young business man's hands, the physician gave his time and general intelligence. Others were drawn in the brickmaker, several teachers, a few college-bred men, and a number of mechanics. As the group began to make money, it expanded and reached out. None of the men are rich — the richest has an income of about \$25,000 a year from business investments and eighty tenements; the others of the inner group are making from \$5,000 to \$15,000 — a very modest reward as such rewards go in America.

Quite a number of the colored people have built themselves pretty and wellequipped homes — perhaps fourteen of these homes cost from \$2,500 to \$10,000; they are rebuilding their churches on a scale almost luxurious, and they are deeply interested in their new training school. There is no evidence of luxury — a horse and carriage, and the sending of children off to school is almost the only sign of more than ordinary expenditure.

If, now, we were considering a single group, geographically isolated, this story might end here. But never forget that Durham is in the South and that around these 5,000 Negroes are twice as many whites who own most of the property, dominate the political life exclusively, and form the main current of social life. What now has been the attitude of these people toward the Negroes? In the case of a notable few it has been sincerely sympathetic and helpful, and in the case of a majority of the whites it has not been hostile. Of the two attitudes, great as has undoubtedly been the value of the active friendship of the Duke family, General Julian S. Carr, and others, I consider the greatest factor in Durham's development to have been the disposition of the mass of ordinary white citizens of Durham to say: "Hands off — give them a chance — don't interfere." As the а editor of the local daily put it in a well deserved rebuke to former Governor Glenn of North Carolina: "If the Negro is going down, for God's sake let it be because of his own fault, and not because we are pushing him."

Active benevolence can, of course, do much in a community, and in Durham it has given the Negroes a hospital. The late Mr. Washington Duke conceived the idea of building a monument to ex-slaves on the Trinity College campus. This the colored people succeeded in transmuting to the founding of a hospital. The Duke family gave nearly \$20,000 for building and equipping the building and the Negroes give largely to its support. Beside this, some white men have helped



IN THE HOSIERY MILL OWNED AND OPERATED SUCCESSFULLY BY NEGROES WITH NEGRO HELP

the Negroes by advice, as, for instance, in the intricacies of banking; and they have contributed to the new training school. Not only have Southern philanthropists thus helped, but they have allowed the Negroes to administer these gifts themselves. The hospital, for instance, is not simply *for* Negroes, but it is conducted *by* them; and the training, school is under a colored corps of teachers.

But all this aid is as nothing beside that more general spirit which ailows a black contractor to bid on equal terms with a white, which affords fair police protection



THE WHITE ROCK BAPTIST CHURCH "THEY ARE REBUILDING THEIR CHURCHES ON A SCALE ALMOST LUXURIOUS"

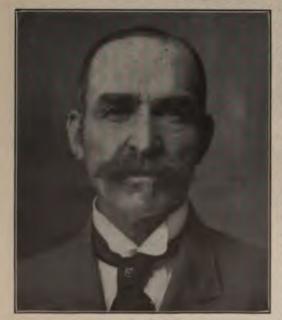


THE INSURANCE COMPANY'S BUILDING THE NORTH CAROLINA MUTUAL AND PROVIDENT ASSO-CIATION WHICH IS TWELVE YEARS OLD AND WHICH CONDUCTS THE BUSINESS OF ITS 200,000 MEMBERS ON SCIENTIFIC PRINCIPLES .



C. C. SPAULDING THE MANAGER OF THE LARGEST NEGRO INSURANCE COMPANY IN THE WORLD, ONE OF THE LEADERS IN THE GROUP OF NEGROES WHO HAVE BUILT UP BLACK DURHAM

and reasonable justice in court, which grants substantial courtesy and consideration on the street and in the press, and which in general says: "Hands off, don't hinder, let them grow." It is



R. B. FITZGERALD ONE OF THE INNER GROUP WHOSE BRICKYARD CAN MAKE 30,000 BRICKS A DAY

precisely the opposite spirit in places like Atlanta, which makes the way of the black man there so hard, despite individual friends.

A Southern community is thus seen to have it in its power to choose its Negro inhabitants. If it is afraid of ambition and enterprise on the part of black folk, if it believes that "education spoils a nigger," then it will get the shiftless, happy-go-lucky semi-criminal black man; and the ambitious and enterprising ones will either sink or migrate. On the other hand, many honest Southerners fear to encourage the pushing, enterprising Negro. Durham has not feared. It has distinctly encouraged the best type of black man by active aid and passive tolerance.

What accounts for this? I may be over-emphasizing facts, but I think not, when I answer in a word: Trinity College. The influence of a Southern institution of learning of high ideals; with a president and professors who have dared to speak out for justice toward black men; with a quarterly journal, the learning and catholicism of which is well known — this has made white Durham willing to see black Durham rise without organizing mobs or secret societies to "keep the niggers down."

To be sure, the future still has its problems, for the significance of the rise of a group of black people to the Durham height and higher, means not a disappearance but, in some respects, an accentuation of the race problem.

But let the future lay its own ghosts; to-day there is a singular group in Durham where a black man may get up in the morning from a mattress made by black men, in a house which a black man built out of lumber which black men cut and planed; he may put on a suit which he bought at a colored haberdashery and socks knit at a colored mill; he may cook victuals from a colored grocery on a stove which black men fashioned; he may earn his living working for colored men, be sick in a colored hospital, and buried from a colored church; and the Negro insurance society will pay his widow enough to keep his children in a colored school. This is surely progress.



FLYING ACROSS THE CONTINENT

C. P. RODGERS AND THE FIRST AERIAL TRANS-CONTINENTAL TRIP — DODGING THUNDER-STORMS — REBUILDING THE MACHINE IN TRANSIT

BY

FRENCH STROTHER

(FROM INTERVIEWS WITH MR. RODGERS, HIS MECHANICIANS, AND HIS FAMILY WHO ACCOMPANIED HIM ACROSS THE CONTINENT)

N JUNE 6, 1911, Calbraith Perry Rodgers mounted an aeroplane for the first time in his life. Ninety minutes later he said goodbye to his

instructor and soared away, fearless and alone, into the open sky.

Two months later, this same man Rodgers entered the aviation meet at Chicago against all comers and won the duration prize of 11,000, having remained in the air twenty-nine hours of a possible thirty-three hours during the nine-day exhibition.

On November 5, 1911, or five months almost to the day from the day he learned to fly, he signed the register at the Hotel Maryland, Pasadena, Cal., as follows:

"C. P. Rodgers, New York to Pasadena by Air."

He had flown across the North American continent, from Sheepshead Bay, N. Y., to Pasadena, Cal., 4231 miles in 4924 minutes actually in the air, and in 49 days of elapsed time from start to finish.

Rodgers, in making this flight, had crossed three ranges of mountains, two deserts, and the great continental plain; he had wrecked and rebuilt his machine four times and replaced some parts of it eight times; he had ridden through darkness and wind and rain and lightnings at the heart of a thunder cloud; he had driven through black night and landed safely; he had raced express trains all across the continent, mules in Missouri, jack-rabbits and coyotes in Texas, and antelope in Arizona; his engine had blown to pieces while he was 4000 feet aloft over an inland sea, leaving him to spiral six miles to earth; he had found the aeroplane a dangerous curiosity and proved it a practicable vehicle of unlimited radius on land.

And the night of the day he ended the flight, after seven weeks of strain and hardship, he ate a dinner of crackers and cream and then drove a six-cylinder racing automobile over the moonlit roads from Pasadena to Los Angeles and the beaches until three o'clock in the morning, just for the fun of the thing. The flying



LEAVING NEW YORK FOR THE PACIFIC 4000 MILES AWAY

machine is a mechanical wonder, but the first man who guided it across a continent is a physical marvel.

Rodgers undertook the coast-to-coast flight in an effort to win the prize of \$50,000 offered by the New York American to the man who should first fly from New York to the Pacific Coast in thirty days. He had money enough to buy his machine, but not enough to stand the expenses of a flight across country, with its necessary accompaniments of special train service, mechanicians, and repairs. However, his performances at the Chicago meet in August had attracted the interest of a great manufacturing firm of that city, which was anxious to launch a new product in a way to startle the attention of the country. A newspaper man suggested to Rodgers that he offer his skill to the company, and twenty minutes after the scheme was proposed to its advertising manager a contract was closed by which the company agreed to pay all expenses of the flight except repairs to the machine, and to pay Rodgers \$5 a mile, Rodgers in turn to fly under the auspices of the company and to display its advertising matter on his machine,

The Wright Brothers at once designed and built for him a special model of their aeroplane, known as Model EX, the only one of its kind ever built. It is smaller than their standard Model B, and larger than the Baby Wright, though, like the Baby, it was designed especially for speed.

The Wrights had taught Rodgers to fly, and said he had the greatest natural genius for flight of any man in the business. But when he ordered the machine for this trip, Orville Wright said to him:

"We'll build the aeroplane for you, and it will be the best we can do; but you are trying the impossible. If the man has been born who can do it, you are the one, but the machine hasn't been made that can do it."

They showed their faith in the man by letting him take with him as chief mechanician, Charles E. Taylor, their master mechanic since they first had a machine shop. A great deal of credit for the flight belongs to the master mechanic for his skill in keeping the aeroplane together and the engine going.

A special train was made up to accompany Rodgers. A Pullman sleeping car and a day coach carried four representatives of the company that financed the flight, Rodgers's mother, his wife, his manager, and three mechanicians — Charles E. Taylor, Frank Shaffer, and C. L. Wiggins — a chauffeur, and a number of assistants. The hangar-car — the first of its kind in America — completed the special. This hangar-car contained complete sets of duplicate parts of the aeroplane, a full equipment of tools for making repairs, a supply of oil and gasoline, an æroplane truck for moving the aeroplane bodily

FLYING ACROSS THE CONTINENT

from place to place, and a six-cylinder Palmer-Singer racing automobile for use in reaching the aeroplane quickly with supplies or, if necessary, with medical aid. When I saw the hangar-car at Pasadena, it was filled literally with junk, the wreckage for four flying machines.

The party assembled for the start at

breasted the gusty air currents that rise from the cañons of lower Manhattan, and then headed steadily into the west wind and winged across the Hudson over the Jersey shore, where his waiting special on the Erie Railroad picked up his trail and he was off for the Pacific Coast.

He stopped at Middletown, N. Y., at



C. P. RODGERS

WHO, IN SPITE OF STORMS AND ENGINE TROUBLES, SMALL ACCIDENTS AND ALL BUT FATAL WRECKS, MADE THE FIRST TRANS-CONTINENTAL AEROPLANE FLIGHT

Sheepshead Bay on September 17. The aeroplane was christened with a bottle of unfermented grape juice — Rodgers has never tasted alcohol in his life. At 4:18 o'clock in the afternoon the machine took the air, and Rodgers headed at once across East River for New York City. Here he circled the higher buildings, 6 o'clock. He had made the 104 miles from New York in 105 minutes. That night he and his party exultantly multiplied one hundred miles by two as a fair day's flight on the showing of that afternoon, multiplied that by thirty, and wondered whether he had better spend the prize money on automobiles or invest in Government bonds.

THE WORLD'S WORK



THE END OF A DAY'S FLIGHT READY FOR THREE DAYS OF REPAIRS

The next day altered these calculations. As the machine took the air it snagged a tree-top and pitched head downward 45 feet into the back yard of a residence, landing on a chicken coop and killing half a dozen chickens. This was the ugliest fall Rodgers got on the journey. He was stunned and bleeding from a big cut in the left temple. The doctor who attended him put him to bed, under orders to stay there at least twenty-four hours. Five minutes after the doctor left, Rodgers was out of bed and in the yard, working over the remains of his aeroplane, which had been completely wrecked.

The machine was rebuilt in three days, and on September 21, flew to Hancock, N. Y., 96 miles in 78 minutes. Landing was made in a field where a German was digging potatoes. He continued to dig, in spite of Rodger's abrupt stop in a cornshock and the shattering of the skids of the aeroplane. He continued to dig when Rodgers asked the way to the railroad station. But his stolidity was finally broken up, for the next morning he hunted up the management and demanded damages for the havoc wrought in his potato patch by the crowds of curious people who had walked through it to see the aeroplane.

Afterward, when, having lost his way, Rodgers landed at Scranton, Pa., he began to realize more keenly the dangers to which the heedlessness of the public exposed him throughout the journey. He detected a woman screwing a loose nut off the machine with her fingers. She explained that she wanted it for a souvenir. and that she had not imagined it would cause any harm to take it because "there were so many, surely one would not make any difference." After explaining to her that it might make all the difference between this world and the next for him, Rodgers turned back to his machine, only to find another souvenir hunter - a man, this time - trying to take a valve off the engine with a cold chisel.

He took flight again, after getting his bearings toward Elmira, and followed the Erie tracks, stopping at Great Bend and Binghamton by the way. As he flew into Elmira at half past five in the evening, he saw his special train racing along

on the clear track below him. It was passing a long siding on which a freight train had been switched to give it the right of way. The sidetracked train was drawing along slowly to the upper end of the siding, to be ready to take the main track as soon as the special passed. Rodgers was horrified to see that its train crew, with their heads all thrust upward to follow his flight, had forgotten that their train was in motion and were about to run out on the main line before the special could pass the head of the switch. He swooped low and yelled a warning that was heeded just in time, though almost too late at that, for the freight train "side-swiped" the special, splintering some of the timbering at the side of the hangar-car and ripping out the vestibule of the Pullman.

On his flight next day, from Elmira to Canisteo, N. Y., the magneto plugs came out and for twelve miles Rodgers had to hold them in with one hand, managing the plane with the other. While at 2,600 feet elevation he shut off his engine and



PATCHING UP THE MACHINE CHARLES TAYLOR, FOREMAN OF THE WRIGHT FACTORY, AND RODGERS AT WORK ON THE TRANS-CONTINENTAL "MODEL EX" A SPECIALLY BUILT WRIGHT BIPLANE

volplaned (or soared downward like a bird) two miles to a landing. The crux of a safe landing is to keep the propellers going full-speed until within a few feet of the ground; hence the danger of volplaning is great, and Rodgers's numerous feats of the sort on this journey were examples of cool daring and skill.



THE AEROPLANE IN TOW OF ITS AUTOMOBILE TENDER THE SPECIAL TRAIN WHICH FOLLOWED RODGERS INCLUDED A HANGAR CAR CARRYING DUPLICATE PARTS, TOOLS, OIL, GASOLENE, AND AN AUTOMOBILE

Again the next day, September 24, after a flight of eighty-nine miles the magneto plugs forced him to descend. He landed in the Cattaraugus Indian reservation at Red House, N. Y., eight miles west of Salamanca. An incident occurred here that gave point to Rodgers's oftrepeated complaint of the foolhardiness of the public in venturing on the field where his machine was about to alight or ascend. After repairing his engine, Red House and was carried back to Salamanca, where it was practically rebuilt for the second time.

On September 28, Rodgers started again, headed for Akron, O. This day's flight furnished one of the most picturesque incidents of the trip. As Rodgers flew over Akron in the dusk of late afternoon, he became somewhat confused and remembering a field a few miles back as a good landing ground, he suddenly wheeled



LEAVING THE CURIOUS CROWD WHICH AT MANY PLACES SO HAMPERED RODGERS'S RISINGS AND LANDINGS AS TO SERIOUSLY JEOPARDIZE HIS LIFE

he made several attempts to rise, and at length came down sharply in a narrow lane between two wire fences. The machine rolled forward along the ground with such force that the planes sheared off several five-inch fence posts as if they had been sawed smooth. A man in its path would have been cut in two instantly — but people everywhere along his route crowded the fields, as at Huntington, Ind., so thick that he flew on to an empty pasture to land rather than risk killing spectators. The machine was nearly ruined at his plane, and went winging away in the darkness. His party below, in the special, at once put back to Kent, O., where they detrained the automobile and raced back in the gloom to the country. Then began one of the oddest searches ever made by man — trying to find a lost aviator by the memory of the sound of his flight. They stopped at farmhouses and inquired, "Have you heard him?" and "where?" and following the pointed fingers that told where the unseen sound had come from, they found him at length in a lonely

pasture, companioned by one dairyman and gaped at by a ring of solemn-eyed cows.

The wind held him at Kent the next day. He made 204 miles westward on September 30 in 258 minutes. October 1 he made only about 80 miles, but he had more than a day's share of thrills. As he flew toward Huntington, Ind., he saw a thunder storm approaching, and turned south to Portland, Ind., to avoid it. He not only failed to escape the first storm but ran into a second, and in the dash to escape, passed about 600 feet above a third, with the lightning playing about him. He landed safely, however, at Huntington, late in the afternoon.

The crowding of spectators on the field the next day, when he was trying to rise in a heavy wind, made it impossible for him to land properly after an unsuccessful attempt to go up, and the machine was wrecked again. For a third time three days were consumed in rebuilding it.

He flew again on October 5 making the 122 miles between Huntington and The Hammond, Ind., in 137 minutes. engineer of the special train, as usual, tried to keep up with Rodgers, who was flying directly over the train. But Rodgers soon drew away, racing several hundred yards ahead. As the train neared a sharp curve around the base of a hill, the crew saw Rodgers suddenly dip his aeroplane toward the ground, swoop low and rise again. Instead of straightening out on his course, he repeated the maneuver. A moment later the special whizzed by a wild-eyed crew of men who were just releasing their hold of a hand-car they had the moment before jerked off the track. Rodgers had seen them staring up at him, ignorant of the approaching train, and had instantly dipped his plane to within twenty-five feet of the ground and yelled to the men to clear the track. They did not understand, and he had returned to repeat the warning, just in time to save not only them but probably his family and friends as well from death. A few minutes later this near-tragedy was relieved by an amusing though grim exhibition of human nature; for, as Rodgers

flew past a funeral party walking beneath him, the pall bearers put down the coffin and took off their hats and waved him godspeed.

High winds held Rodgers at Hammond for two days. On October 8 he flew on to Chicago. He stopped in Chicago only from noon till four o'clock, when he rose again and headed west. The maze of railroad tracks and trains confused him, so that he could not distinguish his special nor the route of the Chicago and Alton Railroad on which it was running. Some time was lost regaining his direction, so that the flight of 38 miles to Lockport consumed 72 minutes — his speed most of the time being nearly a mile a minute.

The next day, Rodgers broke the world's record for cross-country flight when he passed Dwight, Ill., on his way to Springfield. The previous record was 1272 miles, held by Atwood. Two days later he was in Kansas City -- half way across the continent by air. In celebration he broke his usual habit of extreme caution by making an exhibition landing of fancy turns, spirals, and glides at Overland Park. He made one quick turn in which he "banked" his machine (corresponding to the side pitch of a sailboat when tacking) at an angle of 55 degrees. One of his mechanicians, describing the incident to me, remarked:

"A man has about three times to do that stunt, and then they lay him away in a box. Rodgers is usually the most careful fellow in the world, but he's done that twice now, and he'd better stop it."

Up to this time he had broken all world's records for distance and had shown a persistence hardly equalled on any other flight; for up to this time he had practically rebuilt his machine three times, had encountered hostile weather, and foolish crowds, engine trouble and many other things which would have discouraged a less persevering man. He had done better than any other man and his performance was hardly half done.

The story of the remainder of his eventful trip and a character study of the man himself will appear in the next number of this magazine.—THE EDITORS.]

THE STORY OF A DEBT

THE PLIGHT OF THOUSANDS. OF WORKERS IN THE TOILS OF THE LOAN-SHARKS AND THE FIGHT FOR THEIR RELEASE — SHYLOCK IN COURT AND STATE LEGISLATION

BY

FRANK MARSHALL WHITE

OME hundred clerks, constituting a part of the machinery recording the operations of a big industrial corporation, were bending over their desks in an office that occupied a floor of a New York skyscraper, when a female of dashing appearance bustled aggressively She appeared to be between thirty in. and forty years of age; she was attired in a close imitation of the fashionable garmenture of the period; her features were large and indicative of determination, and she rolled a coldly-glittering eye. When she was well inside the office, she called out in a loud, nasal tone:

"I want to speak to William Henry Cogg!"

Even if the other occupants of the room had not turned simultaneously to gaze upon William Henry Cogg, it would have been impossible for any one there to have doubted his identity. At the sound of his name, his face had turned white and he had slightly staggered and seized the edge of his desk for support.

"Oh, there you are, you dirty bum!" she cried, as she caught sight of her victim. "When are you going to pay that money? Thought you could hide away from us, did you? Well, you've got another think coming."

The female was at once recognized as the "bawler-out" for a money-lending concern, and in another moment the head clerk was outside the office railing escorting her to the door by which she had entered. She went without any show of resistance, only turning to call back to Cogg:

Cogg: "Well, I know where to find you until your week's up."

The visit of the bawler-out meant that

Cogg was undergoing final treatment in the process of spoilation by a salary-loan money-lender, or shark — as these predatory traffickers are called. Of course no reputable concern could retain in its service a clerk who was likely to receive visits from functionaries of the loan sharks, and Cogg lost his job at the end of the week.

It had been only two years before that Cogg's boy had fallen from the swing and fractured his arm in Stuyvesant Park, and the \$15 Cogg had been called upon to pay for setting the fracture, with \$2 per visit to the doctor, had made necessary Cogg's first visit to the money-lenders. He was then, at the age of thirty-five, a clerk in an office where he had been employed for fifteen years. He was receiving \$18.50 per week, which he knew to be the limit of his earning capacity. His stock in trade was merely the ability to write a plain hand and a familiarity with simple arithmetic. He was aware that a hundred men as well qualified as he were ready to take his place any moment, and that he could retain it only so long as his services were satisfactory to his superiors in the office. He was further aware that to lose his position would constitute him a member of the great out-of-work army; that once a member of that army it might be months before he secured employment again, and that then he would be compelled to begin at a far lower salary than he was receiving.

Cogg's weekly \$18.50 fitted the expenditure of the household, consisting of Mrs. Cogg, the two children and himself, without leaving a margin of more than a dollar, and he had learned by experience that neither his landlord, his butcher, nor his grocer would extend credit to a man in

his circumstances, so that he might expect no consideration from any one of them in bridging over his difficulties. Nevertheless, the money-lender was a desperate extremity, for if the fact that Cogg was borrowing on his salary was discovered in the office it would mean dismissal. Such a measure is considered only a justifiable means of self protection on the part of an employer, since transactions with loan sharks, if they do not actually lead to dishonesty in the borrower, invariably impair the quality of his work because of the worry entailed. However, Cogg had to have money. Should he fail to pay the doctor, that practitioner would get judgment against him and take proceedings to get part of Cogg's salary, which would almost certainly bring about his discharge also, as an unsafe man who did not live within his income. Cogg conceived the moneylender to constitute the less dangerous horn of the dilemma, because relations with him might remain secret.

Cogg's experience with the Anaconda Financial Company of Nassau Street, New York, is identical with that of tens of thousands of the victims of the loan sharks throughout the United States. Having decided that \$30 would be necessary to carry him through the pecuniary crisis, he accepted the Anaconda's offer of that amount, agreeing in return to make them six bi-weekly payments of **\$6.60 each.** The preliminary negotiations for the company were conducted by a spinster of mature years; but a man took her place at the desk when Cogg called to complete the transaction, an investigation having been made in the meantime as to the accuracy of his representations about his position and salary. When Cogg had affixed his signature to six notes for \$6.60 each, maturing on the 1st and the 15th of the three following months, and had given a power of attorney to the Anaconda Company to deal with them as they might deem proper, the money-lender handed him \$24.

"You are six dollars short," Cogg remarked, politely, when he had counted the money. "There's six dollars costs for inquiries

and drawing up the papers," said the other, shortly. "If you don't like the terms, give me the money back.

Cogg did not like the terms, but he had to have the money, and he reflected that \$24 would at least pay the doctor, and it would necessitate only a trifle more close management at home under the altered conditions of repayment. On the day the first of the notes was due, Cogg went at the lunch hour, to the office of the Anaconda Company.

"That note was due at 12 o'clock, noon. It's half past 12 now, and the cashier is gone. Come in to-morrow," said the woman at the window, the obvious spinster with whom he had opened negotiations for the loan.

Cogg congratulated himself that the money-lending concern took his remissness so lightly, although he could not remember that he had bound himself to take up the notes by noon on the days they were due. The next morning he found a notification from the Anaconda Company at his office to the effect that, in addition to the \$6.60 due on the note, he was indebted to them for the sums of \$1.49 protest fee, \$1 brokerage fee, and \$5 collection fee, a total of \$14.09, which must be paid before three o'clock that afternoon, and that, failing payment, suit would be brought against him, in which event it would be necessary to notify his employers that the company held his notes.

Cogg got half an hour's leave of absence from the office, and anxiously betook himself to that of the Anaconda Company, assuring himself that, when the occurrences of his visit of the day before were recalled, the management would acknowledge itself in error. Another spinster whom he had not seen before came to the window on this occasion. She knew nothing about the matter of the loan, she declared, except that \$14.09 was due the company and that it would have to be paid before the close of banking hours if he wished to avoid a suit at law.

"You're a business man," she said, tersely. "You ought to know that your note wasn't due until three o'clock yesterday, and that it was due at three. Whoever gave you the idea you could pay it to-day without any costs hadn't no business to."

"But I can't possibly raise the money," cried the unfortunate clerk. "And if you notify my company I'll be fired and then I can't pay the notes at all."

"Why not fix it this way," suggested the second spinster, who was aware of both contingencies. "You take out another loan to-day and pay the \$14.09, and that will give you two weeks to make some arrangement before the next note is due."

In deadly fear that his employers might learn of his affair with the sharks, Cogg jumped at this chance. He made out an application for a loan of \$15, for which he received \$10; and, the rate of interest being higher on small amounts, gave six notes for \$4.20 each, payable like the others on the 1st and the 15th of the month for three months thus making his weekly financial burden \$5.40 for nearly three months, and leaving \$13.10 per week for the family to live on during that period.

Another readjustment of the household schedule was, of course, essential in order to meet the new situation, but by the exercise of rigid and painful economy the Cogg family managed to exist and its head to pay the money-lender's notes as they became due, for ten weeks. By that time he had paid the Anaconda Company \$61.49 in return for the \$34 he had re-ceived from them, and still owed them \$10.80. He had been given the \$10 in the form of a check drawn in Providence, and had been instructed to send the biweekly \$4.20 in payment of the six notes on account of that transaction, to an address in the Rhode Island capital. These remittances he had made by post office orders, which he took pains to send two days before the amounts became due in order that they might be sure to reach their destination in time. The amounts due at the office of the Anaconda Company he paid personally in cash during the noon hour on the 1st and 15th of the months as his notes matured.

On the 16th day of the month during which he made his fifth payment, Cogg found in his mail at the office a notice from the Anaconda Company to the effect that he was indebted to them, aside from other sums, to the amount of 14.40, comprising 5 collection fee, 2.60protest fee, telegraphic expenses 1.80, and legal expenses 5, which must be paid before three o'clock that afternoon or suit would be brought against him. In response to his frenzied inquiries at the office of the company half an hour later, he was informed that the post office order due in Providence the previous day had not reached its destination until after banking hours, and that the 14.40were the costs attendant upon that incident.

In vain did poor Cogg protest, that he had sent the money order on the evening of the 13th. The spinster in the window was as ignorant of conditions as before. The sum of her intelligence in the matter was that his note had been protested with the costs enumerated, and that the amount must be forthcoming before three o'clock. The result was that Cogg made an application for a third loan — \$30 again, at the same rate as before, receiving only \$20 on this occasion, however, because the company's risk was now greater he was told. When he left the moneylender's office that morning he had bound himself to pay \$17.40 out of his \$18.50 the week in which the first day of the next month fell; \$10.80 two weeks afterward, and \$6.60 bi-weekly for ten weeks more. Being unable to meet the \$17.40 payment and his rent on the first of the month, he was compelled to apply for another \$30 loan (for which he got \$15 this time), in order to prevent the sharks from suing him and from notifying his employers that he was in debt.

Within a year from the date of his first transaction with the Anaconda Company, Cogg had paid them more than twice the money he had borrowed, and was regularly handing over to them more than half of his salary. He had become so shabby that the other clerks in the office looked askance at him, and Mrs. Cogg and the children were shabbier still, while everything in the house that was pawnable had been disposed of, and they barely had enough to eat. It soon came to a point where he borrowed from other

money-lenders to keep up his payments to the Anaconda Company, and then it was only a matter of a brief space of time before he found himself obliged to put the children in an institution, while he and Mrs. Cogg kept house in a hall bedroom, where she addressed envelopes and managed to contribute a dollar or two a week to the sharks. Finally Cogg accomplished an object he had long had in mind; and, forfeiting the prestige of his long connection with the corporation with which he was employed, he accepted another position at \$15 per week, with a view to disappearing from the ken of the moneylenders — to whom he felt under no moral obligation. A "tracer" was put on his trail, and he was discovered within a day or two, after default in a payment, when the money-lenders filed a lien upon his salary. This meant dismissal, but Cogg, being a competent workman and willing to work cheap, got several positions afterward, only to be followed up and discharged as has been related, until the bawler-out finally drove him from his last employment. The story of his subsequent career, after he took to drink and his wife left him for a man who could support her, until his recent suicide, is as banal as it is commonplace.

Whatever the economic reason may be, the fact remains that there are a great number of honest and industrious men and women throughout the United States, who are working for compensation that is barely sufficient for their support and that of those dependent on them. То these men and women, illness or death in the family or any other cause of un-expected expenditure means that they must borrow. Many of such borrowers are those possessing personal property which they take to the pawnbroker. Those next in order of indigence obtain loans on chattel mortgages covering household furniture and effects that remain in their possession. Then comes the person whose only asset is a salary or wage, who has no recourse save to pledge his or her potential earnings.

These three classes of borrowers have been the principal victims of the pawnbroker, the chattel-mortgage holder, and

the salary-loan money-lender. The pawnbroker, holding the borrower to the strict letter of his contract, is merely a negative oppressor. The chattel-mortgage knave and the salary-loan shark are aggressive extortioners. Their scheme of business could have been devised only by rogues; it can be carried out only by scoundrels. The writer had a conversation in May with an expert accountant in the employ of a corporation, who has been in the clutches of the money-lenders for six years, during which period he has paid \$4,000 into their coffers and still owes them \$4,700, and has been compelled to forfeit real estate on which he had paid \$4,000. He was able to give from memory names and addresses of more than twenty money-lending concerns with which he has done business. All these transactions grew out of a single loan of \$135 in 1905. A case reported from Chicago recently is that of a man who borrowed \$15 on his salary ten years ago; who has since paid the sharks \$2,153, and who still owes the \$15. The books of one salary-loan money-lender in New York show that in a list of 400 borrowers, 163 had been making payments for more than two years, and an equal number for from one year to a year and a half.

The chattel-mortgage knave follows the same general course as the salaryloan shark in the matter of taking back a big percentage of the money originally advanced, and the piling up of "fees" and "expenses," whenever the slightest default in a payment is made, but his final coup is the confiscation of the borrower's household furnishings.

Illustrative of the operation of the chattel-mortgage fraud, the Sage Foundation reports the case of a woman who recently responded to an advertisement, whereby one Seiff, in 125th Street, offered to loan money on furniture and household effects at one half of one per cent. per month. The woman had been deserted by her husband, and her sole possessions were the furniture in her flat, worth about \$400, and a piano for which she had paid \$400. She applied for a loan of \$80 for four months on the furniture, which, after an appraisal, the money-lender agreed to give her at his advertised rate, the money to be returned in four monthly payments. She accordingly signed four notes for \$20 each and the interest, and he gave her his check for \$80, telling her that she must get the check cashed and give him back \$15.

"What for?" inquired the startled borrower.

"There is no profit in lending money in small amounts at the rate of 6 per cent. a year," replied the chattel-mortgage man.

The woman had urgent need for money that same day, and she consented to accept \$65 and pay back \$80 with interest. She paid the four notes as they became due, but having had no previous business experience, she did not ask for their return or for written satisfaction of the mortgage she had given on the furniture. A short time after the loan had been repaid the woman found it necessary to borrow again, and she went to the same money-lender and asked for \$80 as before. On this occasion, for reasons that afterward appeared, he refused to loan her anything on the furniture, but offered to advance the money on the piano. He gave her his check for \$80 on her signing four notes as before, but now told her he must have \$30 of it back. A day or two later she received a note from the money-lender bidding her call at his office, where he told her that she must put the piano in storage and bring him the warehouse receipt. She complied with this demand, paying out of her own pocket the \$8 it cost to have the instrument moved.

When the first instalment of the loan on the piano became due the woman was unable to meet it; and, being in great pecuniary distress, she asked the moneylender to take the instrument in payment of the loan of \$50, for which he held her notes for \$80. Although the piano was a valuable one, he would only allow her \$30 for it on account of the loan — which, when the \$8 she had paid for moving it was deducted, amounted to \$42. She declined, however, to sign other documents he had prepared for her, and finally told him that he must take the piano in satisfaction of his claim, and left him.

On the following day the woman re-

ceived a note from a firm of lawyers threatening her with the immediate foreclosure of a mortgage on her furniture, unless she paid \$81.20 due to the money-When the harried creature hurried lender. to the lawyers' office to learn what was behind this threat, she found that the shark — having kept her notes and the mortgage on the furniture, and she having no proof that it had been satisfied - was preparing to seize her household goods. It was only through the efforts of the Sage Foundation and the Charity Organization Society, and by bringing the matter to the attention of the District Attorney, that the money-lender was induced to relinquish the project of completely despoiling his victim. It would have been impossible to secure a conviction of the money-lender in this instance, because in the event of his prosecution there would have been no proof of a criminal transaction beyond the word of the victim. In the case of each of the \$80 loans, he had given her his check for the full amount, and had got his rebate in cash. Further, he was in possession of all the documents she had ever given him, while she had not a line of writing to show that she had ever returned one dollar of the money which his check vouchers proved that he had given her.

Incidents such as these might be multiplied by thousands in New York, and by thousands more throughout the country, for there is not a city of 10,000 inhabitants in the United States without its loan sharks. Such conditions are fortunately less frequent than they were a few years ago; and in the future they are to be less frequent still; relief is undoubtedly at hand for the small borrower.

A benevolent movement for his rescue from the money-sharks is already nationwide. It is due primarily to the Provident Loan Society and the Russell Sage Foundation. Vice President Frank Tucker, who is the executive officer of the Society, has associated himself with Dr. Samuel Mc-Cune Lindsay and Roswell C. McCrea of the Bureau of Social Research in the study of conditions affecting the poor man who must borrow to meet an emergency. And he has acted as adviser in the investi-

gations of the chattel — mortgage salaryloan sharks, conducted on behalf of the Sage Foundation by Clarence W. Wassam and Arthur H. Ham who has charge of the Remedial Loan Bureau of the Foundation.

According to Mr. Wassam's report to the Sage Foundation, there are in New York City 30,000 men and women in the toils of some 300 salary-loan and chattelmortgage sharks, and the money-lenders are making at least two and a half times their capital every year in this cruel commerce; Mr. Ham, who made a very thorough investigation of this phase of the subject last summer, believes that the victims of the sharks may number as many as 200,000, and declares that he knows hundreds of cases in which extortionate rates of interest mount up to five times the original amount.

Commissioner of Accounts Raymond B. Fosdick's investigation last summer of the relations between New York City's civil service employees and the moneylenders showed that about 20 per cent. of these employees had borrowed from the sharks at one time or another; that the interest they had paid varied from a half to four times the principal; and that theborrowers ranged in importance from \$900-ayear clerks to assistant corporation counsels and an alderman. Fosdick further received evidence that at least one city magistrate and two justices of the supreme court were in the clutches of the sharks. The army of victims there as elsewhere comprises employees of the public service corporations, the insurance and telegraph companies, the banks, the department stores, and scores of smaller concerns, as well as of the municipal departments.

The remedy that the philanthropists are trying is the widespread establishing of remedial loan societies, not so much with a view to the annihilation of the extortioner as to the creation of conditions whereby he becomes superfluous—the idea being that, since it seems to be impossible to make anti-usury laws which he cannot evade, organizations can be built up that shall enter into competition with him, cutting his rates below the point that makes his business worth while.

The practicability of this idea has been demonstrated in New York City by the Provident Loan Society and the St. Bartholomew's Loan Association, both semi-philanthropic organizations that are conducted at a profit. The Provident Loan Society, next to the great Paris Monte de Piete, the largest pawnbroking establishment in the world, lends money on personal property at the rate of one per cent. per month, and during the seventeen years of its existence has loaned more than \$100,000,000. The St. Bartholomew's Loan Association, in connection with St. Bartholomew's Protestant Episcopal Church, does a chattel-mortgage business at the rate of one and one half per cent. per month, charging a single fee that is never more than \$2.

In eighteen of the principal cities of the United States, including New York, Washington, Baltimore, Boston, Providence, Chicago, St. Louis, Cincinnati, Cleveland, Minneapolis, Louisville, Milwaukee, and Detroit, "remedial loan societies" have been established. In addition to these (which, during the last twelve months have made loans aggregating \$15,000,000 to small borrowers at low rates of interest), plans are almost completed for the establishment of similar institutions in ten more cities, while in still twenty others an active interest in the competitive loan movement has been aroused.

Besides this, it is said that in New York, a semi-philanthropic society is soon to be founded that will provide for people who wish chattel-mortgages as the Provident Loan Company provides for those who ask for personal property loans.

The loan-sharks' victim that the benevolent institutions have not yet reached, however, is the small wage earner who borrows on his salary. But very practical steps have been taken to lighten his burden likewise.

In large part due to the efforts of Mr. Ham, a meeting was held at the New York Merchants' Association which was attended by the heads of seventy of the leading business firms and commercial and financial institutions of the city who passed resolutions rescinding the old rule discharging employees dealing with loan sharks, and advocating the establishment of loan agencies by the employers themselves.

Heavy blows have lately been dealt the money-lenders in the New York courts. Recently the first conviction under the banking law of a loan shark had the effect of placing the fraternity in the position of violating the criminal statutes. Before that the firm of Gimbel Brothers won a suit brought against them by a loan shark on behalf of one of their employees, that again shortens the tether of the rogues. The law provides that, in order to obtain a valid claim against the salary of a borrower, the money-lender must within three days after the loan is made file with the employer a copy of the agreement or of the notes given. The practice of the sharks was to take a power of attorney from the borrower, and not to fill out the assignment of salary until he had defaulted in one of his payments. Then by virtue of the power of attorney, the moneylender would fill out the assignment, and file a copy within the three days then following. The decision in the Gimbel case invalidates this process — which had been a mainstay of the extortioners.

Mr. Ham of the Sage Foundation, who has made an exhaustive study of the remedial loan question, has this to say upon the subject of legislation in the interest of the small borrower:

Until quite recently, whenever the exactions of the loan sharks became particularly flagrant, it has been the practice in most states to introduce bills in the legislature forbidding a higher rate of interest than the banking rate, under penalty of criminal prosecution. Experience has proved that drastic measures of this sort do not regulate the interest charges. Such restrictions result as a rule in further evasions on the part of the lender with consequent higher charges, and a more submissive attitude on the part of the borrower.

As an illustration of a more intelligent attitude on the part of legislators, bills have been introduced within the past year in ten states and the District of Columbia, allowing an interest charge greater than the banking rate. The majority of these bills prescribe a rate of 2 per cent. per month, which experience has proved to be equitable for both borrower and lender. The states referred to are Alabama, California, Indiana, Illinois, Ohio, Missouri, Iowa, Maine, Michigan, and Montana. Similar laws had previously been enacted in Massachusetts, New York, Georgia, Maryland, and New Jersey. Several other states allow a higher rate than the banking rate under contract.

A law was passed by the last Massachusetts legislature, creating the office of Supervisor of Loan Agencies, which marks the first step toward the regulation of small loans by a state. The supervisor licenses all individuals, associations, or corporations that make loans of less than \$300, and fixes the interest rate.

These things show the beginnings of an awakening for which there is a crying need.

DOES ANYBODY WANT A FARM? THE ANSWER

N THE November number of this magazine the question was asked "Who really wants a farm?" and answers were invited from its readers — with the sole purpose of finding out whether the talk about getting back to the land were all talk. Between October 31 and November 18 there were 181 replies. These have been taken for study. Others keep coming, of which more hereafter. Of these 181 persons, 176 want farms. The merely curious and the "jokers" did not turn up. There is a spirit of sincerity in every letter.

In 104 letters the available capital of the farm seeker was definitely stated. The total amount represented by these 104 persons is \$354,550. Its distribution,

according to the amount of capital that each has, is interesting and significant:

CAPITAL	NUMBER OF CASES
More than \$10,000	8
Between \$5,000 and \$10,000.	8
Between \$1,000 and \$5,000	69
Less than \$1,000	17
No capital	2

The average capital is, \$3,510.

It has been determined by investigation and analysis that, in the State of New York at least, the smallest amount with which the average man can hope successfully to become an independent farm-owner is This sum marks the division line \$5.000. in that state between the successful farmowner and the renter or sharer. For those persons who contemplate farming in a less developed country, or upon new or abandoned farm land which can be bought for from \$10 to \$30 per acre, the minimum amount of capital necessary may be reduced nearly one-half, dependent always upon the willingness of the farmer to undergo for a time certain discomforts and privations.

Probably the next most interesting fact about these letters is the distribution of their writers over the country, and also of the lands to which they wish to go. Seventy inquiries, about 40 per cent., came from the North Atlantic States; forty-four, or 25 per cent., from the North Central States east of the Mississippi; and twentyfour, or 14 per cent., from the North Central States west of the Mississippi. In other words, 79 per cent. of all the inquiries came from the states where agriculture is most highly developed, and presumably most successful. From outside the United States proper there came, in this group, six letters, two each from Canada and the Canal Zone, one from Mexico, and one from a native of France, temporarily resident in this country.

temporarily resident in this country. The "back to the land" cry is often thought to be merely the voice of city men tired of their environment — those who have no real appreciation of the life on the farm, but who crave a change in any direction. These letters rather contradict that theory. Several of the writers had been raised on farms, or had lived on them for a greater or less time, and are merely giving vent to a repressed or latent longing to get back to the country.

From the larger cities came forty-four, or 25 per cent., of the inquiries; seventeen from New York (including Brooklyn); seven from Chicago; four from Boston; three from Washington and three from Minneapolis; two each from Philadephia, Cleveland, Milwaukee, Cincinnati; and one from Columbus.

Twenty-eight writers directly state that they have had no experience, yet the willingness to work and endure hardship and the expressed decision obviously based on careful consideration, do not indicate a mere commuter's weariness nor a mere desire to dabble in suburban farming.

Men of forty-five years of age or more write of their desire to get to farms, not merely as a retreat for their later years, but as a good business opportunity for their active life. One man, indeed, describes himself as being sixty-four years young, and with the feelings of a man of forty. Two letters come from women who are planning to own and manage their own farms on a business basis.

The desire for farms is undoubtedly the result of a wish really to practice agriculture, and not merely to speculate in land values. In but one case was the agricultural value of the land disregarded, and the possibility of its being "a good investment for a few years" made paramount. Then, too, there is exhibited, in many cases, proof of a preliminary study of conditions and a tentative choice of location that also testify to the sincerity Twenty-three inquiries of the writers. are merely "feelers" with no definite section yet in mind, although in several cases a distinct type of farming had already been chosen. On the other hand, twenty inquiries aim at New York or New Jersey; eight point toward New England; twelve toward Arkansas, Missouri, and Oklahoma; and ten toward lowa, Ohio, Illinois, and Indiana. The natural result of recent developments, advertisement, and progress in regard to specific localities is of course. apparent. Sixteen inquiries are directed toward Florida, eleven toward the Pacific Northwest, and twenty-four toward the South Atlantic States. Six inquirers will locate according to the dictates of their health, in high altitudes, or in arid or warm climates. Strangely enough, but two inquiries come about homestead possibilities.

No description of these letters will give as clear an idea of their spirit as quotations from them. For examples:

. . . I have had about two years' experience as a farmer. I simply tired of working from fourteen to twenty hours a day for the miserable low wage paid farm hands, quit and went into the news business. I am twentyeight years of age, married, and have about seven or eight hundred dollars which I could invest in a small farm.

. . . What the writer wants is that independence mentioned in your paper. I left the farm at twenty — some twenty-one years ago. I entered the U. S. federal service and have traveled extensively. Now I am desk tired and after some twenty years of hard work I am confronted with the fact that I have been a slave. What are my chances to gain that independence and where can I go to get it?

. . . Yes! There is a real land hunger. Thousands of men occupying responsible positions in life would leave it for the farm if they knew how to tide over the first few years.

. . . I am twenty-five years of age, married, and earning \$45 a month as a waiter. It is all inside work, and I don't like it at all. I have no trade. I have been longing to go to farming for the last eight years, but I cannot get away, as it takes every cent I make to live. I am now trying to scrimp and save one hundred dollars by next spring in order to go to California, leaving my wife here until I can send for her.

. . . I want a farm, but I do not know how to get one. The resources of a teacher who earns only a good living with little or no saving are not great, but if there are places where a good farm can be secured without much immediate outlay and a prospect for a living from the start, I want to know about it. I want a farm, but I cannot risk my family in a venture of which I know nothing.

. . Do I want a farm? Did I since happy childhood ever crave anything as much as I have of late years life in the open under God's blue sky and close to all the manifestations of the Creator's art? . . Do not misinterpret my designs. I do not seek great wealth. All I want is a comfortable living for Mother and the kiddies, with something to leave them some day when the last call comes.

. . . For many years, long before there was any exodus particularly in this direction, I have been craving the independence of an outdoor farm life, but circumstances forced me and continued me in commercial life. In the past year this feeling has become so intense that I have really gotten to the point where I am looking around and am going to cash in my available assets just as soon as possible.

. . . The last issue of THE WORLD'S WORK has been of an unusual interest and worth. Many city-bred men have begun to feel a growing discontent with the confinement and routine of office work, and to question themselves as to whether life might not have a broader and more independent outlook. I am a city-bred man but with a strong love for the out of doors, and your inspiring articles arouse a latent desire for country life.

Ask the poor, tired, traveling man who sees his family once a month for a day or two before he hot-foots it again for another tiresome and lonely month. Ninety-nine out of the hundred will say "Show me." The question we don't know is where or how to begin, etc. Most of the farming we see is of the old-timer who works like the ______ and makes an indifferent success. We then ask "Is there anything in this scientific farming?" We read articles that listen good, but we don't know. The principal trouble is we don't know where to get in touch with the beginning or the ending of the information necessary to take the first step in this matter. To tell you as precisely as possible what we want is a hard matter for we don't know what there is in the different farming ventures.

. . . Born and reared on the farm, I get homesick for a return to it as the years multiply. I have no delusions as to its demands, limitations, nor of its freedom and quiet; but after thirty years of city life and professional interests, I am wondering whether it is wise to contemplate a return. At best I can hardly expect to continue present work as a teacher more than ten years. What then? Could one reasonably expect a small farm, of ten to twenty acres, to be of material help in the way of livelihood? My city home might realize some \$10,000, and

its income in bonds would bring about 5 per cent. Would half of it invested in a farm enable one to materially increase the income? As a scientific man it has seemed that it might be practicable for me to take advantage of the farm for conducting experiments in breeding, etc. But is this likely to provide any income?

. . . Working in the office of one of Chicago's largest manufacturing concerns. I come in contact with a great many people living on small salaries. There are quite a number of us who run small farms just outside Chicago on the side, and I know of none who have tried this and given it up. There are at least a dozen of the men in the office who have larger farms in other states. One man holds 90 acres in Florida, which he is planting in oranges. Five others have each ten acres in the Bitter Root Valley. Two of the boys own farms in Michigan, and another a farm in Wisconsin. Besides these, several of us have one or two acres near Chicago. How does that lcok?

And so it goes on — the call of the man who wants freedom and independence and active work in place of the rush and grind and squeeze of city toil. The greatest drawbacks seem to be, first, the possibility of making the break from one occupation to another; second, the acquisition of information about practical farming; and third, the acquisition of accurate and reliable information about the possibilities and resources of the various sections of the country. Probably the first of these three obstacles — the acquisition of capital to start - will remain longest and most troublesome. Yet every source of agricultural information and education assists in removing it. Organizations, coöperative and otherwise, for the purpose of helping the farmer to buy his land gradually and easily, are increasing in number and effectiveness. Moreover, the unreliable and unscrupulous types of such organizations are gradually being exposed, condemned, and put out of existence.

But there is one more cause, apparently, that does much to prevent a wider purchase and occupation of farms — namely, the aversion of women to farm-life. Read these two letters:

. . . The city in which I live is one of over 300,000 people, and I am safe in saying that there are in this city at least 50,000 who would like to quit the city to-morrow and go to the farm if they consulted their own wisbes only. And I think I am safe in saying that this is also true in the same proportion in every city and large town in this country.

. . Now if this statement is true, which can be proven, you will say "Why do not these men go at once and buy farms?" The answer men go at once and buy farms?" The answer to this answers your question. The women of these men prefer to have their husbands live a life they do not enjoy, that many of them detest, rather than go with them out into the country where they, as well as their husbands and children, can enjoy God's pure air, good health, and wholesome living. This is the main reason why the farms of this country go begging to-day, to be later taken up largely by an ignorant, uncultured lot of the lowest kind of foreigners whom we, as educated Americans, do not consider our equals or fit associates for ourselves or our families. This fact also prevents the man who has a sane, sensible wife from going to the farm.

. . . "Does Anybody Really Want a Farm?" Yes, more than one-half the male citizens of the large cities, especially those who were country When I was forced by overwork and born. ill health to leave business, I told my acquaintances I was going onto a farm. They almost all said "O how I would like to buy a place in the country and go to farming!" Asked why they did not, they said with equal sincerity "My wife or my children would not live in the country." Or "I must first educate my children country." but I would go in a minute if it was not for them." It is always the same story. Whenever I go back and meet them, their families are hopelessly tied to the town's attractions department stores, theatres, clubs, and social conditions, even though it involves a third story flat, and a vitiated atmosphere. The men want the farm; the women want the town and its pretty things rather than the life of a farmer's wife. Convert the women and you will be able to answer the question as to whether "Back to the Land" is all cry and no wool.

The WORLD'S WORK is answering every such inquiry to the best of its ability; and it is able, in practically every case, at least to refer the inquirer to trustworthy sources of information; and it will take great pleasure in continuing to do this. And the subject will be followed further month by month by articles explaining the possibilities of the land without sentimentality and glamor, and explaining also many of the pitfalls that beset the new farmer and how to avoid them.

MECHANICAL PROGRESS

THE KNIGHT VALVELESS MOTOR

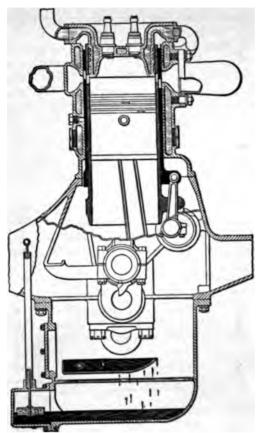
HE usual automobile engine, as everyone knows, is fitted with poppet valves for regulating the flow of the gas mixture into the cylinders. The valve is closed by a spring. For the spring to close it takes an appreciable time, and this time remains the same whether the engine is going fast or slow. At very high speed, therefore, either the spring has to be so strong as to create considerable pumping for the valve to open at all, or else it will not get the valve closed in time. This makes irregularity in the engine and a loss of compression and power. Moreover, no spring will keep on working indefinitely without sooner or later giving out and snapping. It is inherent in the nature of tempered steel. Sooner or later the gas motor must come to positively driven valves, like those of the steam engine — valves that must move when it comes their turn to do so in the cycle of events. It is this thought that makes interesting the working principles of the Knight engine, one of the first gas engines to adopt this kind of valve.

It is called "valveless" — it has no disc poppet-valves until now universal on gas motors — but of course it has the equivalent of the valve, something to control the admission and escape of the mixture. As every automobile owner knows, the gas engine has four things to do to make a complete cycle. It must fill the cylinder with mixture, compress it, ignite it to make the power stroke, and finally sweep out the burnt gas. In the four-cycle engine, the mixture is sucked in through the spring poppet valve, which valve must close promptly at the end of the stroke, as compression then begins. The excellence of the compression depends upon the tightness of the inlet valve, of the piston rings, and of the exhaust valve, which is held tight shut

by the cam of its mechanical valve gear. When the power stroke has been made, the exhaust valve is then opened by its cam and allows the burnt gases to escape. Now, in a two-cycle engine, these valves are done away with by having ports in the cylinder walls, which are uncovered at the proper times by the piston. It is not very economical of gas mixture, because, the ports being fixed, both the exhaust and inlet must be open at the same time — at that fleeting instant when the piston is at the lower end of its stroke and the full volume of the cylinder available. It is the only time, because of course it is not possible to have a port at the compression end of the stroke. But in the Knight motor this is precisely what is done. There are two sets of ports, one in the cylinder walls and the other in a sleeve which slides closely over the cylinder and is in its turn surrounded by the usual water-jacket. Both the cylinder and the sleeve are positively moved by eccentrics on the lay-shaft of the engine, and the ports are so cut that they will "register" (or come opposite) at precisely the right moments to control the admission and escape of the gas mixture.

The proper place for the inlet port is at the top (compression) end of the cylinder. It cannot be put there in a two-cylinder engine as it would still be there during the compression stroke and allow all the gas to get out. But in the Knight engine the sleeve and the cylinder ports match during the filling stroke, thus admitting gas, but one of them has slid past the other when it comes time for compression, thus holding in the gas. They remain closed during the power stroke also, but the sleeve and the cylinder ports again register when it comes time for the exhaust stroke, opening a passage for the burnt gases out to the muffler.

Such a motor will stand phenomenal endurance tests and will run at unlimited speed, as everything works in



THE KNIGHT MOTOR

THE BLACK LINE SHOWS THE SLEEVE AND THE DARK LINE JUST INSIDE IS THE CYLINDER WALL BOTH OF WHICH ARE ACTUATED BY ECCENTRICS SO THAT THE PORTS (SHOWN BY WHITE) COME OPPOSITE EACH OTHER AT THE PROPER TIMES TO ALLOW THE GAS TO GET IN THE CYLINDER AND TO ESCAPE AFTER THE EXPLOSION

unison with the crank shaft and there is no chance for anything to lag or stick. To prevent leaking, a set of piston rings is necessary on the cylinder-head as well as on the piston, and the head is made of the long peculiar shape shown in the drawing for that reason. The large amount of close-fitting oiled surface between the cylinder and its sleeve prevents leakage between them by way of the inlet and exhaust ports.

THE NEWEST TYPE OF STEAM ENGINE

IN THESE days of strenuous conservation of all the raw materials which go to make up our national resources, those new types of steam engines called *lokomobiles*, by the Germans and *demi*-

fixes, by the French, which use only half as much coal as our best engines and turbines, are of interest to everyone. During the last ten years they have been developed by several large manufacturers in Germany until there are now more than 50,000 of them at work all over Europe — all over the world in fact — wherever the French and German trade routes go. They range from the big 1,000 horse-power units directly connected to a dynamo, such as the one which supplied all the light and power at the Brussels Exposition last year, down to the small 40 horse-power units, light and exceedingly economical of coal, which are so very popular at present in Russia, where steam coal is move or less at a premium and the import duty charged by the pound weight.

These units work in all conceivable industries — one lokomobile firm alone having furnished 1615 installations for electric light and power; 1429 factory engines in the metal industries; 1400 for brick works and potteries; 1885 driving sawmills, turning and planing mills and the like; and 1253 for other purposes. These installations aggregate a million and a half horse-power, while another big German firm has installed 980,000 horse-power of lokomobiles during the last four years.

The only country in the world, civilized or uncivilized, that has none of them is our own United States of America. Astonishing, but explainable — partly because of our tariff wall, and partly because of the metric system, as all the parts of the lokomobile down to the last nut and pipe thread are in metric system measurements and will therefore fit nothing at all that we have in stock. If the lokomobile should lose a single nut off a studbolt or if a new rivet have to be put in, it would cost out of all proportion to replace it in this country, as all our stock sizes are in inches and it is a delicate machine shop job to turn out a duplicate in metric measurements. This is one reason why we do not import them regardless of the duty; and another is our tendency to "standardize" everything, which too often stifles further progress. However, these is much talk of an American alliance at present in Germany, so we may soon see these really modern and economical superheated steam units made in America and taking their rightful place among our power producers.

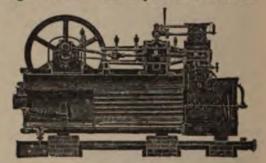
As to construction, the lokomobile is, briefly, a compact combination of a boiler and engine, and a superheater in one unit. The engine is mounted on top of the boiler in order to do away with long and wasteful steam piping and, to insure that both engine and boiler will be under the care of one careful and intelligent man - the engineer - as he alone can easily fire and run such units, even those as large as 350 horse-power. The engine uses superheated steam, which is much more economical of coal than the ordinary saturated steam - which all our engines use - because it will not condense inside the cylinder as does saturated steam. Superheated steam, it may be explained in passing, is ordinary steam overheated by passing it through the superheater tubes immersed in the hot chimney gases. It then has this extra heat to draw upon when it enters the comparatively cold cylinder, which would otherwise condense part of it in the form of drops of water upon the interior surface of the cylinder. Drops of water do not aid in pushing the piston, so it is essential to keep the steam in the state of vapor in order that all of it can do useful work-which is accomplished by superheating it.

The loss from cylinder condensation with ordinary saturated steam amounts to a third of all the steam furnished to the engine by the boiler. Another loss is the waste of most of the heat of the gases going up the chimney. In the lokomobile these are used to superheat the steam from the boiler; for the chimney gases pass over the two coils, (C and D,) containing steam on its way to the high and lowpressure cylinders (A and B) of the engine respectively. The exhaust of the "high" goes to the low-pressure cylinder and, as it is quite cool (only 260°), it takes nearly all the heat out of the chimney gases, leaving only enough for draught.

By thus eliminating all three of these

losses — radiation from steam pipes, cylinder condensation, and stack losses, the lokomobile actually uses only one half of the coal that the ordinary engine and boiler plants do. Lokomobiles need from seven to ten pounds of steam per hour to the horse-power at the flywheel, while saturated steam engines use from sixteen to twenty-three pounds for the same duty. These figures are for engines from 40 to 250 horsepower, which cover the bulk of all the small central station and factory engines over the United States.

In the coal pile the difference is still more remarkable, the lokomobile — the one which furnishes electricity for the lights of the Czar's palace at Peterhof



THE FUEL SAVING LOKOMOBILE

A COMPACT COMBINATION OF A BOILER, ENGINE, AND SUPERHEATER IN ONE UNIT WHICH DO WORK ON ABOUT HALF THE STEAM NECESSARY FOR THE ORDINART AMERICAN STEAM ENGINE

for instance - using but half a pound of coal to the horse-power-hour (it is in 130 horse-power units), while the engine driving the dynamo for any one of our large hotels will use not less than three pounds of coal for the same work - six times as much. This is because the boiler has to be so much larger for our engine, and of course the boiler losses are consequently that much bigger in proportion. Again, these superheated steam units use so little coal that one man, the engineer alone, can run and fire it - does so as a matter of course in Germany and France. Two men are used only on the 500 to 1000 horse-power units. By this arrangement, the wages of the fireman are saved and the whole plant is under the care of a vastly more intelligent man, the engineer, who will keep it all clean and up to maximum efficiency.

THE MARCH OF THE CITIES

THE DELIVERANCE OF DAYTON - EXAMPLES OF MUNICIPAL ALTRUISM

Following Mr. Henry Oyen's comprehensive series, "The Awakening of the Cities" which showed how they are meeting the problems that twentieth century civilization thrust upon them — how far-seeing municipalities are the hope of an efficient democracy — the WORLD'S WORK has decided to publish a series of city achievements as encouragement to one of the most important movements of progress of this time — the physical, moral, and social improvement of American cities.— THE EDITORS.

AYTON, O., has always been a well-intentioned city, but threats were necessary to persuade it that its highest good did not lie in abject submission to an old-fashioned political machine. The politicians, secure in the public's trustfulness, managed the city's destiny from the city hall in a way that con-tributed largely to their own interests, but not to Dayton's. They had a way of giving or denying railroad franchises according to the dictates of their own fancy. The result was that shipping facilities were not all that they should be. Now it happened that in the course of swift expansion a certain big business came to need a railroad line to serve its plant. A company was organized to build it, a franchise was asked for and denied. The machine was not pleased with the idea.

"Then," said the head of the company, "we shall have to leave Dayton."

That was enough to make Dayton sit up and take notice. It investigated and found that the great majority of citizens regarded the prospective removal as a civic calamity; and that their will was being thwarted by a small clique of politicians.

From this discovery came the reclamation of Dayton.

The business men got together, formed a "Booster" organization, and said: "That business must stay, and the politicians must go." The Chamber of Commerce asserted its latent power and forced the city council to pass the franchise which gave to the big plant its needed railroad. The citizens served notice that henceforth they would have a hand in the government of their city. The politicians protested. A campaign was fought, and the people won. Since then Dayton's history has been one of regeneration and progress.

Dayton, once aroused to consciousness of a single one of its needs, straightway inaugurated a general programme of self-improvement. In parks it had lagged almost as badly as in its government. There were only 19 acres of parks in 10,500 acres of city area housing 125,000 people. By a vote of nearly five to one the people expressed their desire for the creation of a park commission, and a vigorous campaign for park development was begun. Present plans call for the acquisition of nearly 1,200 acres of land for park purposes, at an expenditure of about one million dollars.

For years, through one of the best residential districts, there ran an unsightly mill race, abandoned since manufacturing plants had supplanted waterpower with steam and electricity. The banks of the race were lined with fine old trees but the ditch itself was filled with pools of stagnant water, patches of mud and weeds, frogs, mosquitoes, and tin cans. Dayton turned loose its newfound energies on this eye-sore, and the result is a macadamized boulevard which has become the showplace of the city.

In many sections there were scattered dozens of old, tumbledown frame buildings gone to ruin and awaiting only the inevitable fire. Progressive citizens who wished to improve and beautify their grounds were seriously hampered by the presence of these dangerous shacks. The state legislature was induced by commercial organizations to enact a building code law and to increase the powers of the state fire marshal. Dayton took advantage of this new power, and many of the menacing buildings have been torn down.

Dayton has adopted a new standard of civic housekeeping; the awakening, caused by the threat of the great factory's removal, has not only kept that factory, but it has made Dayton a better place for other factories to go and for people to live. The creation of the commission to make parks, the building of the boulevard, and the destruction of the old fire-inviting shacks are three concrete forward steps.

П

Not many of the cities that have opened their eyes in the last decade have had so altruistic an awakening as Dubuque, la. This city, instead of adopting the selfish, though natural slogan "Do it for Dubuque," has taken as its watchword "Do it for Eastern lowa."

Dubuque is an old and a rich city. Its faults were complacency and inactivity. When it woke up, it became humble and energetic. It voted \$175,000 for promotion in no time at all, turned this amount over to the newly created "Dubuque Industrial Corporation," and then set about "capitalizing its ideals." By this it meant the establishing of a sort of ideasharing alliance between itself and the neighboring cities.

"In Dubuque," says the secretary of the Industrial Corporation, "we do not begrudge our sister cities any knowledge or experience which has put us on the upgrade. When any one of us has a wise or happy thought he is glad to pass it on to the commercial secretaries of other cities. We think this is not only our duty as an honest and progressive municipality, but we think it is "good business."

That Dubuque is not sowing her seed on stony ground is shown by the following example: The citizens of Des Moines, a few months ago, discovered that living expenses were higher in their town than in Dubuque, so they sent to the "Key City," investigators, who received the willingly offered information that Dubuque owed its advantage to its open city market, which enables the hucksters and poultrymen to waive the services of the grocer, and to sell their produce direct to the housewife — to the great benefit of all concerned.

And Des Moines went away and did likewise. It not only established a profitable market of its own, but gave wide publicity to the idea among other seekers after municipal betterment.

Ш

Another such city as Dubuque is Little Rock, Ark. This paragraph from the creed of its board of trade, illustrates how this broader vision is spreading.

"We work for the whole state of Arkansas and we believe that what helps our city benefits Arkansas. We will not enter into competition to take from any Arkansas city, any factory or any institution that they may have. This does not mean that we would not welcome them cordially if they moved here, but what we want you to understand is that we would not work to bring about a spirit of dissatisfaction that might cause the removal."

What a contrast to the narrowness of a few years ago when it was considered by many similar bodies the height of enterprise to take an industry away from a neighboring city, no matter what the means employed!

Not long ago the shops of the Iron Mountain and Southern Railroad, located at Little Rock, were destroyed by fire. The shops had been of frame construction. They had been unsightly to the eye and a menace to surrounding property by their susceptibility to fire. Before the railroad had completed its plans for rebuilding, the city offered the company \$30,000 if it would rebuild of stone and brick. The offer was accepted and the shops were built much larger than had originally been planned.

Among all the awakened cities one of the most encouraging characteristics is this broadening of the point of view.

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THE MARCH OF EVENTS

UBLICITY, publicity — the further we go, the clearer it becomes that the best preventive of most of the evils, alike in low politics and in high finance, is publicity. The President's Commission to report on the abuses of railroad finance rely more upon publicity The investigathan upon penal statutes. tions and prosecutions of the trusts show clearly that their worst offences could not have been committed with open doors. The vast pension frauds could not have grown up if the public in every community had known of them.

In small ways as well as large, publicity becomes more general. It is worth noting that the distribution of stock-holdings in large corporations is becoming more general — more stockholders and consequently a smaller average holding; that the number of corporations that offer shares of stock on advantageous terms to their own employees increases rapidly; and that other forms of profit-sharing are adopted by an ever-growing number of business concerns of all sorts. Every diffusion of ownership, consistent with capable management, is a step forward in the ethics of business organization.

For with the increase in the number of stockholders there goes inevitably greater publicity; and publicity makes for franker and therefore often more honest dealing alike with the public and with employees. Of course, too, there follows a closer sympathy and a better understanding.

These are merely general tendencies, but they mean much; for they are in keeping with the whole movement in business life toward a higher level of conduct by more open methods. Business men are not a dishonest class, nor an unfair class. They "average up" at least to the level of any other class in American life. But all men's actions take color from their customs and environment; and secrecy in business is a temptation to selfishness, just as secrecy in politics is a temptation to trickery.

The best result of all the agitation that we are going through will perhaps be the greater degree of publicity that must follow it. It is healthful to live outdoors. It is no less wholesome to work in the open.

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THE NEW PROPRIETORS OF TWO GREAT NEW YORK NEWSPAPERS 1. MR. WILLIAM C. REICK, WHO, AFTER BEING SUCCESSIVELY PRESIDENT OF THE NEW YORK "HERALD" COMPANY, PRESIDENT OF THE "PUBLIC LEDGER" COMPANY OF PHILA-DELPHIA, AND PART OWNER OF THE NEW YORK "TIMES," RECENTLY, AT THE AGE OF FORTY-SEVEN, PURCHASED THE CONTROL OF THE NEW YORK "SUN"



THE NEW PROPRIETORS OF TWO GREAT NEW YORK NEW'SPAPERS 11. MR. RALPH PULITZER, PROMINENT NOW IN THE DIRECTION AND OWNERSHIP OF THE NEW YORK "WORLD," SINCE THE DEATH OF ITS PICTURESQUE AND AD-VENTUROUS OWNER, THE LATE JOSEPH PULITZER





MR. CLARENCE H. MACKAY PRESIDENT OF THE COMMERCIAL AND OTHER CABLE COMPANIES; ONE OF THE PRINCIPAL FIGURES IN THE RATE-WAR AROUSED BY THE INSTITUTION OF THE WEEK-END CABLE LETTERS BY THE WESTERN UNION TELEGRAPH COMPANY



SELMA LAGERLÖF

AUTHOR OF "THE WONDERFUL ADVENTURES OF NILS" AND "THE FURTHER ADVEN-TURES OF NILS," IN WHICH SHE HAS CREATED A TRULY NATIONAL LITERATURE FOR SWEDEN AND GAINED FOR HERSELF PERHAPS THE WIDEST AUDIENCE AND THE WARMEST AFFECTION OF ALL WOMEN WRITERS OF THIS GENERATION

A CASE OF POT AND KETTLE

A RECENT number of American Industries, the organ of the National Association of Manufacturers, early in the winter reported a poll of 10,000 business men and summarized their answers in this way:

Manufacturers representing every industry, financiers of national reputation, important railway officials and commercial organizations in large industrial centres are practically one in their firm conviction that we as a nation and our business activities as a whole are suffering because politics has run mad in this country.

In its comment it spoke of "demagogic office-seekers" who work to "secure political power at any cost," and emphasized this opinion by the accompanying cartoon.



From "American Industries" THE REAL RULER OF THE UNITED STATES AS SEEN BY THE ORGAN OF THE NATIONAL ASSO-CIATION OF MANUFACTURERS

About the same date, the New York Journal of Commerce, which had the habit of speaking for the commercial world long before the National Association of Manufacturers was born, contained this diagnosis:

What was to be expected after the reckless trust mania which began twenty years ago? What was the effect, psychologically, upon the public mind of the corporate misdeeds which have disgraced American finance for years? What has been the effect of the idiotic displays of the idle rich upon popular imagination? And were the politicians any more unscrupulous in taking advantage of an aroused public opinion than the promoters and financiers who, through legal privilege or defiance of law, created the 'swollen fortunes'? When those who complain find time to ponder on such questions they may better understand what is behind the hostile attitude of legislators toward corporations and what created the dangerous and unreasoning hatred of capital.

Both American Industries and the Journal of Commerce are doubtless right — to a degree. The misdeeds and bad manners of "big business" have inflamed the public, and an inflamed public has set demagogues in action. It is a very serious situation when business men look upon public men as a class under suspicion and when public men regard business as predatory. But how are we going to get away from this state of affairs? How are we going to inspire in the factions confidence in each other? That is the only question really worth discussing.

This is a venture at one answer — not very profound, perhaps, but it may be none the less practical for that reason: It is a good time to select new leaders and spokesmen in each camp. They can begin on a new plane of action — a plane of complete frankness with the public and of good manners. Mere manners go a long way. And both in business and in politics the public now wishes more frankness and sincerity and less mere abuse.

RAILROAD PUBLICITY

THE report of the President's Railroad Securities Commission, which was appointed to investigate whether the Government should supervise and control the future issue of railroad securities, is probably the most conservative document on a matter of commerce that has come from Washington since the days of McKinley. Almost all the theories with regard to railroad matters that have found expression in the speeches of radical reformers East and West are demolished. with a single blow. This Commission was composed of President Hadley of Yale, B. H. Meyer of the Interstate Commerce Commission, Frederick Strauss, a banker, Frank S. Judson a Western lawyer, and Walter L. Fisher, Secretary of the Interior.

Their finding lays emphasis upon the following points:

First, that further Federal restrictions with regard to securities would tend to create further confusion in a situation already too complex.

Second, that physical valuation cannot be made a basis for the establishment of a standard of capitalization.

Third, that the amount and face value of our standard securities have only an indirect effect on the making of rates and that should not be of any great importance in rate regulation.

Fourth, that no attempt should be made by law to limit railroad profits to a fixed percentage.

Fifth, that scrip and stock dividends should be prohibited.

Sixth, that no attempt should be made to prohibit the sale of stock to stockholders of an established road at prices below the ruling market price.

Seventh, that it is much better to issue stock in this way to carry on the expansion of a railroad than to issue bonds or interest bearing securities below their face value.

The whole report deals very gently with the habits and methods of capitalization that have been very severely criticized by the radicals of this generation. It is the opinion of this Commission that the surest cure for any evils in the present system of capitalizing railroad properties The makis full and complete publicity. ing of all railroad capital matters public records, is reiterated again and again in the report. We must do away once and for all with secrecy in the administration of the public service companies of the country. We must see to it that expenses of operation are not disguised in the form of an open capital account and written into the cost of the property or into capitalization, to become a permanent burden upon the business of the country.

We must simply lay open before the eyes of the whole world all the financial operations of our railroad systems.

Yet the report is not reactionary. It does not open the way to another era of jugglery, of stock watering, of overbonding, and of dishonesty such as reached its climax with Jay Gould, the afterfruits of which are now being gathered by the stockholders and the bondholders of the so-called Gould Railroads. Such manipulations and dishonesty as underlay the operations of Jay Gould could not have been carried on in an era of publicity.

In every phase of finance the habit of publicity is growing. The most searching questions are asked and answered with regard to every big issue of new securities and every flotation of new companies. It is practically impossible to-day to put together and to finance successfully any watered money-making enterheavily One who doubts it may study, if prise. he will, the story of the attempt made a few years ago to merge the Cincinnati, Hamilton & Dayton and the Pere Marquette roads; and the later attempts to finance and foist upon the public the Wabash-Pittsburg Terminal, and to gain from the public the cash to make of the ill-conceived Hawley system a powerful financial re-organization. In recent years there have been no great booms in any railroad securities which were not based upon values. It is not too much to say that, as long as full publicity is demanded and, indeed, forced by law, there can be no repetition of the financial crimes of yesterday.

WHERE PUBLICITY IS NEEDED

THE persistent controversies about the use of money in former presidential elections, which are both

amusing and humiliating, ought to serve one good purpose: public opinion ought to demand complete publicity, both before and after the election, of every contribution and of every expenditure. The law that requires such publicity does not apply to presidential elections. But public opinion might bring about such a result, and it ought.

A CHALLENGE FOR EFFICIENCY AND CLEANNESS

PRESIDENT TAFT in one of his messages to Congress made a recommendation that would do him and Congress great honor if it should be carried out — that all local Federal offices should be by law put in the classified service, that appointments to them be permanent and be made by merit, and that thus this whole body of political patronage be done away with. That is getting at the root of the matter. That done, Congressmen and Presidents would have much more time and freedom for the public business.

The way the matter works now, is this: Every incoming President has an army of office-holders to appoint - postmasters, marshals, collectors of revenue and of customs, and all the rest. In states and districts represented by Senators and Representatives of the President's own party, these Senators and Representatives nominate these appointees. They practically dictate them. In most cases these offices are given as rewards for political activity. In states and districts where the opposite party has a majority, these appointments are dealt in by national committeemen of the President's party or by local "advisers." Thus the great Federal political machine is built up.

Several Presidents — Cleveland and Roosevelt among them — forbade (or tried to forbid) office-holders from taking an offensive part in political campaigns. But this is at best a mere palliative; for most of these office-holders are purely partisan appointees and the very circumstances of their appointment give them partisan political influence. The only real remedy is that recommended by Mr. Taft — to make such offices permanent during good behavior and efficiency and to fill them only by the merit system.

Then we should have men as postmasters and collectors and the like only because they knew the business and did it well; and we should develop a degree of general efficiency in such work as is now only individual and accidental. That would be the positive gain. And the negative gain would be quite as important; for Presidents and members of Congress would be free from bondage to this patronage system — a kind of slavery that makes a slippery trickster of many a man who would like to be an honest public servant.

But Congress is not in the least likely to follow the President's recommendation, especially in the year of a Presidential election. Nor is the President likely to give the subject the same emphasis that he gives to arbitration treaties and peace programmes: Yet it is sometimes well to make a challenge even when you know it will not be accepted. It may be good for future reference.

A GOOD DEED IN A NAUGHTY WORLD

IN A TIME when most great corporations receive chiefly curses and investigations — in the spirit of fair play let's praise one now and then for a good deed. For example: when Atlanta was preparing for a big corn-show that it held a little while ago, the Southern Bell Telephone Company had its managers call up 100,000 persons in Georgia, Alabama, and South Carolina and tell them by 'phone about the show and its importance and its attractions; and the messages received in reply were given out at Atlanta free. That was a piece of publicspirited work surely.

Of course, if you are a cynic you will say that it cost the company little and that it advertised its service. Well, most good deeds cost little money and every good deed advertises somebody or something; and praise God that it does. Else we should have a silent and inappreciative world, the cynics would rule it, and life would be much less pleasant.

CONTROL OF THE NEW CURRENCY PLAN

HE discussion of the report of the Monetary Commission now turns almost wholly on this question, Will it be possible for "big finance" to control the proposed National Reserve Association and through it the banks behind it? President Taft in his general message to Congress, approves the plan and says, "There must be some form of Government supervision and ultimate control.

. . . I entertain no fear of the introduction of politics or of any undesirable influences from a properly measured Governmental representation." He expresses the expectation also that the individuality and the independence of every bank will be preserved. These two conditions are necessary both for the proper working of any plan and for securing popular approval of it: there must be no danger of control concentrated in any hands, and every bank must be left in its full independence.

There would, of course, be objection to out-and-out Government control; for then we should surely have political management sooner or later. The problem consists of such a balance of control that this great central financial machine cannot in its practical working fall into the hands of any "money power" nor into the hands of any National Administration — a difficult but not an impossible undertaking.

No other constructive legislation now in hand is of such far-reaching importance as this.

ONE WAY TO DIFFUSE CREDIT

THERE is one side-aspect of banking as we practise it that is neglected in most of the current discussion; and that is the diffusion of credit. Numerous as our banks are and capable as most of their officers are, banking is yet done too much by and for a class. Many of our banks do not serve as many of the people as they ought — as many of the "small" people, people who have not yet established banking credit. This tooexclusive method is part of our traditions and our history. Our conception of a bank is of an institution to serve the prosperous.

Yet almost every man who has a stable place of abode is a possible profitable borrower, and the poorer he is the more he needs credit. They have proved in nearly all the European countries that poor men, very poor men, can by a proper system be made the safest kind of borrowers, and the process builds up the man as no other experience can.

In Germany, which was the birth-place of the coöperative credit banks that have spread almost over the whole of Europe and have been introduced successfully even in India, the smallest shop-keeper or the smallest farmer — men far below the economic class that have credit in our banks — can borrow money for any productive purpose. The latest accessible German report shows that more than \$200,000,000 a year are so lent, with a negligible percentage of loss. The two important lessons that this experience has for us are these:

A man who establishes and maintains a bank-credit, not only widens his activities and opportunities and puts himself in an economic class far above men who have no such credit, he does more than that by such an experience he develops his own character and trustworthiness and his own productivity as he could develop them in no other way.

In the second place, by developing all the possible good borrowers within its area, a bank serves its highest purpose and does its greatest usefulness. The main point, bearing on present discussion, comes here, and it is this: the more money a bank can profitably keep within its own neighborhood, the better for the bank and the better for the neighborhood. Such a condition prevents the easy flow of its deposits to the great money centres.

In other words, one great evil, perhaps the greatest evil, of our present financial system would be removed by (let us say) the doubling of the number of safe borrowers from banks in any community. The credit or coöperative banks of Europe have gone far toward working out this very result.

True, these credit banks are not banks at all in our sense of the word. They are merely borrowing societies of poor men. But they become outlets of enormous value to the banks that have money to lend. They are important agencies in drawing money into productive pursuits and consequently away from speculative centres.

AN EQUAL SUFFRAGE STATE IN EARNEST

HE men of California gave women the suffrage and now find that they have enfranchised nearly a hundred thousand more voters than they can themselves muster. The subject has its jocular aspect. Suppose, for example, some issue should arise whereon there would be a division of opinion by sex!

Both the jocular and serious aspects of the subject are emphasized by the political zeal of the women. Every woman's club in California has turned to the study of American history and of the problems of the day. Even the women who opposed suffrage or were indifferent to it, take their new status with a sober sense of its responsibilities. They are diligently studying the proper use of the ballot. It may be that the men did better than they guessed.

THE PROGRAMME OF THE CAR-NEGIE PEACE FUND

EVERY thoughtful man must have asked himself many times, "When all the oratory and benevolent dinners have been taken out of the peace movement, what is left? What sort of definite, practical work can be done by serious men to lessen the danger of war in the future?"

The trustees of the Carnegie Peace Fund of \$10,000,000 have, perhaps, come nearer to answering such questions than any preceding body of men. They will have about half a million dollars to spend this year; and their plans include three kinds of work:

Under the Division of International Law, Professor John Bassett Moore, of Columbia University, will direct the preparation and publication of a complete collection of international arbitrations, to establish a basis by precedents for arbitration in the future. Such clearly edited and arranged decisions will aid arbitrators and their advisors and diplomats in general, and will, it is hoped, reduce arbitration to a clearer statement and system and thus give it renewed force. This division will also edit and publish all arbitration treaties. In effect this work will codify arbitration. This division plans to hold next year a summer school of arbitration at The Hague. Professor Moore is one of our foremost authorities in this field; and this work, done under his direction, will be definite and useful.

The second division of the work laid out by the trustees, is in economics and history and is under the direction of Professor John B. Clark, also of Columbia University. This division called together last summer at Berne, Switzerland, a conference of more than twenty economists and publicists of distinction. They made an extensive plan for future work, the study of such subjects, for example, as international loans and the complications that have sometimes followed them; the position of organized labor and of the socialists with regard to armaments; the effect of war on food supplies, upon banking conditions and the like; the burdens of armaments and pensions and such topics. This division, under the direction of this distinguished and capable economist, will bring together a useful body of much scattered information.

The third division — Intercourse and Education — is vaguer in its plan and scope. It has the task of educating the public opinion of the world. It will maintain a bureau at Paris with an advisory council of distinguished men from the several nations; and it will aid the permanent international peace bureau at Berne and a corresponding organization, also already in existence, at Brussels. This division will try to bring into closer relation influential classes of men in South America and the United States, and in Japan and the United States, by an interchange of lecturing professors and in This division is under the other ways. direction of President Butler, also of Columbia University.

Columbia University seems to have secured the direction of all the work of the Fund, a fact that must be regarded as a weakness. There is, in truth, somewhat too much of the academical in the programme. Colleges and men of learning do not bring about wars nor can they prevent them. They can bring together and make accessible and useful such information as Professor Moore and Professor Clark will address themselves to; and this surely is most useful work. But how the academic world can do much to educate the public opinion, let us say, that drives or checks the German Emperor and the British Foreign Office is not very clear. This part of the programme seems yet somewhat in the air.

Yet somebody somewhere must make a beginning; and this may be as intelligent a beginning as any, in spite of its present too-great identification with one of our universities.

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Who really controls the forces that make for peace or for war? So far as individuals go, great rulers and cabinets and their advisers and the great bankers of the world. Behind them are strong, blind forces — such as the pressure of German manufacturers for wider markets and the clash in those markets of German and English trade; and such as the increasing population of Japan that requires and will continue to require more room. Peace meetings and the codification of arbitrations and careful studies of economic facts do not touch these strong blind forces with directness.

But they do make men think. They put war in its true light as a destroyer of life and treasure. They rob it of its oldtime glory. They dissipate historic illusions of many sorts. They present a humaner and a truer conception of civilization.

Something, then, perhaps much, may be done by the programme of these men of learning — a beginning made at least; and later, let us hope, the real powers of the world will follow these academic blazers-of-the-way.

THE ARBITRATION TREATIES

F COURSE the promotion of peace is not a definite, concrete task. It means rather the building up of a public sentiment in the ruling circles of the world that shall look at life from a new angle — a process of slow education. For even great blind economic forces are, in a measure at least, within human control.

Now, viewing the so-called peace movement as a slow process of education, surely the pending arbitration treaties with Great Britain and France are practical and desirable undertakings. Assuming that in form they comply with diplomatic precedents and custom, their ratification would be a friendly act. It is easy to say that no paper-treaty can prevent war when two nations wish to fight. But is that to the point? The point is, that such friendly agreements to use all honorable means to prevent war are likely to make men and nations less hasty in yielding to a warlike mood.

The spirit of these treaties is approved by the public opinion of the United States — there can hardly be a doubt about that. President Taft has done a distinctly high public service in insisting on their approval, always with a deep conviction and good temper. The people now have a right to expect the Senate to act.

THE MYSTERY OF THE ORIENT

HE difference between the Asiatic and the European minds doubtless is only such a superficial difference as expresses itself, for example, in religions, a difference that longer association by larger groups of each people will in time overcome. But for the present at least the Chinese public mind is so different from ours that the great change which is undoubtedly taking place in the Orient is practically untranslatable in terms of our experience. Judging by our own history we do not know with any approach to accuracy what to predict in China. Our next step and their next step from a given place in the evolution of a freer government would not necessarily be the same. Moreover the difficulty of understanding the great changes that are taking place, is made the greater by the very abbreviated reports of events that reach us.

But one thing is certain, whether or not the so-called republican form of government turn out to be anything that we should regard as republican — it is certain that the great mass of mankind in the

Orient is undergoing a prodigious change, a change that will have a profound effect on the thought and the condition of a large part of the human race. It may be a change comparable to the evolution of what we call free institutions from the old monarchies of Europe.

Consequently the most interesting theatre of events is not now our side of the world, but the antipodes. This shifting of interest will in itself be a powerful force for change — a change in our point of view as well as a change in the Chinese. Absorbed in our own experiences and our own history, we have thought of our side of the earth as by far the most interesting and instructive and important. Even if it come as a shock, the realization of this possible mistake may be a broadening influence on Western thought and character.

EVERY FIRE A CRIME

HAT is the law in Berlin. And why not? Run down the truth about any fire, and some one person will be found whose negligence was the cause of it. Somebody stored dangerous quantities of inflammable or explosive goods on his premises; or he built a frame structure next to a crowded sweatshop. He took chances with human lives - because it was cheap. In Berlin it is not cheap. The police investigate every fire, and the responsible person pays the cost of putting out that fire, and damages besides. Note the result: in Chicago, the American city of equal size, the annual fire loss is \$6,000,000; in Berlin, \$300,000.

This comparison is being used in Wisconsin to further the passage of a bill to make the person or corporation that is responsible for a preventable fire liable to criminal prosecution. The fire insurance companies favor such a law; carelessness is not cheap to them. And enlightened public opinion will favor it for two reasons: first, that it will tend to arrest the recklessness that has caused so many awful deaths; and second, that it will help to stop the enormous drain upon the resources of the American people represented by our annual national fire loss of \$200,000,000.

A SHOCK TO YOUTHFUL MODESTY

M ODEST people in many cities are shocked at the tendency to overdress by young girls; for we seem to be suffering from an epidemic of youthful immodesty in dress. One does not need to read the report of the New York Child Welfare League to learn that the school-girl of to-day has abandoned the simple and charming garb which made her so enchanting, and has taken to hobble skirts, Louis XV. heels, gossamer hose, corsets, coiffure, and cosmetics — yes, an astonishing number of girls even to powder and paint.

It's a pity. Of course, the feminine young person thus makes herself a sad caricature to an elder eye; but the trouble is with the mothers of such children. For the correction of such an impropriety must come by the strong hand of authority. And fashion seems to have got the better of maternal taste or power.

The subject may seem, in some moods, a mere passing fad; but it is really a very serious misfortune. In the first place, no nice girl should be permitted to make a guy of herself; in the next place, overdressing costs money and time, endangers health, and distracts the mind from the more important interests of that most important and delightful period of existence — school-days. Not to speak of snobbishness, overdressing causes envy, and a great many other unpleasant things.

There is no other country in which misses are permitted to attire themselves in the fashion of their mammas and married sisters. No English peeress, no German gräffin would dream of allowing her daughter to do up her hair, don a corset, and take to high heels, while she was in school. Common-sense shoes and braided hair are the happy lot of school-girls everywhere except in our own cities.

It is said that the girls in private schools show more common-sense than those in the public schools. In a word, the percentage of children of comparatively wealthy parents who overdress is less than the percentage of the poorer — this, in spite of the fact that it has been commonly supposed that offences against good taste and modesty are more often committed by the rich. But whether it be the rich or the well-to-do or the poor who encourage or permit their young girls to overstep the proper bounds of youthful modesty, it is a very serious and sad fact.

THE RURAL CONQUEST OF TYPHOID

I NOCULATION against typhoid has reached the Farmers'-Bulletin stage. That is to say, the Government's experiments in the army have proved so successful that the Department of Agriculture has felt warranted in explaining the treatment to the farmers and in suggesting advice about it. It may fairly be said, therefore, that this inoculation will now become common in regions where the danger is greatest. But, before the method of inoculation is described, methods of prevention are insisted on foremost the screening out of flies and the eating of only cooked food in times and places of danger.

In the army, inoculation is compulsorysee the result:

"In 1898, in the Seventh Army Corps, stationed at Jacksonville, Fla., consisting of 10,759 men, there were 1,729 undoubted cases of typhoid fever, and 2,693 additional cases of fever believed to be typhoid, making a total of 4,422 cases, with 248 deaths. In the recent manœuvres at San Antonio, Tex., there were 12,801 men, all inoculated. Among these men there was only one case of typhoid fever and no deaths." The British army in India makes a similar showing. Of 8,754 inoculated men, there were 16 cases and no deaths, while among 7,376 uninoculated men there were 68 cases and 14 deaths.

All persons whose occupations or residence brings them into known danger ought to be inoculated. It is a painless and harmless and simple thing in the hands of an intelligent physician. The very old or the very young are not likely to take typhoid and no ill person ought to be inoculated. But, as for the rest of the population, there will soon be no better reason for contracting typhoid than smallpox.

GOOD ROADS — WHO SHOULD BUILD THEM?

HE campaign for good roads conducted with great vigor by many

▲ organizations has gathered such volume that it must now be reckoned among the strong educational influences of the time. The amount of instructive literature that is distributed, outruns the dreams of the agitators of even a few years ago; and much of it throws light on many sides of economic and community life. For a good road is the key to almost every kind of rural progress. Consider such facts as these:

In Durham County, N. C., there were sixty-five public school houses. Many of them were the homes of starveling schools little neglected buildings situated in inaccessible places. The county built good roads. Quickly thereafter, seventeen of these remote little schools were consolidated with others and absorbed, and the forty-two remaining schools were much better located, much better taught and much better patronized. How truly rural education depends on roads - and roads on education - is shown also by such facts as follow: In 1904 only 21 per cent. of the roads in Missouri were "improved," and in 1900 there were 80,000 illiterates in the state. Contrast Massachusetts with 45 per cent. of its roads improved and only 2,000 illiterates. An educated people build good roads, or good roads lead to the education of the peopleas you like. The Good-Roads Office of the Department of Agriculture announces that in five good-roads states the average school attendance is 77 per cent. and in five badroads states it is 59 per cent. More than that, the rural counties in

More than that, the rural counties in Tennessee and West Virginia that lost population during the last decade are counties that are notorious for their bad roads. Before Massachusetts carried into effect the present highway improvement by state aid, there were many abandoned farms in the state. Now there is no such thing. Of course good roads helped. In fact in most rural regions any place in the Union, into which more food-stuff for man or beast is shipped than is shipped out — practically every such community is a community of bad roads. In a word, country-folk who have good roads grow their own food as a rule, and generally more. Hundreds of thousands of facts and parallels like these are making an impression.

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The already loud clamor for national aid to construct highways becomes louder at every session of Congress. There is a probability that we shall have good-road "pork-barrels" as we have so long had river-and-harbor "pork-barrels"; for Congress does not easily learn economy by experience. And is there a member or a Senator who would not win favor at home by an appropriation to be spent in his district or his state?

President Taft spoke a reasonable and timely word of warning against national aid in road-building at the recent dinner of the Automobile Club of America, in New York. If such a warning may be interpreted as a threat of a veto, it may postpone this additional pork-barrel for a while.

The states and counties, of course, ought to pay for road-making. That is good economics.

THE GIFTS OF THE RICH

THE newspaper compilations of benefactions made by rich persons and corporations last year to such public institutions as colleges, hospitals, and museums, and to charitable uses, sets the sum at more than 150 millions; and during the last eleven years, the corresponding sum is estimated to be about a billion-and-a-quarter dollars. These estimates include only the large gifts known to be made by persons of great wealth. A very much larger sum, of course, was given for these purposes in the smaller donations of a multitude of givers — an enormously larger sum.

These imperfect figures may well set any man to thinking. In no other country do the people — either the rich or the well-to-do — give with anything like such freedom. The reasons for this good American habit are instructive. We have more rich and well-to-do persons than any other country. There are, no doubt, more great fortunes in England but by no means so much diffused wealth. But our diffusion of wealth is not the only reason for our freer giving for public purposes. The main reason is that we have not even yet come to look to the Government to do all such tasks as people expect the governments of the Old World to do. Something at least remains of our old-time theory that the Government should not become a general almoner. While the functions of our Government, from municipal to national, have constantly been multiplied and widened, still we recognize the duty of giving private help to our institutions for the public welfare. In fact a rich man is regarded as having fallen short of his duty if a part of his fortune does not go to some such use. And that is a wholesome sentiment in a democracy.

An inevitable inquiry is, "Do rich men not waste much money in their donations and bequests by giving it for less good uses than they might select - for uses, for example, that will in some way gratify Doubttheir vanity to be remembered?" But there seems from decade to less. decade to be a process of education by experience. For instance more and more money is given to relieve suffering and to eradicate diseases. That surely is well. Another kind of work that is almost new in the world and is of incalculable help to the human race is the endowment of institutions of scientific research. Such an institution with \$2,500,000 endowment was recently established in Berlin; and Professor Adolf Harnack, the President, gave credit for it to American activity in this direction, mentioning the Rockefeller Institute for Medical Research, the Institute at Manila and the Carnegie Institution at Washington.

And more and more money is given to save children from neglect and ignorance. Here any man may find one sound method of help, even if there be no other. Give to adults or for adults as you may, you will sometimes put your money where it will do harm as well as good. It is a difficult business to make sure that the help you intend for grown persons will always be help. But help to childhood stands a better chance.

If you are a rich man, you may find it worth your while to make an investigation to see if this difference be not fundamental and true; and, if you are a poor man, study the problem betimes so that when you become rich you may have no doubt about a wise way to bestow your fortune for the public good.

HOW PENSIONS MAKE COWARDS

URING the debate in December in the House of Representatives on the Sherwood pension bill, a group of Representatives sat in a smoking room just off the chamber.

"It's an infernal shame to waste the

public money in that way," said one. "It's bad politics, too," said another. "The Republicans have worked that game as long as there's anything in it and now we Democrats are fools enough to take it up too late to make anything by it." "Just in time," said a third, "to prevent

us from carrying out any programme of economy. We're all in the same boat."

The conversation went on with such remarks as these:

"I don't blame -He comes from a strong old-soldier district and he'd be left at home, if he opposed the bill, and his career of usefulness cut short. But the rest of you fellows — it's simply cowardice." "Cowardice or not, 1 must now go in

and deliver some buncombe for the old soldier and save my mutton." And in an hour afterward the last speaker was delivering an old-glory, old-soldier, highfalutin, humbug speech without a word of sincerity in it in favor of the bill that is meant to add \$75,000,000 to the annual pension cost.

This conversation was narrated to the writer of this paragraph by a member of the House, as truthful a man as lives. "Of course," he added, "I can't give the names of these cynical, cowardly members.'

At the hotels in Washington - or any place where Congressmen gathered to gossip, about the time this Sherwood bill was before the House - anybody who would be let into the circle of conversation heard similar remarks. Every Washington newspaper correspondent has heard such confessions time and again.

What have we here, then? A great fabric of fright, a school of hypocrisy, a state of mind which permits and excuses falsehood and cowardice. Men publicly proclaim what they privately admit is false and wrong. And Congressional opinion tolerates this conduct.

As Mr. Charles Francis Adams points out, there has never been in the United States since our government was formed such an organization as has grown up around pension frauds, nor an organization that has so intimidated political parties and public men - from Presidents down.

The "old-soldier vote" has already cost the treasury more than the Civil War cost. The cost of the war, above ordinary expenses of government, was \$3,250,000,000; and there have been paid out for pensions since 1866, \$4,245,000,000. There are now on the pension-rolls (including mercenary widows and deserters) almost as many names as there were soldiers serving in the field at any one time during the war.

Yet nobody in authority is brave enough to demand even publicity of the pension-Suppose a private business or a roll. corporation carried a pay-roll of more than \$150,000,000 a year, and there was even a whisper of fraud - do you not suppose that it would have a thorough examination made to determine at least whether every man on the roll was alive?

The pension-roll now costs more than \$150,000,000 a year. One per cent of that would pay for the publication of every name with the sum received by every pensioner, for what reason received, and upon whose examination of the facts and upon whose recommendation. If such publicity were made, public opinion in every community would probably point the way to a proper revision of the list and to the restoration of neighborhood opinion itself on this subject to proper self-respect. The worthy pensioners would, every man of them, be held in higher honor than they are now held; and the improper pensioners would be held up to deserved scorn.

This would be the first step toward

recovery from this national degradation of character.

Yet no Secretary or no President recommends such an obvious piece of good house-cleaning and good book-keeping; no political party demands it; no Representative or no Senator introduces a resolution to force it. They all live in this artificial House of Fright. Before the vast organization of claim agents and buncombe orators they are all cowards.

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It is such insincerities of political life as this that cause the public to hold Congressmen and other officials in contempt, to suspect them, often to despise them, and still oftener to fear their insincerity. For there is no substitute for moral earnestness. Without it public life can no more escape degradation and suspicion than private life can.

So long as by a conspiracy of silence and fear and by buncombe, Congress permits about \$160,000,000 a year to be spent for pensions, and adds to this cost, and refuses even to investigate its expenditure and to permit the people to know who receives it — just so long will Congress and administrations, of whatever party, deserve and receive public suspicion of insincerity and a degree of public contempt.

Reduction of expenses? Reform of the tariff? There can be no effective efforts at either so long as the Government has to pay this vast pension-tax; and every man who is tinkering at reductions and reforms knows this and knows that he is merely tinkering or playing a political game.

IV

Go out among the people; and you will not find a single man who will dissent from these two propositions:

(1) Every deserving pensioner should be rewarded and held in honor.

(2) Every undeserving pensioner should be exposed and dropped from the rolls.

V

So pervading is the effect of this long pension debauchery that this incredible thing happened: a petition to Congress to grant pensions to Confederate veterans received many signatures in an intelligent Southern community and was sent to Washington. The argument was that the Confederate veterans fought for a principle that they believed to be right.

Such an incident might be dismissed as ludicrous or pathetic or imbecile; but it has this important significance: it shows that many people have come to regard pensions as a charity. If the Government gives out hundreds of millions to the deserving who fought for one principle why not to others who fought for another principle? Are we not living in a liberal age? Should charity be narrowly circumscribed?

Thus it is possible that the poison of this demoralization may in time taint all public opinion and the Government come to be regarded as a great dispenser of alms.

V

There are many arguments in favor of a pension for men and women who have given long and faithful service in the civil branches of the Government. But no thoughtful man can favor such pensions in the light of our experience with military pensions. We have proved that the Government cannot be trusted with further responsibilities of this nature. The Civil Service Reform Association at its recent meeting in Philadelphia objected to such pensions and proposed instead that, if necessary, the salaries of civil servants be increased. At any rate they must manage themselves to provide for their old age.

AN AMERICAN ADVENTURE IN PERSIA

A MERICANS have watched with a good deal of interest and not a little pride the efforts of Mr. W. Morgan Shuster to defend what was left of the oldest empire on earth against the aggression of the rival empires of modern times, Russia and Great Britain. When the Persian Government wanted a disinterested expert to straighten out its demoralized finances, at its request President Taft suggested Mr. Shuster as a man capable of doing the work. In six months he converted a treasury deficit of \$500,000 into a surplus of \$800,000, although during that time he had to provide \$1,500,000, for the suppression of a rebellion backed by Russian influence.

But by his very success he necessarily made enemies not only of Persian officials by putting a stop to their graft and extortion, but also of the two great Powers which regard Persia as their protégé or prey. He put his foot into a diplomatic web that has been two hundred years in the weaving. The keynote of Russian policy has always been to gain an outlet to open water. The Persian Gulf was her only chance between Vladivostok and St. Petersburg. The keynote of British policy has always been to protect the overland route to India. This also necessitates control of southern Persia. In 1722 Peter the Great sailed down the Volga with his little fleet and took possession of the Caspian Sea including the provinces on its southern coast which the Russian troops are now again occupying. In 1903 Lord Curzon, Viceroy of India, sailed up the Persian Gulf with three cruisers and held durbars on the coast to reassert the old British claim, and now Indian troops have been sent to Bushire and Shiraz. The two Powers, without taking the trouble to consult Persia, calmly proceeded in 1907 to carve up the country into such "spheres of influence" as suited them. Their commercial and military manœuvres since may be regarded as merely the exercise of this "influence," and everything was going smoothly until Mr. Shuster appeared upon the scene.

This American "filibuster in a pea-



THE DARKENING SHADOWS OVER THE MOST ANCIENT EMPIRE RUSSIA, IN SEARCH OF AN OUTLET TO OPEN WATER, IS WIDENING HER "SPHERE OF INFLUENCE" IN NORTHERN PERSIA, WHILE GREAT BRITAIN, JEALOUS OF THE OVERLAND ROUTE TO INDIA, PLANS SIMILAR AGGRES-SIONS IN NEUTRAL TERRITORY. RUSSIAN TROOPS NOW OCCUPY KASBIN. THE OUTCRY OF PERSIA'S AMERICAN TREASURER-GENERAL, MR. MORGAN SHUSTER. HAS ONLY HASTENED THE DISMEMBERMENT

jacket and a paper collar," as the Russian papers call him, stood up and with a loud voice and rude words said right out what the world had tacitly ignored. But his plucky stand for Persian independence precipitated rather than retarded the partition of the country. The British Government has plainly indicated to Parliament that it has no intention of interfering with anything Russia may do in the northern half of Persia. At the same time the recent activity of Great Britain gives grounds for the suspicion that she hopes ultimately to absorb what was designated by the Anglo-Russian Convention of August 31, 1907, as neutral territory.

Thus the Persian effort at independence will be balked by English and Russian aggression. But Mr. Shuster at least gave this international game a kind of world-publicity that it would otherwise not have had.

THE DISTRIBUTION OF THE NOBEL PRIZES

LFRED NOBEL was an inventorof a new way of making money and of a new way of spending it. He made \$9,000,000 by the manufacture of something which the British Government, after due consideration by official experts, pronounced valueless, that is, dynamite; and he devoted the bulk of his fortune to the reward of contemporary greatness. We all know who are the great men of the past, or we think we know. But to find out who among those now living are doing the most for the advancement of the race is a more difficult problem and more important, especially if the recognition is accompanied by an award of money sufficient to afford enlarged opportunities for usefulness. It was Nobel's intention that the income from his estate should be divided into five equal parts to be annually bestowed respectively upon the persons who should during the preceding year have made the most important discovery in physics, in chemistry, and in physiology or medicine, and produced the most important work in literature of an idealistic character, and done the most for the promotion of international peace. The selection was entrusted to the Swedish academies of science, medicine, and literature, and, for the peace prize, to the Norwegian Storthing. The Committees have performed their delicate task conscientiously and impartially and the worthiness of most of the recipients has not been questioned by those who know their work, even though they may challenge their preëminence.

The Nobel roll of honor, therefore, affords a unique opportunity to see which nations are doing the most for civilization as indicated by the sixty-five individuals who since 1901 have received this award. Germany has been so honored sixteen times and stands at the head in all five departments except peace. France stands second with ten Nobel prizemen, followed by England with seven and Holland with five. Then come Russia, Italy, Switzerland and Sweden with four each; and Denmark, Spain, Belgium, Austria, and the United States with two each; and Norway with one.

It is humiliating to American pride to be put in the lowest rank with countries as small as Denmark or as backward as Spain; but when we consider the list it is not so easy to suggest names of many Americans who are clearly entitled to crowd out the European recipients of the prizes. We are obliged to confess that our achievements in science and literature are not what might be expected of us, considering the population, wealth, diffusion of education and number of laboratories in the United States. Why not, is a hard question but one worth thinking about.

The two Nobel medals which have crossed the Atlantic came to Professor Michelson of the University of Chicago for his investigations of the wave-length of light and to Theodore Roosevelt for his services in bringing about peace between Russia and Japan. Last year the peace prize was divided between Professor T. M. C. Asser of Amsterdam, an authority on international law and now 73 years old, and Alfred Fried who was born in Vienna in 1866 and is the founder of the German Peace Society. The prize in medicine went to Professor Allvar Gullstrand of the University of Upsala for his work in ophthalmology; and the prize in physics to Professor Wilhelm Wien of Würzburg, discoverer of "Wien's Law", and expert on "canal rays."

Madame Sklodowska Curie has the distinction of being the only person who has received two Nobel prizes. In 1903 the prize in physics was divided between Becquerel and Pierre Curie and his wife, since all three were concerned in the opening of the new and rich field of radioactivity. Professor Curie was killed by being run over on a Paris street a few years ago but Madame Curie has continued her research work and has recently succeedep in isolating the metal radium, whose mysterious emanation and perpetual flow of heat have revolutionized physical science. Like Sienkiewicz, who holds the Nobel literature prize, Madame Curie is a Pole and she has given her country a name in science which it is denied on the map, by calling the most energetic element she dis-covered, "polonium." Two other women have been honored by the Nobel Foundation, Baroness Bertha von Suttner for her great peace novel, "Lay Down Your Arms," and Selma Lagerlöf for her imaginative Swedish stories.

The public takes more interest in the literary prizes than in the scientific, and there will be general satisfaction with the latest award to Maurice Maeterlinck. Yet who would have prophesied twenty years ago that the young Belgian poet who was printing on a hand press a very limited edition of a symbolistic tragedy filled with weird echoes of Shakespeare, would ever become a popular author, beloved of old and young in many lands? Maeterlinck has known how to win more than one public. Some who cannot endure such dramas as "Pélléas and Mélisande," enjoy hi interpretation of "The Life of the Bee" enjoy his many go to see "The Blue Bird" who will not read his essays on "Wisdom and Destiny." Yet through all these varied forms there is a sane and simple philosophy of life, not unworthy to be called idealistic in the sense in which Nobel used the word.

AN ACCIDENT THAT SAVED A BUSINESS

BY C. M. K.

NE day about ten years ago, a salesman for a New York bond house, foraging for business, called on the president of a little \$50,000 manufacturing company in Connecticut to try to sell him some bonds. He met the

to sell him some bonds. He met the usual response. "Young man," said the president, "I

haven't any use for bonds or any other kinds of stocks. I have always put all my money into this business. I started it in a barn twenty-five years ago, and it has grown up now to pay me about \$20,000 a year because I have always attended to it and put my money into it."

The salesman was an adaptable man. He asked a lot of questions about the business and was genuinely interested. *Finally, as he rose to go, the salesman said*: "A good many men, carrying on successful business enterprises, and putting all their earnings back into the business, find out some time that it would have been a good thing not to have quite all the eggs in one basket. Sometimes a reserve that is not tied up in the business turns out to be pretty useful. I hope it won't be so in your case."

About two weeks later a letter was forwarded to the salesman from his home office in New York. It came from the manufacturing president — an invitation to call. The salesman accepted it with alacrity. They talked over the whole subject of bonds, what they represented, how they paid their interest, how they could be used in a business way, and all the other details with which only the bond buyer or seller is familiar. In the

end, the manufacturer bought two standard railroad bonds for cash.

A few months later the salesman dropped in again and he found that the merchant had \$2,000 more which he was perfectly willing to invest. He had explained the thing to his wife and she, being a cautious woman, had endorsed the idea. He wanted to know from the salesman whether the bonds could be put in his wife's name, and the salesman explained the matter of registration.

In the course of the conversation it developed that the buyer had come to the conclusion that he would put away regularly \$500 a month into bonds. The idea of a sort of sinking fund had taken firm hold of him. Several times in the course of this talk he brought up the idea of not having all his eggs in one basket. When he told that he intended to set aside regularly a certain amount of his profits, the salesman conceived another idea which might be of mutual advantage.

idea which might be of mutual advantage. "Why not," he said, "instead of buying small blocks of bonds, buy \$10,000 of a good bond, pay 20 per cent. on it down and pay the rest month by month, sending us your check every month until the bonds are paid for. We don't do that very much, but if you are going to be a steady investor I think I can persuade the house to make a deal whereby the interest on the unpaid balance will not be any more than the interest paid by the bond, so that every dollar you put in begins to earn some money right away."

They talked this over. In the end the manufacturer bought \$5,000 of bonds and paid \$500 on account with an understanding that he was to pay the same amount each month until the bonds were fully paid for. That was the beginning of a habit. For nearly ten years it continued. Sometimes the bonds were high grade railroad issues, once they were municipals, twice they were short term notes, and on several occasions they were public utilities underwritten by the banking house. The salesman never bothered to call except when the last payment was made on each block of bonds, when he would go around and discuss with his client what he should buy this time.

For all these years the accumulation went on without any business use being made of the bonds. The buyer forgot that part of the conversation, and he became to all intents and purposes simply an investor, thoroughly contented and easy in his mind, and did not think of any financial advantage from his investment except the steady income which it paid. When this income reached a point where it would itself buy a bond a year he increased his purchases by that much. He began to assume the appearance of an inveterate investor.

About a year ago his health broke down and he and his wife went to Europe for The business was left in charge a rest. of his nephew. A block of bonds was bought to be paid for while he was away by checks sent from the office. He went away and rested with an easy mind. Bv August he was in good health. Then, one day, he received an urgent cable calling him back in a hurry and stating that matters of urgent import demanded his presence. He packed up and came home as fast as he could.

It developed that the company had been robbed on a wholesale scale by the nephew. The discovery of a shortage nearly equal to the entire capital stock had practically wrecked the institution. The nephew had absconded. The credit balance of the company had disappeared and one of the banks was calling for the payment of its loans. The situation when the president arrived was extremely critical. The banks, as usual in the case of a client with long standing credit, had allowed over expansion and the result of the sudden curtailment of credit facilities seemed to be inevitable bankruptcy.

The first few days were spent in trying to arrange new credit facilities. Then a few anxious days followed wherein the president tried on his personal credit to raise funds from his friends. Unhappily, little could be done in this direction, for he had himself never been a liberal lender of money, particularly in times of distress, and he found his personal goodwill in the financial field of very little avail. He reached home from the last salvage expedition on a Saturday night. worn out and almost ready to give up and let the affair take its natural course.

His wife told him that she had been called up in the morning by his friend the salesman, who had called at the office and learned a little of the situation. He had stated that he would spend the night at a hotel in town and would like to see the president either Saturday night or Sunday, about some more bonds. The message flashed an idea to the old man's mind and he lost no time in getting to the telephone. Fifteen minutes later the salesman was in his library listening to a plain unvarnished tale of all that had happened. When the story ended with the statement that the company needed \$50,000 and needed it right away the salesman justified his existence.

"Why," he said, "as close as I can figure, you have about \$75,000, altogether, of bonds, and you bought them all from me. I can't speak officially for the house, but I wouldn't be afraid to bet any amount of money that we will lend you \$50,000 on that collateral at the current rate of interest for as long as you want it, or that we will buy back the bonds from you and give you pretty close to what you paid for them if not more than you paid for them. If you will let me call up the house of one of our partners in New York I will see if I can make it official."

In half an hour it was arranged. The money would be loaned at 5 per cent., and if more money was needed the bonds would be purchased for cash at the market value. Since the bonds were all registered the salesman undertook to get them in shape to be used as collateral and the money would be delivered by Tuesday at the latest.

At the present time that loan is still standing. None of the bonds have been sold and none of them are likely to be sold, for when the banks discovered that \$50,000 cash had been thrown into the business, the business was on its feet again immediately with as good credit as it ever enjoyed if not better.

This episode is the best illustration possible of a growing habit of building up reserves against business contingencies. There are a great many business men in

the country to-day who recognize the cardinal truth that, if they put all their resources into their own business and into matters that are dependent upon their own business for success, they are carrying all their eggs in one basket, and there are probably a thousand companies in the Eastern States that are putting away year by year what they consider solid and substantial reserves in the form of investment. These funds are never disturbed for the ordinary exigencies of business. They are not used in the buying of raw material or in the process of manufacture, which can be carried on bank credit. They are understood to be cash resources which, if necessity arises, can themselves be made the basis of additional bank credit at the rate of \$400 of credit to \$100 of cash.

While the practice is general enough at the present time, the method, I should say, in the majority of cases is extremely imperfect. I know of one case where this so-called reserve is invested in suburban real estate mostly very near the factory itself. No mistake could be much worse. Real estate is not a liquid asset. It cannot be sold at a moment's notice. In most cases it could not even be mortgaged at a moment's notice, and in the case I refer to most of it is bought already fully covered by mortgage.

fully covered by mortgage. This matter of buying with a reserve something that could not be used quickly in case of an emergency is about as sensible as it would be to equip fully your factory with fire escapes, lock every door leading to them and throw the keys away. The effect will be the same in case of an emergency in nine cases out of ten.

Therefore, if there is one thing that a reserve of this sort ought to be, it ought to be liquid. Standard listed bonds are undoubtedly the best possible form for it to take. When a man starts out to set aside such a reserve, he ought to pay attention to this form of securities alone for the first few purchases at least. After he has bought one or two blocks of these standard bonds, which would be good collateral in his own bank or almost any other bank, or which he could throw into the market at any time and get his money

the next day, he can turn to the idea of getting a little higher revenue. The standard bonds will yield him from $4\frac{1}{4}$ to $4\frac{3}{4}$ per cent. a year. His second class will yield him 5 to $5\frac{1}{2}$ per cent. though the latter rate is high under present market conditions. He should not try to go over that rate at the present time under any circumstances.

Specialty bonds and stocks, dealt in by people who, if crisis arose, would not bid for the bonds at any reasonable price and who would almost certainly refuse even to loan upon them at a reasonable rate, should not be touched under any circumstances by this kind of buyer. They may be all right for income only; but the man who is putting away funds as an anchor to windward cannot afford, for the sake of income, to throw away the whole purpose and intention of this investment. Therefore, insist always that bonds or stocks bought for a reserve of this sort be salable and loanable.

If your banker tells you that this block of bonds yield $5\frac{1}{2}$ per cent. and has a "reasonable" market and that that one yields only $4\frac{1}{2}$ per cent. but could be sold at any time, your natural inclination ought to be toward the second rather than the first. In a man's own personal investment he does not often need to be able to throw his securities into the market any day, and the $5\frac{1}{2}$ per cent. issue might be much the better of the two for him; but business money must be real money, and not a non-negotiable promise to pay twenty-five years from now.

PENSIONS – WORSE AND MORE OF THEM THIRD ARTICLE

THE COSTLY SUCCESSION OF "BLANKET" BILLS — \$160,000,000 ANNUALLY AND THE END NOT IN SIGHT — OUR REMUNERATIVE ROLL OF HONOR

BY

CHARLES FRANCIS ADAMS

ORTY-SIX years after the echoes of the last gun discharged in the Civil War had died away, it was offi-cially estimated that rather more than 550,000 of those who served therein in any military capacity still survived, and that 96 per cent. of those surviving were the recipients of pensions. Such a statement, including, as the aggregate of survivors necessarily must, those whose term or character of service was merely nominal, those who were in advance paid for all they did, and paid most liberally, those who are otherwise amply provided for, and those who for various causes are undeserving of assistance and when men gathered up promiscuously are numbered by the hundreds of thou-

sands the percentage of such is of necessity invariably large, — taking all these cases into consideration, the statement speaks for itself. Such a showing is not creditable. On its face it is suggestive of reckless and indiscriminate giving on the part of the public, and of fraud and false pretence on the part of the recipients. That more than one quarter of those who genuinely participated in a war half a century ago still survive is, to say the least, surprising. If substantiated, however, the fact speaks volumes for the excellent physical condition in which they came out of it. On the other hand, the implication that no less than ninety-six out of a hundred of these survivors of the stalwart American youth of 1861 are now if not virtually paupers yet dependent for a comfortable support on others or on the public is certainly in no degree conducive to an increased national self-complacency. The simple fact is, neither of the things stated is really so. No such number of proper and worthy recipients of public assistance survive; no such proportion (96 per cent.) of average American citizens of any class stand in need of assistance from the public. If any faith at all can be put in the statistics of American life, or, throwing statistics aside, if any reliance can be put on ordinary, every-day observation, it is manifest that more than half of the enormous sum (\$157,325,160.35) thus expended in 1910-11 was worse than thrown away; that is, if the rule universally deduced from human experience-that profuse and indiscriminate giving is a curse - holds good in this case also. That our pension system tends to pauperize the community by undermining that sense of self-respect always incident to self-support, hardly admits of denial; that indiscriminate giving, regardless of individual requirements, restricts the funds available for the relief of the really deserving and really needy. is a self-evident proposition. That such a condition of things calls for reform is obvious; but before a proper measure of reform can be devised, it is necessary to have a clear understanding of the real cause of difficulty - the root of the evil.

In the case of the pension system, that root of evil is found in the legislative policy which has for nearly thirty years been steadily followed in regard to it — a piece-meal, instalment-plan policy, gradually assuming shape through an ill-considered succession of progressive "blanket bill" enactments. In other words, while perpetually legislating, no measure has ever been even suggested which professed, much less which was intended, to be comprehensive and final. Itself avowedly an entering wedge, the passage of each measure is forced through by a system of tactics which might most aptly be described as the "flying wedge." In other words, the organization having this legislation in charge — the General Pension-Staff, we will call it — first con-

siders what can probably be obtained under conditions at the time prevailing the particular political party in control, the state of the Treasury, and the greater or less proximity of an election. A meas-ure is then introduced intended for immediate action, with a distinct intimation that further and ulterior results are in view; but reserved for a more opportune occasion! The measure selected is as much as can probably be made to go now. As the result of a varied experience stretching through the lifetime of an entire generation, the General Pension-Staff is well advised as respects both pension strategy and congressional tactics. The method of procedure has been reduced to a system. In the last Congress it was time and again asserted in debate that the end ultimately in view was the securing of legislation which would give what is known as the "dollar-a-day" pension to every man who, having served 90 days during the Civil War, had received an honorable discharge, and \$20 a month to the widows of such, regardless of the date of marriage. The so-called "Sulloway" bill, it was claimed, would "at once put at least 75 per cent. of all soldiers on the roll at \$30 per month, and the balance will receive a like amount before long." The widows, dependents, hospital nurses, teamsters, camp-followers generally, and even militia, were to follow, an endless procession as long as the money held out.

The legislation thus immediately proposed, which would unquestionably have gone through could it have been brought to a vote, would easily have lifted the appropriation above the two-hundredmillions-a-year mark. Upon this the "flying" wedge was directed; but this again was merely an "entering" wedge. Judging by the experience of the past, it can admit of no question that, if the Sulloway bill had become a law, and the dollar-a-day pension basis had been established, the cry would next have been heard that the cost of living had so increased that a dollar and a half a day was in purchasing power now no more than a dollar a day at the time the measure was first advocated. The pensions should in "justice" be increased accordingly. Further-

more, under no measure yet even introduced, much less made law, has any attempt been made toward reducing to a system legislation by special act covering individual cases. On the contrary, it was distinctly stated in the debate on the "Sulloway bill," nor was the statement denied that, if the most extreme of the present "blanket" measures were passed, the future introduction of special acts would in no way be restricted. Rather, a new life would be infused into that vicious practice, but on a higher level. was at once pronounced excellent; its further application was proposed. So the next year a bill was prepared and submitted, generalizing, but in moderation only, the exceptional case. Presented May 7, 1906, and referred to the Committee on Military Claims, this measure, strictly limited, had a most plausible sound. As such it appealed. In fact, as soon became apparent, it was only the second blow upon the wedge inserted the previous year. Under this bill (59th Congress, Document No. 489, reported

THE SWELLING "ROLL OF HONOR" OF PENSIONERS BY SPECIAL ACT

CONGRESS	NUMBER	CONGRESS	NUMBER
Thirty-seventh (1861-1863). Thirty-eighth (1863-1865). Thirty-ninth (1865-1867). Fortieth (1867-1869). Forty-first (1869-1871). Forty-second (1871-1873). Forty-third (1873-1875). Forty-fourth (1875-1877). Forty-first (1867-1879).	27 138 275 85 167 182	Fifty-first (1889-1891) Fifty-second (1891-1893) Fifty-third (1893-1893) Fifty-fourth (1895-1897) Fifty-fourth (1895-1897) Fifty-fifth (1897-1899) Fifty-sixth (1897-1993) Fifty-seventh (1901-1903) Fifty-eighth (1903-1905) Fifty-ninth (1905-1907) Sixtieth (1907-1909)	1,388 217 119 378 694 1,391 2,171 3,355 6,030 . 6,600
Forty-seventh (1881-1883) Forty-eighth (1883-1885) Forty-ninth (1885-1887) Fiftieth (1887-1889)	216 598 856	Sixty-first (1909-1911) Total	9,649 35,987

Every bill, therefore, yet introduced has been of the "blanket" and "entering wedge" character — an instalment only.

wedge" character — an instalment only. The "flying wedge" is then brought into legislative play. All the forces behind every possible description of pension act, whether reported, contemplated, or hoped for, are concentrated in solid phalanx behind that measure which immediately holds the stage. That carried, the next is in order.

Next, thus in order, to the Sherwood Dollar-a-day bill — now actually reported and immediately impending the measure known as the Volunteer Officers Retired List affords in its history an apt illustration of the "entering wedge" tactics. This measure originated in 1905. On March 3, of that year, Gen. Joseph R. Hawley and Gen. P. J. Osterhaus, officers of the Volunteer Civil War service, were placed by special act on the pension roll as Major Generals "retired." A precedent was thus created; the narrow edge had been inserted. The principle June 13, 1906,) it was proposed to create a special roll to be known as the Volunteer Retired List. A place upon this roll was limited to those 70 years and upward of age, who had, after an actual Civil War service of two and one-half years, attained the rank of Major General or Brigadier General of Volunteers, or who, being field officers of volunteer regiments, had been brevetted Major General or Brigadier General. Eligibility to this roll was very properly extended to all who, without reference to the length of their service, having attained the above rank, had in the line of duty sustained injuries of a specified character. Those on the roll were to be entitled to threefourths pay on the scale received by officers of like rank in the regular army. A somewhat imperfect list was prepared, assumedly containing the names of 191 persons reported as possible beneficiaries under this act, should it become law. The passage of the act, would, it was stated, involve an annual expenditure of above \$550,000; not, for the end in view and under the conditions set forth, a considerable or unreasonable addition to an annual pension appropriation exceeding \$150,000,000.

At first glance the measure commended itself. The length of service rendered thirty months - the rank achieved - that of general - the age attained before becoming eligible as a beneficiary - 70 - all served as guarantees, and years established limitations. Here was honorable recognition and reasonable reward for exceptional service, long rendered. It soon became apparent, however, that this bill, in the form proposed, stood no chance of passage; and this on obvious grounds. For, whereas, a "blanket" pension bill covering enlisted men as well as officers would affect some six or eight hundred thousand voters, a bill which affected less than two hundred voters only, no matter how individually deserving, was plainly lacking in political merit; for, in consid-ering proposed pension legislation, the voting strength of those affected is in the Congressional mind the prime consideration. The measure now suggested went home to but half a vote on the average in each Congressional district; argal, as Shakespeare's clown would have dis-coursed, it was undeserving of consider-ation. Though a strenuous effort was made toward the passage of this measure, nothing could be effected. Obviously, it was necessary to enlarge it. It would be purposeless here to follow it through its several subsequent stages. Annually brought up, and ever in a new and more attractive form pressed upon the notice of Congress, it made no progress; and so, gradually assuming new shape, it at last became thoroughly comprehensive - so to speak, broad-bottomed. The age limit disappeared; the length of service was reduced; one after another, every grade of commissioned officer was included in its scope.

A little "log rolling" was also at this stage expedient. The consideration and passage of the measure could tacitly but most advantageously be combined with the consideration and passage of another "blanket" measure in favor of the enlisted man; a measure affecting, it was said, 800,000 beneficiaries, and adding \$55,000,000 to the pension payments. This was business! In thirty states of the Union the two measures would, if combined, probably affect an average of 3,000 beneficiaries in each Congressional district; and, while it was true the establishing of the retired list alone would in those states probably affect on the average hardly more than one hundred voters in each district, yet they were active and influential voters!

In its final shape, and so accompanied, the original bill of 1906 had thus assumed a wholly new aspect. The measure as now framed applied to all ever having held a commission in the Civil War Volunteer Army, without regard to age, provided only that the entire term of service of the proposed beneficiary had exceeded six months. In other words, every individual who had received a commission during the Civil War and had served half a year or more, whether as enlisted man or officer, at the front or in the snug retirement of a recruiting office, was placed for the remainder of his life on the Retired Volunteer Officers Pension Roll, with two thirds pay, quite irrespective of whether he had received injury during his period of service, which had to a degree already been provided for under other legislation, and without regard to his extraneous means of support. And yet it is safe to say that quite a large proportion of these proposed beneficiaries had, during their period of military service, been the recipients of larger salaries than had ever subsequently come their way.

The innocent looking, strictly limited measure introduced in 1906 had thus in 1910 become "blanket" legislation of the widest and most vicious character. As such, it was estimated that it would include 22,000 beneficiaries, instead of less than 200 as originally proposed, and, instead of \$550,000 a year, it would add \$14,600,000 to the annual pension roll of \$155,000,000. Though favorably reported, this handsomely enlarged measure still failed in obtaining the necessary support. In other words, it did not even yet represent a sufficient number of votes to make

its passage worth while in the average Congressional estimate. Nor did the rank and file of the pension roll, so to speak, regard it with favor. In the eye of the enlisted man, the commissioned officer had already enjoyed sufficient advantages; he was in no way entitled to further favors. That the bill should again be recast, and re-appear in a still more seductive form was reluctantly recognized as essential. This work was accordingly next taken in hand, and, on February 21, 1911, the measure was reported in the Senate in an entirely new and altogether more reasonable shape. It now included all surviving volunteer commissioned officers who had served during the Civil War for a term or terms aggregating two years; they were to receive a reasonable retiring allowance at a diminishing rate, running from \$900 per annum in the case of a colonel, or grades higher than colonel, those holding the same having served two years and more, to \$450 to Lieutenants having served in excess of one year; provided that no ex-officer should be entitled to, or should receive the retired allowance until he should have arrived at the age of 70 years, nor until he should first make affidavit that his income, derived from private sources, including the income of his wife, did not exceed \$1200 per annum. It was estimated that the first year's net cost of the measure thus recast and limited would be approximately \$5,000,000 in excess of all pensions (\$3,000,000) now paid to the proposed beneficiaries under existing pension laws. It might apply in all, it was assumed, to about 15,000 persons; and right of admission to the roll without retired pay was very properly extended to all surviving officers who had served six months or more, irrespective of age or private income; a merely honorary recognition.

Reduced to this final form, the measure may be considered as now pending, and ready for consideration by the present Congress at its first regular session; that is, practically, after the passage of a previous "blanket" measure, satisfactory to a much larger number of the rank-andfile, has been secured. That has the right of way! In the form it now bears, the

Volunteer Officers bill is plausible. Nevertheless, under the established and prescriptive system of pension legislation, this measure also if now passed, will in all human probability prove to be merely another stage of the Hawley-Osterhaus wedge. Once it becomes law, the cry will be raised - Why this discrimination between the list of the Regular Service and the Civil War Volunteer list? The limitation of age will hardly be swept away, because the number of the Civil War commissioned officers already less than 70 years old is inconsiderable. The other limitations would, however, one by one be removed, until finally all distinctions between the volunteer retired list and the regular army retired list would cease. The Hawley-Osterhaus precedent would, in the joint names of Justice and Honorable Recognition, be applied universally!

The arguments most confidently urged in its support are, if calmly considered from a detached point of view, the most curious feature in the very earnest advocacy of this measure by those interested in its passage. And apparently those who advance these arguments actually believe in them! They never weary of asserting, until they have convinced themselves, that the measure is one of right; that it merely carries out a solemn pledge made by Congress and confirmed by Abraham Lincoln during the first year of the Civil War (July, 1861) — a promise to the effect that those mustered into the volunteer Civil War service should be placed on the same footing as to pay and allowances as similar corps of the regular The proposed beneficiaries then army. go on somewhat strenuously to ask -How has the Government kept this promise?" And it is pointed out that since 1866 Congress has passed various acts conferring honors and benefits on officers of the regular army, solely on account of their Civil War service; but has passed no acts of a similar character in favor of the officers of the volunteer service.

The passage of similar measures relating to the volunteer officers is next demanded as an act of simple justice – the redemption of a solemn contract volunteered by the Government when in dire need, etc., etc. The fact is conveniently ignored that no one of the several measures referred to applied to officers of the regular service who had subsequent to the war been mustered out of that service. It applied only to officers of continued and consecutive service lasting until those to whom the acts applied had been retired for age or incapacity. No one of these acts applied to those who had been mustered out, least of all those who had been mustered out more than forty years before at their own request, and in order that they might enter upon other occupations which at the time had seemed to them likely to be more remunerative, or in other respects desirable. There is, consequently, no analogy whatever between the two cases, and no pledge was ever made which the Government can justly be called upon now to redeem. Regulars and volunteers are on precisely the same footing. Yet those who would be beneficiaries under the proposed act have actually argued themselves into a firm belief that, in demanding a great preference, they are merely insisting upon the fulfilment of an obligation which has up to date been unduly and unrighteously withheld.

A similar analogy is drawn between the officers of the Civil War and the officers of the so-called Revolutionary army, wholly oblivious again of the fact that there is no real analogy between the two cases. No benefits or pensions of any description were conferred upon the officers of the Revolutionary army until the lapse of close upon half a century after that struggle closed. During the Civil War the officers of the volunteer army were paid, as were the officers of the regular army, what belonged to the grades they held in the legal-tender money then in use - "the blood-sealed greenback" - which possessed a recognized value. The officers of the Revolutionary army, on the contrary, were paid in a continental money, constantly depreciating and finally altogether valueless. Every officer of the Civil War who has seen fit to claim it has since been the recipient

of a regular pension, the same as that of the enlisted man. No real analogy, therefore, exists between the two cases; and yet the analogy is constantly urged, as if it were perfect at every point, and as if a right conceded to the officers of the earlier struggle had been denied to those of the later. In other words, a preference is importunately demanded in the names of Justice and Equality.

Such, as respects pensions, is the system of progressive, patch-work, instalmentplan, blanket legislation which has been pursued for the last forty years, and is still being pursued. Nor is any end in sight, or limit proposed. It simply feeds on itself - and \$150,000,000 a year of public money, soon to be \$200,000,000! Under such circumstances, what the occasion now calls for is obvious. It calls, and it calls imperatively, for some measure of a wholly new character-- at once constructive, definite, and final. A measure which will discharge the over loaded and groaning committees of Congress from all further consideration of pension acts, general or special. The framing of such a measure should also, it would seem, be easy; nor in framing it would it be necessary to tax the knowledge or ingenuity of the Congressional Committee on Invalid Pensions. On the contrary, such a measure would best be prepared under instruction and for the use of that committee in the Pension Bureau and the office of the Adjutant-General. Then, prepared by experts in the full light of a vast accumulated experience, it would be so framed as to make provision, at once suitable and liberal, for all ordinary classes, as also to provide for cases of exceptional hardship. The business of Congress is to legislate, not sit as a tribunal, whether executive, administrative, judicial, or eleemosynary.

The first existing condition manifestly calling for attention in such a measure would be a purging of the roll. It is useless to assert, as is generally asserted, that no purging of the roll in this case is necessary; or that, so far as it is necessary, the machinery for it already exists. Neither statement is true. During the year closing June 30 last, in consequence

of repeated allegations of extensive fraud, the Commissioner of Pensions has instituted what he terms a "checking of the pension roll." It amounts, however, to nothing more than the ascertainment that, in the localities selected for investigation, the person receiving the pension was actually the person entitled to draw it. Beyond that somewhat immaterial consideration there was no attempt to go. The charge is that in this, as in all similar cases, the inducement to fraud has begotten fraud. Measures of a more searching and drastic character are called for; and, in the case of a private company engaged in the business of insurance or the payment of annuities, would be in use. But even allowing that a machinery, such as it is, for the elimination of fraud already exists and is in use, the charge is made, and moreover is supported by reference to cases judicially and otherwise exposed, that the existing pension roll is largely factitious, built upon perjury, misrepresentation, and evasion. Notoriously, it is a sealed book. Within the last year it has been, in private, confidently asserted by officers of the Government, than whom none have better means of reaching a correct conclusion, that if the existing roll were as thoroughly purged as a similar roll would be by a private business organization, the amount paid out thereunder would be reduced by onehalf.

Such cases as the following, too numerout to specify, are on record and have in course of recent debate been brought to the notice of Congress. A responsible man, himself a veteran of the war, wrote from a town in Ohio that he "could name at least twenty men in the same company to which he belonged who are receiving under special pension acts \$24 a month, and who never stood in line of battle. Still another case was specified on the floor of the last House of a man "who enlisted in 1864, got a big bounty; stayed in the hospital until discharged; never fired a gun or did a day's duty at the front; came home; was examined; was pensioned at \$12 per month for the last stages of consumption, and is living yet." A system under which such abuses exist, and are practically connived at, is one not improperly characterized as a "system which offers every possible inducement to mendicancy and conceals every possible inducement to fraud."

Without going into the exact truth, or possible exaggeration, of such statements, it should be sufficient that they are made, publicly made, and in Congressional debate. The pension beneficiaries, in this respect resembling all other recipients of public money, should be peculiarly sensitive under such imputations. Demanding inquiry, they should challenge searching investigation. The pension roll, it is claimed, is one of honor. If it be one of honor, those who discredit it by their presence should be exposed, and their names stricken therefrom.

The first and obvious step to this end would be publicity. The fullest light should be let on. This would be brought about by the annual publication of a list of pensioners, indicating in each case the name, place of residence, and the amount of which the beneficiary is in regular receipt. It should be by state and county, town and ward, the appeal being to persons dwelling in the immediate vicinage of the recipient.

Against this most obvious remedial measure two arguments are advanced arguments singularly contradictory as well as futile. In fact, in this respect as in others when pensions are in question, great mental ingenuity is displayed in the invention of objections to any measure looking to public enlightenment. In the first place, the pension roll is proclaimed a roll of honor. It is then, however, immediately argued that the acceptance of public money savors of pauperism, and places the recipient thereof somewhat in the position of a mendicant. "Veterans" are sensitive; and their sense of delicacy should not be outraged by any publication of a roll, even though it be one of honor! In other words, the presence of his name on that particular roll of honor carries with it a stigma. Next, and with increasing ingenuity, it is asserted that the publication of such a roll subjects those whose names thereon appear to receiving applications from at torneys, "green-goods" men, dealers in quack medicines, and other well-known solicitors of patronage, and in this way subjects the battle-scarred veteran to unnecessary annoyances; which, however, are shared in common by them with the ten to twelve thousand persons whose names appear in "Who's Who in America" and other similar publications.

The simple fact is that those advancing these ingenious arguments, as well as others of similar character, do so for the excellent reason that they well know the existing pension roll would not bear the glare of the lime-light. Cases of fraud by the thousand would, it is alleged, at once become patent were that light let on. Those who take a proper pride in the presence of their names upon the roll of honor should on this score alone demand that the roll be made public.

Finally, it is urged that this and the other measures proposed involve an annual expenditure of large sums, which had much better be saved and given to the veteran under the "blanket" system, without formal examination or prying inquiry into the particular case. Any private corporation distributing annually considerable amounts in the form of pensions to superannuated employees, or employees injured in the service of the company, would unquestionably consider 5 per cent. of the amount distributed well expended in the work of administering its relief. Were 5 per cent. of the United States pension appropriations so expended it would amount to no less than the absurdly unnecessary sum of \$8,000,000 One half of that amount would a year. provide for all existing Penamply sion Bureau expenses and also pay the cost of the most drastic investigation, including the annual publication of the roll of beneficiaries. The argument from economy through dispensing with effective administrative work is merely a cover for a public expenditure fraudulently profuse.

Publicity and the consequent purging of the roll being then first provided for, the next step would be to prepare, in the light of the experience of fifty years, a definitive and comprehensive measure, understood to be of a final character, covering

all possible cases and classes of cases, both ordinary and exceptional. It is useless to argue that such a measure is difficult of preparation. All the material necessary for framing it must have been accumulated, and is now in the hands of bureaus and officials amply competent to frame a measure accordingly. It only needs that they should be set to work. That the ordinary member of a Committee on Invalid Pensions is not qualified, or in any respect competent, to prepare so complex a measure, is obvious. He has not the knowledge of precedents and statistics, nor could he devote to the framing of the bill the necessary amount of time and thought. It should be prepared to his hand; taking the place of one of those slip-shod "blanket" measures so discreditable to legislators, but which committees seem always ready to accept and report.

The course now to be pursued by the honestly sympathetic but yet conscientious Congressman would thus seem tolerably plain. When the next bill providing for an indiscriminate increase of pensions is proposed, he should not oppose it as a measure of relief to the "worthy soldier" and "veteran," but, objecting to its form, he should ask that it be referred back to the committee reporting it, with instructions to prepare a bill of a definitive character, understood to be final as well as comprehensive, covering all cases which a century's experience has shown likely to arise; the same to be reported as a substitute for the last pending specimen of "blanket" legislation. After all these years and in the face of such an accumulation of experience, involving more than four thousand millions of public money already actually disbursed, no measure, not so framed and reported as final, is entitled to respectful consideration.

Finally, a comprehensive measure, understood to be definitive, and as such doing away with all necessity for future Congressional action, having been prepared — it would remain to provide the administrative machinery necessary to its effective working. This should not be difficult. It was, in fact, clearly pointed

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out in the debate on the Sulloway bill by Mr. Payne of New York. The committee in its report had complained in terms already referred to of being hopelessly overworked, it was unable by utmost exertion "day and night" put forth, to dispose of more than one in fifty of the cases referred to it. In reply Mr. Payne said that, if the committee was not able to reach all these "distressing cases," he Houses, under which they are reporting special bills, and give the Commissioner of Pensions authority to grant pensions in accordance with these rules. The affidavits which are now examined hastily by the committees, from the necessities of the case, would then have to undergo the scrutiny of the Pension Bureau, and the facts could be far more easily and accurately established." Such a disposi-



REPRESENTATIVE ISAAC R. SHERWOOD OF OHIO AUTHOR OF THE "DOLLAR A DAY" BILL, WHICH RECENTLY PASSED THE HOUSE BY A VOTE OF 229 TO 92; CHAIRMAN OF THE COMMITTEE ON INVALID PENSIONS WHICH HAS A LARGER PAT-RONAGE AT ITS DISPOSAL THAN PROBABLY ANY OTHER COMMITTEE OF CONGRESS

wished to point out to them that, by "enacting into general law the rules which they enforce when bills are brought before that committee, giving the administration of it to the Pension Bureau, they would relieve the committee of the consideration of nearly all these cases." It would, he then added, be far more just than the passage of the "blanket" bill then pending, to enact into law "the rules adopted by the Pension Committees of the two tion of the matter would, however, it must be confessed, be inconsistent with the economical theories, more popular in the Congressional mind, advanced in the same debate by a Representative from Ohio. This gentleman thus expressed himself: "I would, in a spirit of real economy, abolish the brass ornaments and expensive machinery of the Pension Bureau, muster out the army of agents examiners, and medical boards, and the

grant without question a pension to every Civil War veteran holding an honorable discharge or being able to satisfactorily account for its absence. Thus would millions be saved annually to the Government which it now expends in useless salaries."

The administrative method here suggested has certainly the merit of simplicity. It would effectually do away with every barrier to a free access to the Treasury. The most ardent supporter of pension appropriations could hardly ask for more. On this head, however, the gentleman just quoted is hardly entitled to the consideration which properly belongs to Mr. Payne. That, however, the Committee on Invalid Pensions will, or any other Congressional committee similarly situated would, take such a rational view of the subject as that suggested by him can scarcely be hoped; for, under the legislative system now in vogue, the Committee on Invalid Pensions has a larger patronage at its disposal than probably any other committee of Congress, perhaps larger than all others. Able to report favorably, or to refuse to act, on any



THE REVIEW IN WASHINGTON IN 1865 IT IS OFFICIALLY ESTIMATED THAT 96 PER CENT. OF THE 550,000 OF THESE FEDERAL SOLDIERS WHO SURVIVED ARE EITHER PHYSICALLY INCAPACITATED OR STAND IN NEED OF PUBLIC ASSISTANCE — FOR PENSION PURPOSES IT IS ESTIMATED THAT THE MEN WHO SURVIVED THE WAR HAVE BEEN FAILURES SINCE

PENSIONS - WORSE AND MORE OF THEM



THE VAST MAJORITY OF WHOM ARE NEITHER PAUPERS NOR CRIPPLES BUT ORDINARY AMERICAN CITIZENS

pensions on its files, with the number increased by many hundreds each legislative week, the members of that committee can exercise a political influence most considerable. That they should willingly divest themselves of it is scarcely to be hoped. They can be divested of it only by action from without; but, until they are divested of it, the abuse of special pension legislation, which has now grown to unprecedented dimension, cannot be corrected. None the less, the simple measure alone necessary for its correction is obvious. Mr. Paine pointed it out, and his remarks in so doing can be found in the *Record*.*

Tribunals would thus be provided, sufficient in number to insure reasonably prompt action on all cases which presented themselves; and to them by standing rule would be referred every application of exceptional character. Such tribunals would be in the nature of a Court of Claims. Instead of the committee undertaking to pass upon the individual application, the members of it thus assuming judicial or administrative functions, it would confine itself to proper legislative work. Framing and enacting general rules, it would receive each ap-

* The speech of Mr. Payne is in the Record of January 17, 1971; pp. 10 33-34. The rules referred to of the Committee on Invalid Pensions are to be found in the Record of January 16, 1971; p. 958. plication for special relief, refer the same at once to the proper branch of the Pension Bureau, by which the application would be intelligently and locally passed upon, and the applicant either refused or given that measure of relief provided in the general act.

Could such a system as that here outlined be adopted even at this late day, it would do away with the necessity of any further pension legislation, whether blanket or individual. The Committee on Invalid Pensions would be at once relieved of its congestion - its groans would cease for lack of occasion therefor. This result attained, it would be of comparatively little importance how liberal, within reason, the provisions of the general and definitive act might be, or what addition it might make to the present drain upon the Treasury. The "entering wedge" the Treasury. The "entering wedge" and instalment-plan system would be brought to an end; but, until that system is brought to an end, no reduction of the pension roll disbursements can be expected. On this point no one can longer either be deceived or deceive himself. It is always and regularly admitted that the present appropriation is large and the amount already expended, running into the billions, is beyond human comprehension; yet it is argued with wearisome iteration that the additional relief now provided is but one of some 30,000 applications for

THE WORLD'S WORK

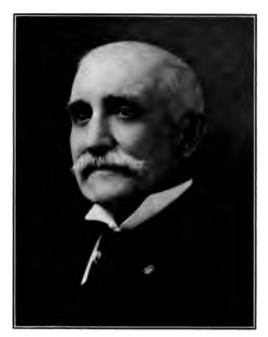


FROM WHICH A SIXTH OF THE GOVERNMENT'S TOTAL EXPENDITURE GOES. TWO AND A HALF PER CENT. OF IT WOULD PAY FOR A REAL INVESTIGATION OF THE PENSION ROLL AND FOR ITS PUBLICATION AS WELL AS PAY THE ORDINARY ADMINISTRATIVE EXPENSES

temporary, and within the next ten years will cease through the death-rate. Nothing of the sort will occur. Under the existing system, every year, new acts will be reported and passed, and ever increasing recourse had to special acts. The future will, in this respect, be merely a repetition of the past. This slovenly makeshift and manifest fraud should stop; and stop now. Were it made to stop, the life of the pension system would admit of actuarial computation. The process of regular reduction and ultimate extinction would begin, and could be figured to a nicety. For instance, take the measure already referred to, introduced in the last Congress, and providing for a Volunteer Officers Retired List. It was estimated that under the proposed bill there would be at first 21,995 possible beneficiaries. The annual reduction which would occur was then computed, with the result that, while the measure would, in 1911, call for an appropriation of \$13,521,393, in 1929 the amount required under it would be reduced to \$179,940. There would then remain only 243 beneficiaries.

Under any well considered measure of constructive legislation, it should be the same with the general pension list. To-day there are upon that list more than 900,000 mames. Of these, it is computed, some 40,000 and upward are dropped from natural causes each year. The computation is, however, to a degree deceptive. If even such a proportion were maintained the existing roll would practically disappear during the life of the next generation. We all know nothing of the sort will take place, and that the last name will hardly have been removed from that roll when the twenty-first century is ushered in. On this head, the experience of the Revolutionary past is instructive.

Any such action as that here outlined action at once obvious, simple, effective, and economical of the public money is most improbable; and it is made improbable by the condition of affairs which admits of easy illustration. In the course of the debate of January last on the Sulloway bill (Record, Jan. 10, 1911; p. 750) one member voiced his opposition in few words, closing thus -- "Yet I want to say this here and now, though I realize the effect of my vote upon this question, that \$50,000,000 a year is too big a price for the country to pay to bring me back to Congress." The nail was here hit on the head; but the average member of the House is not afflicted with any similar excess of modesty. In his estimation no price seems to be too considerable to pay for his retention in Congress, provided always the money paid to bring that result



MR. JAMES L. DAVENPORT THE COMMISSIONER OF PENSIONS UNDER WHOSE AD-MINISTRATION THIS PAUPERIZING AND CORRUPTING FUND IS SPENT

about comes not out of his private resources, but from the National Treasury. Hence in the same debate another member proclaimed himself not only in favor of the pending measure — the dollar-a-day pension - but also of the most unquestioning private legislation in addition thereto, and the sweeping away of all limitation of the date of marriage in the case of soldiers' widows and increasing the amount in such cases to \$20 per month. Obviously, a somewhat excessive premium on immorality; but it, also, meant votes! Furthermore, he advocated the extension of this beneficent system to cover all the militia of the war period, who, though "never technically mustered into the service of the United States," yet "served their country." Those men, he claimed, "should in justice and honor be granted military status and the accruing benefits. Here was indeed a bid for votes! It included not only the aged and war-worn veterans and the "spring chicken" relict, but that body of participants known in civic processions as "citizens generally." This gentleman evidently set not fifty, but

a hundred and fifty millions a year as the value to the country of a retention of his presence in the National Council Chamber.

The case of this member will, however, sufficiently exemplify what the particular measure then under discussion --- the Sulloway bill - meant as a political factor in a single district — $ex \ pede$, Herculem! In the absence of a detailed statement it is not possible to specify the aggregate number of pensioners, or the number of pensioners of each description, resident in the district in question. The average number in each district of the state, which the member in part represented, is almost exactly 2300. Assuming that his particular district did not fall behind the average, it is not unfair to assume that one half at least of those receiving pensions were "Veterans," and would be beneficiaries under the provisions of the measure then pending. The average amount of the pension paid under the existing law is \$15.00 a month; this it was proposed to double in the case of the beneficiaries under the pending measure, making it \$30.00 a month. The net result would be that in



Copyright by Harris and Ewing REPRESENTATIVE WILLIAM RICHARDSON OF ALABAMA, CHAIRMAN OF THE HOUSE COMMITTEE ON PENSIONS

this particular district the passage of the Sulloway bill meant the gratuitous disbursement among the voters of an additional sum of \$17,000 a month, a similar sum being already disbursed, or \$200,000 per annum in addition to the \$200,000 provided by existing law. The plurality received by the member in question at the last election was 2500 in a total vote of 46,000. Comment is unnecessary; the inference suggests itself.



Copyright by Harris and Ewing PORTER J. MCCUMBER OF THE SENATE COMMITTEE ON PENSIONS

There are at this time two Senatorial scandals exciting much public attention. Of these, one involves the use made of a fund of \$50,000 raised to effect the result; the other the use made of a sum of \$117,000 furnished by the successful candidate for Senatorial honors. The two amounts seem large; the last so excessive as to be scandalous. Here, however, is a sum of \$200,000 a year — \$400,000 for a single Congressional term — voted by a member out of the National Treasury "to bring me back to Congress." And in his view, even this does not suffice! — The alleged corruption funds so interminably discussed in the Lorimer and Stephenson cases sink into insignificance.

As already observed at the commencement of this series of papers, the party of political opposition elected under a mandate to restrict a too profuse public expenditure, is now in control of the National House of Representatives. Measures are pending before that body looking to the increase of the present appropriation for payment of pensions merely because of the age of the recipients thereof, from \$157,000,000 a year to \$200,000,000 and more. "Progressive" measures are in agitation and warmly advocated which, if they become law, would increase this amount to \$250,-000,000. An average sum of \$600,000 to be each year gratuitously disbursed in every Congressional district of the entire country! The measure immediately impending* involves the additional gratuitous annual disbursement of approximately \$175,000 in each of the Congressional districts of the more Northern section of the country; the more Southern section will not participate in it to any considerable extent. Each of its districts may possibly get from it \$2,000 a year - crumbs from the table! - At the close of the opening session of the present Congress, Mr. Underwood, the leader of the Democratic party, on the floor of the House declared, in language already quoted, that "This House is pledged to reform the administration of public affairs and to retrench public expenditures. . . Not a dol-lar will be appropriated which a careful investigation does not demonstrate should be expended in a wise, efficient and effective administration of public affairs. The issue will soon be presented, and it remains to be seen whether the gratuitous expenditure of fifty millions a year in addition to the \$157,000,000 already provided, "to bring Me back to Congress," is in the estimation of a majority of the present House of Representatives, a sum "expended in a wise, efficient and effective administration of public affairs.'

*Since this was written the Sherwood bill passed the House by a vote of 220 to 02 in spite of Mr. Underwood's opposition. --Tux Entrows.



FLYING ACROSS THE CONTINENT SECOND ARTICLE

RODGER'S TRIP FROM KANSAS CITY TO PASADENA

BY

FRENCH STROTHER

(FROM INTERVIEWS WITH MR. RODGERS, HIS MECHANICIANS, AND HIS FAMILY WED ACCOMPANIED HIM ACROSS THE CONTINENT)

BY HIS flight from New York to Kansas City, Rodgers had broken the world's record for distance; continuing in spite of three wrecks can fairly be called a world's record for perseverance. His wild spirals as he landed in Kansas City, turning corners at 55-degree angles showed another characteristic of Rodgers's skill and a spirit of recklessness which he usually controlled.

But the trip from Kansas City to the Pacific was even more eventful than the first half of the journey. From the time he left Kansas City the official log of the trip sounds like the day-book of an automobile repair shop. For instance, the entry under date line of McAlester reads: "Leaking oil tank and a cracked cylinder kept Rodgers from continuing his flight this day."

Four days later, after hops from Mc-Alester to Fort Worth, to Dallas, to Waco, and to Kyle, the log says: "Rodgers nearly met his death while in the air at 3.500 feet. Crystallized piston and intake valves nearly made a wreck. The aviator shut off his engine, volplaned two miles and made a perfect landing in the only pasture within forty miles."

On the 22d he reached San Antonio, where his friends on the Special adopted a baby jackrabbit as a mascot, which was soon discarded; for a wreck at Spofford and broken skids at Sanderson within a few days did not look as if the rabbit was a potent charm for good, though the day he reached Sanderson he had made one of the best speed records of the trip, 174 miles in 140 minutes.

Before he left Texas he had another wreck. Two miles west of the old post at Fort Hancock, the pump connection sheared off, freezing the motor, and Rodgers fell five feet, the fall being broken by the mesquite, otherwise the entire plane would have been smashed. As it was, the skids were destroyed.

At Deming, N. M., he came down again with a broken magneto spring.

He examined the propeller chains, and decided that, though eleven of the rollers were missing, he would not stop to make the very necessary repairs.

The condition of his machinery was getting more and more desperate, but that did not at any time daunt Rodgers. Indeed, he seemed to grow more daring and resourceful the farther west he went and the worse his machine behaved. For example: two water towers stand on the military reservation at Fort Worth. They are forty-two feet apart. The spread of the planes of Rodgers's machine is thirtytwo feet. With that ten feet of leeway, or five feet at either tip of his planes,



THE "IRON" AVIATOR

THE GRANDSON OF COMMODORE PERRY WHO OPENED JAPAN TO THE WORLD, THE GRAND-NEPHEW OF THE VICTOR OF LAKE ERIE, WHOSE FATHER, A CAPTAIN IN THE UNITED STATES ARMY, WAS KILLED FIGHTING INDIANS IN ARIZONA

Rodgers "looped the loop" around and between those towers, making a figure 8 in the air, at sixty miles an hour.

But the most remarkable example of his courage and skill and presence of mind — indeed, one of the most wonderful pieces of cool-headed nerve ever recorded — was his descent at Imperial Junction, Cal. He was flying west from Arizona, intending to go on to Banning, Cal. He had flown over Imperial Junction, in the solitary waste of the Colorado desert, and was speeding along above the Salton Sea at an elevation of 4,000 feet, when suddenly, without a moment's warning, the No. 1 cylinder of his motor blew out, completely wrecking his engine and filling his right arm with flying splinters of steel. An instant's hesitation would have meant sudden death; a false move with his injured arm, which controlled the warping lever, would have tilted him over sideways and sent him hurtling down 4,000 feet to destruction. The aeroplane made two terrifying lunges downward, before Rodgers could control it; and then he began a long, easy, graceful spiral glide, descending in loop after loop of diminishing radius, six miles in all, judging his distance so nicely that he landed only a short space from the station at Imperial Junction. I saw the remains of this engine at Pasadena, and a man could literally put his head into the hole that had been blown out of it.

Before reaching Imperial Junction, Rodgers had flown from Willcox to Maricopa, Ariz., on the 1st of November. In the middle of this flight he had stopped at Tucson, to shake hands with Robert G. Fowler, who was flying from Los Angeles to New York. This was the first meeting of transcontinental aviators in history.

Proper caution would have made Rodgers stop a long time at Imperial Junction, for he not only lacked adequate materials for repairs, but he had lost the aid of his chief mechanician, who had been called away by the illness of his wife. But he was now only 178 miles from Pasadena, which he and his managers had chosen as the official destination of the trans-continental journey; and he was determined to go on at once. The old Model B machine, in which he had won his first success at Chicago, was in the hangar-car. He took the motor out of this machine, and two cylinders of the discarded first engine he had used when leaving New York, and from these parts of two old engines pieced together a new engine, which he mounted on his aeroplane. That was the equipment with which he flew through the narrow San Gorgonia Pass, where the ceaseless trade wind sucks through as if through a funnel, and where sheer mountain walls rise 5,000 and 6,000 feet above the rocky floor,



RODGERS'S RECKLESS SPIRALS AT KANSAS CITY WHERE HE TURNED CORNERS AT AN ANGLE OF MORE THAN FIFTY DEGREES

THE WORLD'S WORK



THE WRECK AT SPOFFORD, TEX. AFTER WHICH THE BABY JACKRABBIT MASCOT WAS THROWN AWAY

making manœuvring dangerous and landing places few and uncertain.

He went into the air at 10:45 the morning after his descent at Imperial Junction, intending to go on to Pasadena at once. But six miles east of Banning, in San Gorgonia Pass, a connecting rod broke, his radiator began to leak, and the magneto plugs worked loose. Rodgers, holding one of the vital levers of his machine with his knee, held the jumping broken connecting rod together with his right hand, and flew on to Banning, six miles away. Here he made a dive of 2,000 feet, almost straight downward toward the face of a mountain, at such terrific speed that he seemed certain to be dashed to pieces against the rocky cliff. But a hundred feet from it, he sharply swerved and shot down in a semi-circular drop into a plowed field.

Rodgers spent the night of Saturday, November 4, at Banning. The next afternoon, ten thousand of us waited for him in the warm afternoon sun at Tournament Park, in Pasadena, where the glorious Tournament of Roses celebrates the New Year's day. A few miles to the east the almost sheer, cliff-like walls of Mt. Lowe and Mt. Wilson towered upward 6,000 feet overhead. As a group of men laid out a white sheet in the centre of the field to mark his landing place, the local manager of the telephone company was talking from the special aviation telephone at the edge of the field, asking the scientists in the observatory on the summit of Mt. Wilson to keep watch through telescopes and to flash us word when the aviator should be sighted in the air on the last lap of his epoch-making journey. The band played stirring music for us as we fidgeted about and watched the blue haze southward down the Pass. Then a bar of white light shot across the field from the crest of Mt. Wilson, and we knew that he was on his way. The band broke into quickstep, and the ten thousand rose to their feet. A small boy on the roof of the judges' stand beside

the race course saw him first. "There he comes!" he screamed, and began madly ringing the starting bell.

À yell broke from the crowd; sure enough, there he came, a great way off, growing larger and larger, seeming about to pass by the city altogether, when suddenly he turned with the wind behind him and came rushing toward us like the gigantic roc of the Arabian Nights,

while a roar rose from the crowd that was really terrifying in its mixture of triumph and savage joy in the sight of danger. For, just as he swept over us, he tilted forward suddenly and seemed to lose control. Two men who had been with him all the way from New York turned their heads away — they thought he was gone. Down toward us, 1,500 feet he swooped, till he seemed about to drive into the ground, when he shifted his planes and swept grandly in spirals down to earth, alighting within twenty-five feet of the marked landing place.

Then suddenly the barriers that had held the crowd melted away, policemen disappeared and fences were not, while the thousands swept upon the field and mobbed him. The next moment a telephone transmitter was thrust into his hands, and, while the crowd crushed the guard that gave him barely room to move, he told the Associated Press by telephone that he had finished his journey. Then a flying-wedge was formed that hurled him through the crowd, and he was landed



SOME OF THE BROKEN PIECES WITH WHICH RODGERS'S HANGAR CAR WAS FILLED WHEN HE REACHED PASADENA

safely in an automobile. After circling the track twice so everybody could see him, and after being introduced to Roy Knabenshue, who first sailed a dirigible balloon in this country, and to Mrs. Hoxsey, mother of Arch Hoxsey, the aviator who was killed a few months ago, he was carried to his hotel. When he had received the congratulations of his party and the reception committee, and



A CYLINDER THAT BLEW OUT 4,000 FEET IN THE AIR WRECKING THE ENGINE AND FILLING RODGERS'S ARM WITH FLYING PIECES OF STEEL, IN SPITE OF WHICH, HOWEVER, HE MADE THE THREE QUARTERS OF A MILE DESCENT IN SAFETY

had registered as an evidence of the successful termination of his transcontinental journey, the chairman of the day asked him, in tones that implied he might have the fulness of the earth if he wanted it:

"And now, Mr. Rodgers, what can we do for you?"

"I'd like some crackers and a glass of cream," was Rodgers's reply.

That reply was in tune with his whole character and with the traditions that have come down in his family for generations. Rodgers is a great grandson of Commodore Calbraith Perry, who in 1854 opened the ports of Japan to the world. He is a grand nephew of Oliver Hazard Perry, who won the battle of Lake Erie. His father was Capt. C. P. Rodgers, who was killed fighting Indians in Arizona in the early '80's. He is a double first cousin of Capt. John Rodgers, the naval aeronautical expert and aviator. Nearly all his male relations for several generations have been in either the army or the navy; and he would have tried to enter Annapolis if he had not been left almost completely deaf by an attack of scarlet fever in his boyhood. That same illness also affected his speech, so that he talks with an effort, and very slowly.

"Cal was always a serious boy," his

mother said to me after he had completed his flight. "He was always interested in mechanics, and early declared he would be a locomotive engineer when he grew up. He went to the Princeton Preparatory School and various other schools, but he never cared much for books. He was an undergraduate at Columbia University for a short time, but I'm afraid he played more football than anything else."

Those few sentences pretty fully describe his equipment. He showed signs of speed mania early in life, drove fast horses when they were the swiftest things available, steered a racing yacht for greater speed, took up the motorcycle when that was invented, and then became an expert amateur automobile racer. The aeroplane was his last attempt to find new sensations of speed. It is the fastest thing he has found, but he still says he prefers a good automobile to an aeroplane.

His failure to gain admission to Annapolis was a deep disappointment to Rodgers, and no other ambition seemed to take the place of his wish to become a sea fighter like his ancestors, until the idea of making the first transcontinental aerial flight was presented to him. That roused his



REBUILDING THE ENGINE IN THE DESERT RODGERS REPLACED THE ENGINE WRECKED OVER THE SALTON SEA BY ONE MADE OF A COMBINA-TION OF TWO OTHER ENGINES AND THUS COVERED THE LAST 178 MILES OF HIS TRIP

sporting blood, and when the way was opened for him to attempt it he followed it through with persistence, with courage, and at times with reckless daring. It is doubtful if any aviator has ever taken the number of chances of death that he has taken, and lived through them all. As Orville Wright said of him, "He was born with four horse shoes in his pockets."

In spite of an ever present cigar, he seems to have no nerves at all. He handles himself easily, without haste. On the trip he was literally tireless - he

worked tremendously and was never weary. His companions called him "the iron man." But he has odd contradictions of these characteristics. For example, when he stopped at El Paso, a member of his party took him across the Rio Grande to Juarez to see a Mexican bullfight. Rodgers watched until the matadors began to wound the bull. and then he exclaimed: "I can't watch it. It would make me sick." And he turned his back on the bull ring and asked that his companion tell him

bull had been when the dragged out of sight.

A similar angle of character cropped out when someone spoke of the evil of flying on Sunday. Rodgers is not at all a religious man, but the next Sunday that he flew, he asked that the members of the party on the special train hold services while he was in the air. And so, as the train raced madly across the prairie in pursuit of the birdman winging ahead, the little party in the Pullman improvised a church service as he had requested.

This feeling of uncertainty about the ethics of Sunday flight developed into a bit of superstition toward the end of the journey, so that after a series of accidents happening on Sunday, the last one being his most dangerous fall near Compton, Cal., he declared he would never fly on that day again.

The popular idea of an aviator is of a small man — "that flimsy thing couldn't hold up a full-grown man." Rodgers stands six feet four inches in his socks, and weighs 192 pounds stripped, though he

does not look it is spare and not especially muscular in appearance.

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He is not so young as many of the more successful airmen. He is thirty-two years old, and married.

So much for the man who made the flight: the machine is noteworthy too. The aeroplane, complete, cost Rodgers \$5,000, and he began the journey with \$4,000 worth of extra parts. With a member of his party, 1 checked over the contents of the hangar car at the end of the journey, at Pasadena,

"IN SPITE OF AN EVER PRESENT CIGAR HE SEEMS TO HAVE NO NERVES"

killed and

and made the following list showing the number of times various parts were broken and replaced in the flight:

- 6 Back Skids
- Front Skids 5
- **8** Propellers
- 6 Planes (double sets) 4 Propeller Chains
- 3 Seats
- 2 Radiators
- **6** Cylinders 2 Steering Rods
- 1 Elevating plane
- broken)

2 Engines

- 4 Back Tail Skids
- 4 Fins

In fact, the only parts of the machine with which Rodgers left New Y ork that he

- 2 Tails 2 Tail Springs
 - (11 rollers in links



brought into Pasadena were the vertical rudder and the drip pan. Every other part had been replaced more than once.

These repairs cost a good deal of money, for only one factory in the country makes these exact parts, and they are highpriced. An engine, alone, costs about \$1,500. Altogether, Rodgers spent between \$17,000 and \$18,000 for repairs.

The engine used was a Wright patent aeroplane motor, and is made exclusively by the Wright Brothers. It differs radically from automobile motors in its method grade — 64 proof — gives an intense heat and tends to preserve a uniform temperature in the motor at all altitudes and to promote the proper combustion. One thousand gallons of gasolene were used on the trip, though not all this amount went into the engine — some of it was waste.

Rodgers has several ideas of changes in aeroplanes, based on the experiences of his long flight. For example, he thinks the overhead oil tank should be lowered, to provide a better distribution of weight.



THE FIRST HANGAR CAR IN THE COUNTRY WHICH, WHEN IT REACHED PASADENA, WAS FILLED WITH BROKEN PARTS THAT RODGERS HAD DISCARDED AFTER HIS MANY WRECKS ON HIS WAY ACROSS THE CONTINENT

of generating power from gasolene. In an automobile motor, the gasolene is heated in a chamber called the carbureter, until it vaporizes. This vapor is introduced into the cylinder and there exploded by an electric spark, the explosion driving the piston. The aeroplane motor, on the other hand, is a "direct explosion" or "injection" motor: that is, it has no carbureter, but the gasolene is introduced directly into the cylinder, a drop at a time, and the gasolene itself exploded.

The gasolene which Rodgers found best for his purpose is of a comparatively low He would also increase the bore of the cylinders and the length of the piston's stroke in the motor, to gain power. At present, at least three quarters of the power generated by the motor is necessary to gain momentum enough to fly at all. This leaves a very small margin of reserve power for emergency use or for unusual speed, and it should be enlarged. He thinks the skids should be strengthened to guard against the dangers of a smash-up arising from even a slight error of judgment in landing. He also intends to study out some means of concentrating the entire

control of the rudder and planes in one hand, or in one foot and one hand, so that he may leave the right hand free to make adjustments or emergency repairs in the engine while in the air. The necessity for this last-named improvement was forced upon him repeatedly during the journey, when magneto plugs worked loose, or when, as in his flight from Imperial Junction to Banning, a connecting a fair chance to right his machine and regain control of it before striking the ground, whereas the man who is flying low is likely to become entangled in wires or tree tops even if he does not go to smash on the earth before the buoying tendency of his planes has a chance to operate.

The transcontinental trip itself offers two especially hard problems. To quote Rodgers:



JUST LANDED IN PASADENA TELEPHONING THE ASSOCIATED PRESS OF HIS ARRIVAL

rod broke, and he was forced to risk losing control of his steering or warping apparatus, or risk a shutting-off of his power in a dangerous part of the country where no landing place was available.

But perhaps the most broadly useful generalization that he draws from his experiences is that high flying is the safest flying. If the aviator is up several thousand feet when an accident occurs, he has "The worst places I encountered on my trip were just out of New York and down in Texas. Mountains caused the trouble. In the ranges between New York and Chicago I had my hardest battles. In Texas, near Sanderson, I was compelled to cross the Rio Grande three times because of the terrific winds."

Of the possibilities of transcontinental aviation he says:

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"Thirty days is too short a time in which to attempt a flight from coast to coast at this stage of the aeroplane's development. The machine is too much in its infancy for such a feat to be accomplished now. But I expect to see the time when we shall be carrying passengers in flying machines from New York to the Pacific Coast in three days. That is at an average of more than 100 miles an hour, and cannot be done until some had been money; but of course the underlying motive was not financial, it was the same spirit of adventure and love of speed that made Rodgers drive fast horses and racing motor cars before the flying machine opened a way for new manifestations of nerve and skill.

He unconsciously summed up the significance of his flight, not only its meaning to him personally, but its significance to the future of aviation and to the



THE MACHINE AT PASADENA

MORE THAN 4,000 MILES FROM ITS STARTING PLACE. THIS WAS THE OFFICIAL END OF THE JOURNEY, BUT LATER, IN SPITE OF ANOTHER WRECK AT COMPTON WHERE HE NEARLY LOST HIS LIFE, RODGERS LANDED HIS MACHINE ON THE PACIFIC BEACH

way is devised to box in the passengers, as the wind tears one awfully at such speed as that."

The trip was a financial disappointment to Rodgers. He received \$5 a mile for his flight from New York to Fort Worth; and from Fort Worth to Pasadena, \$4 a mile and all the purses he could arrange for on the side. He thus received about \$20,000 from his backers and about \$3,000 or \$4,000 prize money. But his machine cost \$5,000 and repairs cost about \$17,000 more, so his net return was small; very small indeed if the inspiration of the trip forward impulse of humanity, at Pasadena, after he had heard the last of the applause and received the last congratulations and had laid off the American flag they had thrown across his shoulders. He placed his hand on his mother's shoulder and said:

"Never mind about the money. It don't amount to much that way — but I did it, didn't I!"

And that is the important thing. The rest of us may take our time following the path he blazed, but the path is there. The thing has been done.

THE PRESENT PLIGHT OF "LABOR"

THE EFFECT OF THE MCNAMARA CASES ON UNION MANAGEMENT — WHAT THE FEDERATION OF LABOR IS

By a member of the WORLD'S WORK staff

MANUAL OF COMMON PROCEDURE FOR THE USE OF LOCAL AND FEDERAL UNIONS AFFILIATED WITH THE AMERICAN FEDERATION OF LABOR

It is desirable that this Manual shall be kept under lock and key in the meeting room, and not be exposed or submitted to the inspection of any person not a member in good standing of the American Federation of Labor without authority of the President.

So runs the title and first page of a little book that lies before me — the secret ritual of the great labor organization which the confessions of two murderous dynamiters have put on trial before the country.

I have it honestly, by due authority of the President; in fact, from his.own hand. Before he gave it, he cut out half of the last page; this he handed me to inspect; it contained the Federation's secret cipher code — a checker-board arrangement which a trained reporter's eye could hardly study for sixty seconds without learning something. "Perhaps that had better not go out of the office," said President Gompers, "but take the manual along with you and look it over if you have time."

Here is the oath of initiation:

You also promise to keep inviolate the traditional principles of the American laborer, namely: To be respectful in word and action to every woman; to be considerate to the widow and orphan, the weak and defenseless: and never to discriminate against a fellow worker on account of creed, color or nationality. To defend freedom of thought, whether expressed by tongue or pen, with all the power at your command?

You further agree to educate yourself and fellow workers in the history of the labor movement, and to defend, to the best of your ability, the trades-union principle which guards its autonomy and which regards Capital as the product of the past labor of all toilers of the human race; and that wages can never be regarded as the full equivalent for labor performed, and that it is the mission of the tradesunions in the present and the future to protect the wage-earners against oppression, and to fully secure the toilers' disenthralment from every species of injustice?

You further promise that you will never knowingly wrong a brother, or see him wronged, if in your power to prevent it, and that you will endeavor to subordinate every selfish impulse to the task of elevating the material, intellectual, and moral condition of the entire laboring class?

You further solemnly promise on your word of honor that you will, whenever and wherever possible, purchase only strictly union made goods and that you will use your best endeavors to influence others to do the same, and never become faithless to your obligation?

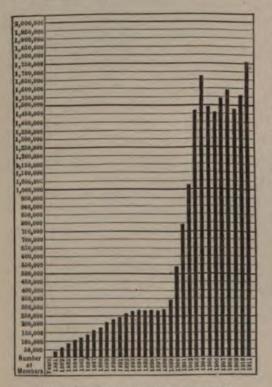
It seems all innocent enough, and yet — What manner of thing is actually this society into which more than two millions of American workingmen have been thus initiated? Is it, in fact, a brotherhood whose logic leads necessarily to bomb-planting and murder? Are the McNamaras natural products of its methods?

It was born in 1881. A few convinced trades-unionists put their heads together and concluded it was time for a federation of the trades.

November 15th of that year, ninety-six delegates met in Turner Hall, Pittsburg, and formed the present society. The next year, at Cleveland, they perfected the organization, electing a permanent president, in the person of Samuel Gompers, of the Cigarmakers' International Union.

At first the Federation grew but slowly. In 1900 there was a surprising spurt upward, followed by another and another till in 1904 the membership reached 1,675,000. It fell back a little after that, but to-day numbers 1,760,000 — a million and three quarters. In Germany alone is to be found a greater number of federated labor-unionists.

The American Federation of Labor is an association composed of trades-unions,



THE GROWTH OF THE AMERICAN FEDERATION OF LABOR WHICH BEGAN IN 1881 AND WHICH HAS REACHED, IN 1911, A MEMBERSHIP OF NEARLY 2,000,000

(termed "International," because they include Canada and Mexico, as well as the dependencies of the United States), covering every form of labor. Strictly, the Federation itself has no members; workingmen belong to their unions, and the unions form the Federation. This is the general plan; it is not necessary to go into the complexities and some apparent anomalies of organization. The Federation does deal directly with individuals and with local unions in many matters such as commissioning organizers and issuing charters and giving advice and *arbitrating disputes*. Under the constitu-

tion each trade manages its own affairs; this guaranteed autonomy was a principle strongly insisted on by the founders of the Federation. But the tendency of federations is always to develop more and more centralized authority, and though the officers stoutly deny it, it is clear that the strong men who have been drafted out of the various unions into the Executive Council of the Federation have come to exert throughout the whole fraternity very powerful moral influence, if nothing more.

To-day the Federation comprises 116 international unions, many of which it has itself organized. The organization of laboringmen in trades-unions is, indeed, its principal labor. On December 23d last, 1622 organizers held commissions from the Federation's headquarters. Most of these are unsalaried, except that on reporting a successful piece of work they are paid for it. Only forty-five are on full-time pay - \$4.50 a day, with actual traveling expenses and an allowance of \$2.50 per day for hotel bills. Organizing means starting local unions in any trade; increasing membership in local unions by inducing workers to join or persuading shops to unionize; bringing local unions together in "central," state, national, or international unions; persuading rival unions, local or national, to consolidate, and so forth. It must be remembered that workingmen have formed themselves in a haphazard way into hundreds of unions, under hundreds of names, frequently invading one another's trades and territories and giving rise to endless friction. It is a principal concern of the Federation to straighten out these tangles, reclassify, assimilate, and harmonize mutually competing and antagonizing organizations. The last year has been marked by especial success in this direction. The American Federation now all but

The American Federation now all but completely dominates the world of organized labor. Over against its 116 international unions only five considerable organizations are without its fold, and negotiations are under way with some of these.

The particular objects which the Federation sets itself, in addition to the

organization of labor, and the spread of organization sentiment, are the shortening of working hours, the spread of recognition of the union label, the obtaining of legislation favorable to workers, the securing of more sanitary, safe, and comfortable conditions, the abolition of child-labor.

With an intermission of a single year, Samuel Gompers has been president of the American Federation ever since it first elected a president, in 1882. He is unapproached in the position he occupies in the regard of labor union men. Admiration, confidence, and affection are words that should be coupled with regard. There is a tremendous amount of sentiment among workingmen, those, at all events, who have the imagination and the spirit to join unions — a tremendous amount of it, and it spends itself lavishly on the head, the big but scantily-covered head, of this little cigar-making English Jew. Any one who, the day before Christmas, in the height of the attacks on him following the McNamara exposures, could have seen his desk and his office piled with pretty gifts and heard the affecting contents of the letters and telegrams constantly pouring in, would have been deeply impressed with the fervid, even religious, sentiment of the movement of which this squat-figured, putty-faced man is the head — and with his own not unenjoying sense of martyrdom. He is a very remarkable man, a figure of dignity and ability, for all you may say. There is no company in which he does not rank among the ablest — and the most eloquent.

Born in England, sixty-two years ago, Sam Gompers — unionists love to talk of "Sam" — worked at the bench of a cigarmaker. He rose to leadership in his union — he is still its vice-president and then he became head of all the allied unions. Shrewd he is, perhaps wise. Labor in this country never had a leader who won so much for it. He is candidly a practical man, and an opportunist. He has no social vision, no great dreams. Socialism is his pet abhorrence. For it and its professors he reserves his choicest, richest, and most copious vituperation. A very practical man he is, yet an arrant sentimentalist by temperament. He talks always in the tone which he would use in making a speech before the assembled parliaments of the world; he has become rather a victim of his own rhetorical genius; he orates at you, when you would have him converse. He is the editor of the American Federationist, the official organ, in which he supplies the workers with the inspiration that can come only from an eloquent, daring, experienced master of popular appeal, amply seasoned with vituperation and invective. His gifts have made him a welcome figure at fashionable public dinners, on public occasions, at conventions and conferences where public questions are discussed; he is ist vice-president of the Civic Federation, that society which attempts to bring together great capitalists and labor leaders. Always and everywhere, however, Gompers is the apostle of labor, never for a moment beguiled from the remembrance that his popularity rests on his influence over the workingmen.

The secretary, Frank Morrison, is, next to Mr. Gompers, the best known and the most active officer. A Canadian printer, who came to Chicago to go to college and take a law course, Mr. Morrison has been the second in command of the Federation for the last fourteen years, the period of growth. He is a man of attractive personality, with the cleanshaven face and fine head of a senator or a judge, but they do say he is the very mischief in a fight.

The published accounts of the Federation show that Mr. Gompers receives \$5,000 a year for his services, and Mr. Morrison \$4,000. Either could easily earn much more.

Mr. Gompers's only real rival is James Duncan, 1st vice-president, a Scotch granite-cutter, with strong proclivities for political argument, a good debater and a sturdy fighter. Though he differs with the president on many points, Duncan has always managed to keep the peace with him. Duncan fulfills to the utmost the type of professional labor leader. He is not burdened with a sense of social responsibility. Ambitious for personal power, he is without wide outlook on the world. It will be noticed that neither Gompers, Morrison, nor Duncan is a native American. Neither, from his name, was James O'Connell, 3d vice-president, one of the strongest men in the Executive Council.

The 2d vice-president, John Mitchell, became well known during the spectacular anthracite strike in which, though then very young, he bore himself so well. Mitchell has on occasion used language as violent as any labor fanatic could desire, though his general reputation is that of a safe and sane counsellor. The writer of this article has heard Mr. Mitchell express, at the table of the President of the United States, sentiments that intensely delighted Mr. Roosevelt. Indeed, Mr. Mitchell is charged, by some of his fellow unionists, with eating too often at great men's tables and with being too thrifty in his private affairs. He was for several years chairman of the Trade Agreement Department of the Civic Federation until his union (the United Mine Workers) compelled him to resign that \$6,000 job and rely on Chautauqua lecturing for a living. They say at Federation headquarters that Mitchell is a growing man. It was thought for a while that he was ambitious to oppose Gompers, but his opposition never developed much vigor.

John B. Lennon, the treasurer — John Brown Lennon he likes to write it and tell you that he is a descendant of the abolitionist martyr — came from the Tailors' Union, and Bloomington, Ill., where he is known as a man of piety and a temperance worker.

All these and several more vicepresidents were elected by the last convention by single ballot cast by the secretary. They usually are. Opposition would be futile. They constitute practically a self-perpetuating body.

Visitors to Washington, when sometimes they look across G Street from the old Patent Office, see rows of windows marked with the initials "A. F. of L." which means nothing to most of them; they would be surprised if they were told that half of that seven-story building was occupied by the offices of "Mr. Gompers's Unions" — busy, crowded offices they are, with a telephone exchange and sixty people, working at high speed, clearly under the most business-like discipline but all very happy, apparently.

So crowded are the offices that it has been determined to erect a building for the exclusive use of the Federation. A committee is now hunting for a site in Washington.

In the meantime, in the building on G Street, there is no evidence of dark, nefarious deeds. Mr. Morrison invites a visitor into his office, and asks him to sit down while he continues a conference with a legislative expert or anybody else, and then takes him through the twentyodd rooms of the establishment or lets him wander about at will. Mr. Gompers will take great pains to order out any paper or book about the place to give you documentary replies to your questions. "Ask me anything you like," he says. "There is nothing secret about the place. Anybody with a serious purpose is as free to come here and to go right through everything we have as the air is to circulate through our doors and windows. Ask what you like.

I liked to ask a great many things some rather impertinent things.

First, as to the labor-unions and public-Why did not the unions incorporate? itv Mr. Gompers's reply was that there was nothing for the public or the unions to gain by their incorporation. The power to sue and be sued was nothing. No contract could be drawn between employers and employees that the courts could enforce; they had been trying for years and had given it up. Incorporation would make their affairs, their accounts. for instance, no more public than they were already. The president of the Federation rang and telephoned for various officials, bookkeepers, and clerks and had his desk piled with books containing the receipts and expenditures day by day, back for a quarter of a century. Opening them at random one saw accounts of receipts and expenditures minutely itemized, except that here and there John Doe and Richard Roe were paid round sums, fre-quently \$100, for "organizing expenses" and "legislation expenses." Against any

of these items, however, Mr. Gompers offered to produce vouchers showing the details involved.

"Now, what knowledge would the public gain from our incorporation? These accounts which you have just seen are published regularly month by month in our official organ, the *Federationist*, for all the world to see."

"Are the accounts of the international unions so published, Mr. Gompers?"

"I believe they are. Certainly those of my own union, the Cigarmakers', are."

"How about the International Bridge and Structural Ironworkers' Union?"

Mr. Gompers was understood to say that he knew nothing about that, but he burst into a denunciation of those who had insinuated that he had guilty knowledge of the McNamara work so fierce that his explicit reply was lost in the rage of his indignation.

What was the authority, then, that the Federation had over the unions, I asked. It hadn't any, said Mr. Gompers. The Federation respected absolutely the autonomy of the internationals, and no one was more zealous than he in guarding that autonomy.

"We are here to advise our friends in the ways of right and justice, not to lay commands on them. Moral influence? Yes, to the limit, but moral influence only."

only." "Mr. Gompers, you had, you say, no executive authority in the International Bridge and Structural Ironworkers' Association, but did you never feel called on to exercise some moral influence there? Was your attention never called to the remarkable number of explosions and accidents on works of construction in which this union was engaged?"

"No, <mark>never</mark>."

"The Erectors' Association publishes a list of 113 dynamitings within six years in connection with jobs on which this union was engaged. Had these happenings never been called to your attention during the years in which they were occurring?"

"No, they had not. I knew nothing about them, and I know no more now about the occurrences in that list than you do, sir. 1 know nothing whatever about it except seeing it in the paper." "You have not inquired into this very

"You have not inquired into this very serious circumstantial charge?"

"No, I have not. I can't notice every silly allegation made against us by our enemies. Why, they even charge us with responsibility for those misguided wretches — us who reprobate coercion and lawlessness with unceasing denunciation and exhortation to law-abiding behavior. We are constantly and forever preaching that our only hope and reliance must be on reason and good will; and pointing out that violence is bound always to rebound on our own heads to our own hurt."

"You admit there is violence, then?"

"Yes, here and there, occasionally. Seldom indeed, are our men implicated in it. Take a street-car strike, for in-You have no idea how many stance. of the general public have grievances against the company, which they seize the occasion of a strike to express. The strikers, quiet, peaceable fellows, get blamed for everything. And you have no idea how much of the disorder is the work of detectives hired for the purpose of making the unions appear as lawbreakers. Do you know the possibilities of the art of the agent prococateur?" And Mr. Gompers waxed eloquent again. Eighty per cent. of the work of the detectives constantly under hire by enemies of the men of labor were engaged in the dastardly, vile, doubly-treacherous business of the agent provocateur.

"Since the moral influence that goes down from the officers of the Federation is so strongly against violence, Mr. Gompers, what account do you give of the psychology of men like the McNamaras? They were not working for themselves; they had nothing to gain; they did not know the men they killed; they had no personal grievance; they did all for the cause. How do you account for them?"

"I can no more explain their psychology than I can that of any other insane fanatic. But I want to say this: It is an awful commentary on existing conditions when even one man, among all the millions of workers, can bring himself to the frame

of mind to believe that the only means of securing justice for labor is in violence, murder."

Discussing the McNamara case, I asked Mr. Gompers if he had made anything like a judicial inquiry into it before he committed himself and the Federation to the position that the men were innocent.

"Not a judicial inquiry. 1 made some investigation. Everybody I talked with believed them innocent - pooh-poohed the idea of their guilt. To me, knowing as I did the spirit of the unions during so many years, it was incredible that any of our people could have done such things as they were charged with. Knowing the methods of detectives as I do, it was perfectly easy to see how they could have framed up the entire case. All our suspicions were confirmed by the manner in which the accused men were kidnapped. Then, at Los Angeles, I learned that there really was no doubt that the destruction was done by gas — natural gas, you know, which is almost without odor and very dangerous. The fact now appears that it was gas, after all, that did the horrible work — though that fact doesn't in the slightest lessen the McNamaras' guilt. Then, the Structural Ironworkers had no grievance against the Los Angeles Times. The Times's troubles were with the printers, who are too intelligent to resort to murderous violence. We know the bitter eagerness with which our enemies, the Otises, Posts, Drews, and others, seize every occasion to attack and discredit the unions, and to us it all seemed perfectly clear that innocent men were being made the victims of an assault on tradesunionism. In that belief, we stood by them. When we learned that they were guilty we denounced their deeds in abhorrence and grief."

What are we to conclude? Opponents of organized labor listen with cynicism to the explanations of the high officers. They grin at the smooth assertion that the unions never use coercion. As a matter of fact everybody knows they do. Everybody knows the strong-arm methods, the 'ging, the stone-throwing, the sandbagging, which are resorted to in very many strikes and in the preparation for them. Nobody in the world of labor is ignorant of the methods by which open shops are sometimes terrorized and independent workers "persuaded" to join the union.

It is, of course, absurd to attempt to implicate the officers of the Federation of Labor, or any of them, in such a tragedy as that at Los Angeles. It is not so easy to acquit them altogether of moral responsibility. They are strong men who ought to have been able to send down the line the stern word of forbiddance; they ought to have made it clear that the unions would never be allowed to become the beneficiaries of violence; they ought, as one of their first duties, to have been alert to discover and thwart plots of violence by which unions were to be benefited.

As to the officers of the Structural lronworkers' Union, it is another matter. It is hard to believe that they were ignorant of the McNamaras' activity, unconscious that "the boys" were busy with large sums of money in shady ways. It is difficult to imagine the lronworkers' officers so feeble of intellect as not to connect the swiftly-growing list of dynamite outrages with the secret work of the secretary-treasurer and his brother.

In any event, Union Labor received a severe blow when the McNamaras confessed to their misdeeds. Nothing has ever shaken the country as did the killing of the score of Los Angeles men in the cold blood of union terrorism. The country will No amount of symnot stand for that. pathy for the legitimate aims of unionism can excuse the insolent carelessness of human life and property into which its fanatics have been led. If it is to survive in this country, it has got to reform itself completely. It has got to purge itself of lawlessness and give guarantees of its respect for life and property. It has got to abandon secret practises; and work, as we are compelling all other social factors to work, in the open.

Mr. Gompers will continue to be the captain, for awhile; his position in the Federation is for the present impregnable.

A dozen Socialist members of the Federation have assured me that there would be no attack on him within the union — no section within will assail him while he is the victim of attack from without. It is hinted that Mr. Gompers's friends like to keep him in the position of a martyr; they suggest that the Bucks Stove Company contempt case has been unduly drawn out with an eye to keeping "Sammie" in the martyr's rôle. Yet, in the long run, the McNamara case must necessarily ruin the old chieftain's influence. It puts him in a comic position. He should have known if he did not know, the shrewd workingman will argue.

One thing which deserves to be made clear to everybody interested in the labor problem is the conflict between laborunionism and Socialism — as the advocates of each to-day understand them. The issue is sharp, and the opponents fierce. The point of the matter is that laborunionism exists to gain all it can from private capital, while Socialism wants to abolish private capital.

All Socialists, within or outside the unions, look upon Mr. Gompers as a conservative, a reactionary. They desire political action. Anything short of that is, according to the non-union Socialist, idle; according to the union Socialist, at least an incomplete programme. The radicals hold that, under the present organization of society, the interests of labor are always inevitably in conflict with those of capital. One can gain only There can be no at the other's expense. compromise, no conciliation, no harmonization of interest. The officers of the American Federation of Labor do not embrace this view. They are willing to confer, they attempt to harmonize.

The issue focussed itself at the last Federation Convention, Atlanta, November 13-25, on a resolution calling on all union men to resign from the National Civic Federation. John Mitchell had already been asked by the Mine Workers' Union to sever his connection with this body, founded on the false assumption of "identity of interest." The Atlanta debate raged for many hours during two days; in the end the convention refused, by a vote in the proportion of 12 to 5, to pass the radical resolution.

On the other hand, paradoxically if not inconsistently, Socialists outside the unions charge that dynamite is the logical result of trades-union opportunist policy. It promises so little, says Congressman Victor Berger, a union man, that "the desperate character readily turns to desperate acts." "Dynamite is a logical result of an attempt to wage the class struggle without the ballot," declares the editor of the *Coming Nation*. "Had the McNamara brothers understood the philosophy of Socialism they would never have resorted to deeds of violence," says the *Appeal to Reason*. These are Socialist sheets.

Put into more reasoned shape, the idea of the Socialists is like this: "The McNamara result shows the futility of all methods of fighting the capitalistic oppressors, except the political method. The American Federation of Labor has been growing up for thirty years, and it has now reached formidable proportions. But it has grown in consequence of violent methods of persuasion, and the moment these methods are revealed to the world, they meet with a crash a public sentiment which will not tolerate them."

There are some Socialists in the unions, but not enough to make a fight for its control. There is Duncan MacDonald and William Johnson and Max Hayes and Morris Braun; practically the whole of the Western Federation of Miners is socialistic. But there is going to be no organized opposition to Gompers.

The most interesting question in the world of labor is whether, in the months ahead, Socialism or Trades-unionism will grow the faster. Both will grow. The Los Angeles tragedy is not going to discourage the Federation. It will only stir it to new energy. But the Socialists have a more picturesque if a less practical Their leaders are younger and appeal. more brilliant; they speak a later word; they interest a bigger audience. Their hope now is that the Los Angeles tragedy will make it plain that theirs is the policy of law and order.

SELMA LAGERLÖF

SWEDEN'S IDOLIZED WRITER. A WOMAN WHO HAS CONQUERED ALL EUROPE WITH HER PEN

BY

VELMA SWANSTON HOWARD

O SWEDISH writer past or present has so faithfully mirrored the soul of the Swedish people as Selma Lagerlöf, and no writer past or present is so idolized as she. When the International Woman Suffrage Congress met in Stockholm last June, it was the spirit of Selma Lagerlöf that dominated the Congress of Nations. In making her address before this diverse audience, she was able, by the compelling earnestness of her plea, to move profoundly even those who could not understand her language. Yet she is a woman who aspires to no prominence. She is modest, retiring, and with no trace of self consciousness, or desire to compete or impress.

In her native province her work has sunk deep into the hearts of the people. The places and characters she has described have become so intimately associated with her stories and legends that the real names are constantly being confused with the fictitious ones. This summer I visited Mårbacka, sailing up Lake Fryken on the steamship Selma Lagerlöf and returning on the Gösta Ber-Everywhere in Sweden one finds ling. postal cards representing scenes in "The Adventures of Nils." There is a Nils Holgersson game; there is a topical song in Swedish dealing with the author and her tiny hero, and even in this country there is a Nils Holgersson Club.

Selma Lagerlöf's popularity is not confined exclusively to the Scandinavian countries. In Germany she is more widely read than any other foreign writer. A Berlin critic has said of her that she is the "foremost woman writer of our time." She is equally beloved in Russia and Holland, and recently she has conquered France. Although prize after prize has been awarded to her, it is only since the bestowal of the Nobel prize that she has become a world figure.

In her own land no crowned queen has wielded a greater influence, has been more fêted and honored than this woman of the people. She sprang into fame with her first book, "Gösta Berling," which won, for her a substantial prize. Soon after the publication of the first volume of "The Adventures of Nils," she was crowned with the laurel wreath at the Cathedral of Upsala and received from the University of Upsala the degree of Doctor of Letters. About a year after the second volume of "Nils" had made its appearance, she was awarded the Nobel prize in literature.

Selma Lagerlöf might well be called the founder of a new school of literature. She arrived at the psychological moment when the literary tendency of Europe was morbidly realistic. She saw what other writers had seen — only in another light. Hers was the seer's vision rather than the critic's judgment, and so clear was her vision that she discovered life where we had seen but dead things and gray.

Her method is to throw into obscurity human frailties and vices and to turn the light on what is biggest and strongest in men as she sees them. It was for "optimism in literature" that she was awarded the Nobel prize.

Her religion can be expressed in two words: Love and Compassion. She has written three notable books of a marked religious tendency, two of which are modern novels: "Jerusalem" and "Miracles of Antichrist," while the third, "Christ Legends," is her own treatment of material gathered mostly in the Orient - simple lessons in tenderness and self-forgetfulness.

Selma Lagerlöf has broken away from conventional and academic literary forms; she tells her stories in her own way, which is as distinctly individual as that of Kipling. Her style is marked for its simplicity and purity; in her work there are no involved sentences, no meanings lost in a maze of rhetorical windings.

Feeling the need of radical reform in the public school system of education, the National Teachers' Association of Sweden commissioned Miss Lagerlöf to write a book which should embody the geography and natural history of the country, to be used as supplementary reading in the Having once been a teacher herschools. self, she understood the requirements of children and how best to attract and hold their interest. After four years of study and research the author gave her rich imagination full play, ingeniously and delicately weaving and interweaving fact with fancy. The result was "The Wonderful Adventures of Nils," an enchanting fairy story which has been compared to the fairy classics of Grimm and Andersen.

The innovation was so successful that, since the appearance of Miss Lagerlöf's book, other distinguished authors have followed in her footsteps. And now educational works in fairy tale form, including an interesting history of Sweden's heroes, have been added to the list of school books. However, Miss Lagerlöf's book remains preëminently the most popular. Her book is to be found in every home where there are children; and tourists visiting Sweden find it an interesting and invaluable guide book. While I was stopping with Miss Lagerlöf in her old manor, which she so charmingly pictures in "The Further Adventures of Nils,' everything about the place recalled in-cidents connected with the fairy tale. Here was the pond she described, where no one was allowed to fish lest they disturb the carp; here at any moment Thumbietot might appear, or the doves and Lady Brown Owl; for it was here that Miss Lagerlöf made the acquaintance of little Thumbietot (Nils Holgersson), who told her all about himself — how he, a human

being like herself, had been turned into an elf; of his travels with the wild geese and his wonderful adventures. To quote her own words: "What luck to have run across one who has traveled all over Sweden on the back of a goose! Just this which he has related I shall write down in my book."

And when the story was finished she bought back the home of her childhood among the blue hills of Vermland, where she now lives with her aged mother and where she can have the solitude she craves for her work. Farming is her recreation and the farm animals are her pets. A recent acquisition to her household is a little orphan boy whom she took from a poor-house and who happens to bear the same name as the hero of her fairy story — Nils Holgersson.

However, Miss Lagerlöf does not live exclusively in her own fairy world. She finds time in her busy life for the enjoyment of other writers and reads with deep appreciation the best standard works of English and American authors. Dickens, Tennyson, Kipling, Hawthorne, Emerson, George William Curtis, and Longfellow are among her favorites. Like most educated Swedes, she is an accomplished linguist and can read understandingly English, German, and French works in the original.

Alive to the needs of the peasants in her district she has in her drawing room an open library of books which she herself has carefully selected.

Selma Lagerlöf, as is typical of her people, is of the blonde type. She is of medium height, with figure well rounded. Her hair is quite gray. Her face is broad, her steady clear blue eyes light up wonderfully when she smiles. Her movements are slow, her gestures few. The most striking thing about her is her rich contralto voice with its soft low tones vibrant with feeling. She cannot "make talk," as we say, but speaks only when she has something to say. When one of Miss Lagerlöf's close friends laughingly said to her in my presence: "Selma, you cannot pay compliments," it seemed to me that her very manner of listening was in itself a gracious compliments.

WOMAN THE SAVIOR OF THE STATE

HER FUNDAMENTAL ACHIEVEMENT IN HER WORLD, AND MAN'S HALF-SUCCESS IN HIS, AS THE BASIS OF THE DEMAND FOR SUFFRAGE

BY

SELMA LAGERLÖF

TRANSLATED FROM THE SWEDISH BY VELMA SWANSTON HOWARD

From an address delivered before the Sixth Congress of the International Woman Suffrage Alliance in Stockholm and regarded as the most eloquent statement of the suffragist plea made in any country

AVE women done nothing which entitles us to equal rights with man? Our time on earth has been long - as long as his. Has it left no trace in passing? Have we created nothing of incontestable worth to life and civilization? Beside this, that we have brought human beings into the world, have we contributed nothing of use to mankind? I know that the women before our time did not fritter away their lives as playing children, but worked. I look at paintings and engravings, pictures of old women of olden times. Their faces are haggard and stern; their hands rough and bony. They had their struggles and What have they done? their interests.

I place myself before Rembrandt's old peasant woman, she of the thousand wrinkles in her intelligent face, and I ask myself why she lived. Certainly not to be worshipped by many men, not to rule a state, not to win a scholar's degree! And yet the work to which she devoted herself could not have been of a trivial nature. She did not go through life stupid and shallow! The glances of men and women rest rather upon her aged countenance than upon that of the fairest young beauty. Her life must have had a meaning.

We all know what the old woman will reply to my question. We read the answer in her calm and kindly smile: "All that I did was to make a good home."

And, look you! This is what the women would answer if they could rise from their graves, generation after generation, thousands upon thousands, millions upon is: "All that we strove for was to good home." How few among them would answer differently! One and another nun might cry that her aim in life had been to serve God. One and another queen would declare that she had served her country. But their forms would be lost in the throngs, their voices would not be heard among all those who answer: "Our only ambition has been to create a good home."

We all know that this is true. We know that if we were to ask the men, could we line them up, generation after generation, thousands and millions in succession, it would not occur to one of them to say that he had lived for the purpose of making a good home.

We know that it is needless to seek further. We should find nothing. Our gift to humanity is the home - that, and nothing else. We have been building upon this little structure ever since the time of our Mother Eve. We have altered the plan; we have experimented; we have made new discoveries; we have gone back to the old; we have adapted ourselves; we have gone forth and tamed such among the wild beasts as were needed in the home; we have selected from the growths of earth fruit-bearing trees, luscious berries, seeds, and the choicest flowers. We have furnished and decorated our home; we have developed its customs; we have created the art of child training, comfort, courtesy, and pleasant social intercourse.

For the home we have been great; for the home we have also been petty. Not many of us have stood with Christina Gyllenstierna on the walls of Stockholm and defended a city; still fewer of us have gone forth with Jeanne D'Arc to battle for the Fatherland. But if the enemy approached our own gate, we stood there with broom and dish rag, with the sharp tongue and clawing hand, ready to fight to the last in defence of our creation, the home. And this little structure which has cost us so much effort, is it a success or a failure? Is this woman's contribution to civilization inconsiderable or valuable? Is it appreciated or despised?

For answer we need only listen to the comments we constantly hear around us: Why does it go well with this or that one? Because he has had the advantage of a Why, for instance, good home training. is this person so much better able to meet the trials of life than many others? Because his training in the home had been along right lines. Another fails. Why? you ask. This, again, is in a great measure due to the faulty upbringing he re-ceived in the home. How has that man been able to bear up under all his misfortunes? Because his wife has always eased his burden by making a good home for him.

Isn't it wonderful, this little retreat! It receives us with joy as tiny, helpless troublesome babes; it has an honored place for us as feeble and broken old men and women; it gladdens and refreshes the man when he returns, exhausted by the day's toil; it cherishes him as warmly when the world goes against him as when it honors him. Here there are no laws, only customs, which one follows because they are useful and expedient. Here one is disciplined not for the sake of punishing, but only for development. Here one finds employment for all talents, but one who has none can make himself just as beloved as the most gifted genius.

The home can take into its world humble servants, and keep them for life. It does not lose sight of its own, and slaughters the fatted calf when the prodigal returns. It is a store house for the legends and ballads of our forefathers. It has its own ritual for fêtes and ceremonies; it treasures memories of our forebears which no history can record. Here every one may be himself so long as he does not disturb the harmony of the whole. One finds nothing more adjustable, more compassionate among all that mankind has effected, and there is nothing so beloved and so highly prized as woman's creation, the home.

Since this is so, since we admit that all the other work of woman is of evanescent character as compared with the extraordinary work which she has accomplished in the home; when we see how persistently the woman's talents point in this direction, must we not with all our heart bemoan the Woman Movement — this departure from the home, their emigration, 1 might say, from their one accustomed field of usefulness to the man's field of labor?

Most men and a large proportion of the women themselves have fretted and grieved over this. They have also hindered and obstructed in so far as they could, but nothing has availed. The young woman in her search for employment has received but little encouragement, rather has she been scorned and ridiculed. The least desirable places have been open to her; the poorest pay has been offered for her services, which she has gratefully accepted. Few have found anything praiseworthy in this. One instinctively had the feeling that she acted wrongly in leaving the home service.

Nowadays we are making the most extensive investigations as to the causes of emigration. We find that it is due to economic oppression, to a desire for equality and freedom, to a yearning for change, to tempting examples -----

But, with that has all been said? Do we not all feel that this breaking away from the land of our fathers is due to an irresistible force? We liken it to a fever. this which drives thousands upon thousands from familiar surroundings and beloved associations, away to strange lands, to adapt themselves to a new country, to learn a new language, to acquire new methods of work - while the rewards are uncertain, the hardships and discomforts are inevitable. May it not be that some great law of Nature sets into motion the emigration throngs? The rest of us scarcely dare do aught to check it, for we know that, so long as there is an acre of unbroken ground on the face of the globe, there will be pioneers who will find their way to it. One cannot prevent humanity from populating the earth and making it habitable; therefore no one laughs at the emigrant.

And I believe that there will soon be an end to all ridicule of the working woman. It will be understood that when she was forced to leave home it was not solely for economic reasons, not only from a desire for equality, not only from a longing for change and freedom, all of which have played a part, but there are also other reasons. A force stronger than Nature herself, a touch of the indefinable has stirred woman. Yellowing wheat fields, new cities, flourishing states show us where the immigrant has advanced. Perchance the woman, also, shall some day show us that when she forced her way into the man's working territory, she too wished to cultivate wildernesses and deserts!

But before we venture to predict anything as regards the future, let us consider what the man has accomplished in his world.

First of all, in what has his labor consisted? During the thousands of years that woman has been working upon her humble creation, the home, what has been man's greatest achievement?

There can be no question as to the answer. Man has created the state. He has served it and suffered for it; he has given to it his almost superhuman efforts; he has risked life for its upbuilding; he has given to it his profoundest thought. To defend it he has placed himself at the cannon's mouth. He has constructed its laws and has classified the inhabitants of this elaborate creation, which embraces all of us and unites us, like the members of a human body.

We must not deny the man the great honor due him as founder of the state, and not only the state as a unit, but also the smaller and greater organizations of which it is comprised; for they are all his work. As soon as we step outside the four walls of the home, we meet him, and him only. He has created the farm, the village, the city. He has constructed the church, the university, the industrial world. All the states within states are from the start his work. He is the great builder of human ant hills. He never stands alone, but always in coalition. Man's greatest contribution to civilization is the well organized, strong, and protecting state.

Let us be clear on one point! It is not my meaning that the home, as I have just presented it, is perfected everywhere. If such were the case, then verily humanity had reached its goal, and further reforms and improvements would not be needed. Naturally I'm aware of the fact that the majority of homes are not perfect, and that many are bad. But the good and happy homes do exist; we have seen them; we have lived in them. We may not have had them ourselves, perhaps, but we can bear witness to their existence. They are no mere dream. Women can create them in poverty and in affluence, in lowliness and in refinement. They are to be found in kings' castles and in cotters' huts.

Now, as to the states — these our greater homes, so difficult to build, constructed with so much effort, watered by so much blood and so many tears, builded by the help of the strongest characters, the boldest minds — is there or has there ever been one that has satisfied all its members? Are they not always in the midst of continuous reform work? Does one not desire even to-day to reform and reconstruct them from the bottom up? Do they not present constant reasons for discontent and bitterness?

In the "Nardesta" of Runeberg, Catherine of Russia says to her friend, the Countess Natalia, apropos of her home:

"What happiness is yours! To be able to extend toward all a helping hand; to be able to meet all needs, creating a little paradise of joy and bliss only with the heart's desire!"

Catherine was a woman, but here she does not speak as woman but as regent of the greatest kingdom on earth. She knew what every statesman knows: that the state can enforce order and procure defense; yet she was permeated with the feeling of its limitations, and its helplessness in many ways.

Where is the state in which there are no unprotected children? wherein no budding genius is crushed, but where all its young are lovingly nurtured?

Where is the state that gives to all its aged poor the protection and respect

due those who are nearing the end of this life? Where is the state that punishes offenders only with the idea of correction and development? Where is the state that utilizes every talent, that gives, and in which the unfortunate receives as much thoughtful consideration as do the most favored?

Where is the state which does not embody alien peoples it cannot care for? Where is the state which gives to all the opportunity of living their own lives, so long as they do not disturb the harmony of the whole? Where is the state wherein none of its members may go to waste in idleness, drunkenness, and in shameless living?

Perhaps you will answer that this is not the business of the state. It stands for law and order. But if such is the case, why does it meddle with all these other matters? It does so because it knows that the state which does not create happiness cannot prosper. It is essential to its welfare to be beloved by high and low. The state must be a promoter of comfort, security, education, culture, and ennobling; for to it mankind must look for the realization of their hopes.

Nor has the state been remiss in making great enough demands upon humanity itself; but thus far, for some reason, the state has been unable to enforce these demands.

There is one thing more to be considered. I have been bold enough to state that the home is woman's creation. But I did not say that she alone created it. Fortunately for her and for all of us, she has ever had the man with her. Master and mistress have sat side by side. Had the woman toiled alone she could not have solved the problem. The home would not have been in existence, either as a dream or a reality.

But in the creating of the state, man has stood alone. Nothing has impelled man to take woman with him into the Hall of Justice, into the Civil Service Department, into the House of Commerce. He has forged his way alone.

Think how long he alone performed the duties of physician! He still prepares his own meals at the barracks; he coaches at the boys' school. He has taken upon himself the hardest tasks, and he has not been afraid of work. But has he succeeded? Witness the hatred between the classes; witness the stifled cries from beneath, all the threats and revolutions. Witness the complaints of the unemployed; witness emigration! Does all this signify that he has succeeded, or that he ever can succeed?

And, mark you! At this very moment, when governments are tottering, admirably constructed though they be; when social revolution appears at our very door — it is right here that the great Woman Invasion into man's field of labor and into the territory of the state begins.

Does this signify anything? Or, does it simply mean that women desire a better lot in life — equality, change, freedom, power?

Why does all this come just now? One must be blind not to see, deaf not to hear!

Has not something within been calling and urging? Go forth to new and difficult work! Take your place at the railway switch, sweep the street, copy at the office, sell postage stamps at the postoffice, teach the elementary branches, take your place at the telephone switchboard, be a surgeon's helper; do all this subordinate work and be assured that it is not wasted!

Above all, be assured that it was necessary work! You must enter all fields; you must be on hand everywhere, if the state is ever to be beloved like the home. Be certain that your services, now so despised, shall soon be sought after. They will be in such demand that you will hardly be able to meet the wants. Be assured that we shall soon be in evidence everywhere — in uninhabited regions and in cities, with many new occupations not yet known to us, but all working toward the One Good.

Alas, we women are not perfect beings! You men are no more perfect than we are. How are we to attain that which is great and good unless we help each other?

We do not think that the work can be accomplished at once, but we do believe that it would be folly to reject our help.

We believe that the winds of God are bearing us onward, that our little masterwork, the home, was our creation with the help of man. The great masterwork, the state, shall be perfected by man when in all seriousness he takes woman as his helper.

THE FATE OF ALASKA

A BATTLEGROUND FOR CONTROVERSY LEFT UNDEVELOPED — LITTLE DANGER OF MONOPOLY — THE ACCEPTANCE OF THE LEASING SYSTEM — THE DUTY OF CONGRESS

BY

CARRINGTON WEEMS

Written after Mr. Weems bad visited Alaska in person

HE Alaskan coal supply is not in danger of monopolization, nor is any one "interest" likely to gain control of its outlets. of the coal has, moreover, been greatly overestimated in the violent struggle between those who were more or less content with the old methods of dealing with the public domain and the conservationists who brought a new and vital conception to the public mind. In the struggle between these two forces, Alaska served as a battlefield, and the importance of its problems was somewhat magnified while its interests were sadly neglected and abused. In the conflict over how it should be developed, development was stopped. For five wasted years Alaska has suffered, and Congress now has before it the duty of starting the country forward on a wise course.

The general lack of trustworthy and accurate information about Alaska is apparently the fundamental difficulty. On one authority it is reported that the coalfields of Bering River contain wealth undreamed of. Upon another we are asked to believe that the geologists have been mistaken in the deposits which are all but worthless; that from excessive faulting their product is crushed and unmarketable; that "California oil has killed Alaska's goose." One day the country is startled by learning that Controller Bay is the sole key to the coalfields, and that with official cognizance it has fallen into the hands of an unscrupulous syndicate *bent upon monopoly*. Not long afterward this alarm is discounted by news from the front which characterizes Controller Bay as a windswept mudflat, valuable as a duckmarsh, utterly worthless as a harbor. The public may well wonder where the truth is to be found.

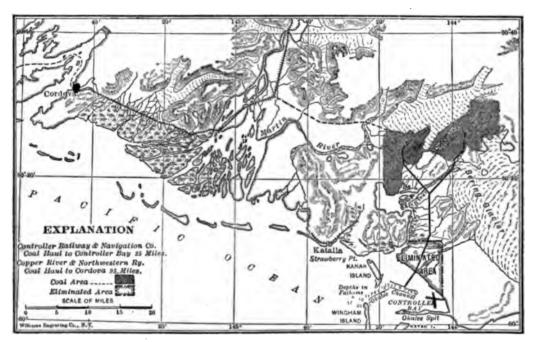
To all intents and purposes, the Bering River field comprises the Alaskan coal question. Of all Alaskan coal deposits this field contains the most accessible of the high grade coals. The Matanuska field, several hundred miles to the northwestward, comes next in importance: its quantity and quality are about the same or better, but it is removed nearly five times farther from tidewater. Eventually, increasing demands will justify the exploitation of the Matanuska field, and it will be connected with the sea either by a branch - already surveyed - of the Copper River and Northwestern main line from Cordova to the interior, or by a railroad having Seward on the Kenai Peninsula as its terminus. Later, of course, increas-ing industrial demands will automatically open up one interior Alaskan coalfield after another. The settlements in the Arctic region will have coal near at hand on Colville River and at Cape Lisburne. In the interior near Eagle and in the vicinity of Fairbanks, as at various points along the Yukon River, lignites are found in abundance. The same is true of the Innoke River district, and of all the eastern half of Kenai Peninsula. Even far out to the westward in Chignik Bay and on Kodiak Island, coal of good grade is waiting to be mined. In falling back thus upon widely scattered coal deposits, Alaska will be protected naturally from monopoly and extortionate fuel charges.

Only one fifth of Alaska has ever been surveyed geologically. How much coal the rest may contain no man can guess. From many scattered points within this area, prospectors have reported coal dis-Upon well-established data, the coveries. head of the Geological Survey in Alaska states that the minimum of coal resources should be placed at 150,000 million tons, although the actual tonnage is likely to be many times that amount. Mining in a small way by Arctic whalers has revealed a high grade bituminous coal in the Cape Lisburne region, and there is good reason to believe that the coal deposits of the Arctic slope are more extensive than all the other fields combined, covering roughly 3000 square miles. Of course the large part of this coal, which is not easily accessible from the Pacific Coast, is practically non-existent as far as export trade is concerned in the near future. But the present generation and the next will have more than enough natural obstacles to overcome in building railroads and profitably opening up coal mines near at hand.

Those who first undertake to market Alaska coal are very far from having the bonanza which alarmists have described. The difficulty lies in the market. Even after the excessive first costs have been overcome, and the present high price of labor in Alaska reduced by settled conditions, the most sanguine estimate is only able to place Bering River coal in Seattle at something like four dollars a ton, which is the average price now paid there for British Columbia and Vancouver coal. This Canadian coal is sold, moreover, at an excessive profit, and under competition its price could be very With Australian materially reduced. coal, which is cheaply mined at tidewater, the Alaska product will also experience lively competition. It is true that for special purposes these coals would not be able to compete on the same footing with the best from the Bering River field, to which they are inferior. But here, too, the high grade product will not find an undisputed market. Statistics show that when the Panama Canal is completed, it will be possible to lay Pennsylvania coal down at San Francisco for a price in the neighborhood of four dollars and sixty cents a ton. Nor is this all that Alaska coal will have to face. A competitor even more to be feared is California petroleum, which in the Pacific states controls the fuel market at present. This oil is being introduced by the Alaska Syndicate the Morgan-Guggenheim interests -- on its steamships, upon the Copper River & Northwestern Railroad, and at the famous Bonanza copper mine. At the tidewater terminal of the road its manager stated that oil could be bought for something like one dollar a barrel, or in terms of the fuel equivalent of coal, about four The enormous plant of dollars a ton. the Treadwell mines in southeastern Alaska burns fuel oil at a coal equivalent of approximately three dollars a ton.

Various estimates place the bare cost of mining Bering River coal and placing it on vessels at the nearest port, between \$2.25 and \$2.66 per ton. From which it will be seen that Alaska coal will be reasonably secure only in the home market - a market demanding annually less than 150,000 tons, or a fair yearly output for one small-sized mine. Beyond that, Bering River coal can, on the score of its very high quality, be counted upon to sell in the face of competition to the extent of a million tons a year on the Pacific coast, including sales to the United States navy. A million and a half tons is a safe estimate of the amount of Alaska coal which in the beginning could be marketed annually with profit. In the face of such a showing the incentive for creating a monopoly is lacking. The game appears not to be worth the candle by a good deal.

Even in the much discussed Cunningham case, while the illegality of their methods finally lost them their claims, the evidence hardly substantiates the idea that this was an incipient monopoly. Outside of this group, which is only a small fraction — about one eighth — of the whole field, and that by no means the best, the Guggenheim interests made no efforts to gain holdings, notwithstanding the fact that they had full opportunity before the ore-bearing areas were entirely occupied. Their agreement with the claimants associated with Clarence Comningham, in regard to securing coal at stipulated prices, might have been no more than a protective measure which any large consumer would take. They were assured thereby of a supply of fuel at reasonable cost for the development of their immense copper properties and for their railroad, which is plainly designed to become the great trunk line to the interior of Alaska; their profit from the development of the coalfield was to come out of increased tonnage for their railfor honest and constructive land laws has made impossible the monopoly of which there was little danger, but besides this it has accomplished a really constructive task. It has brought about the general acceptance of the leasing principle for the development of Alaska coal. This means that the Government will hold the title and lease the privilege of mining under such conditions as the experience and study of the Bureau of Mines indicate are proper to prevent waste of coal



THE ALASKA COAST LINE

SHOWING THE TWO POSSIBLE OUTLETS FOR THE COALFIELDS — THE PROPOSED BRANCH OF THE ALASKAN SYNDICATE'S ROAD CONNECTING WITH ITS MAIN LINE TO CORDOVA, AND THE PROPOSED LINE OF THE CONTROLLER RAILWAY & NAVIGATION CO. FROM THE COALFIELDS TO CONTROLLER BAY

road. Such an agreement was unlawful on the part of the claimants while their patents were pending, under the coal land laws then in effect, and it cost them eventually the loss of their claims. In the meantime the danger was that an illegality would be countenanced, and that the old, wasteful methods of mining would be encouraged, not that a monopoly would be formed.

The controversy which was hailed chiefly as an attempt to prevent a monopoly in Alaska — but which in reality was but one battle in the long campaign and human life. So much for the coal. As for the later cry that the same sad

As for the later cry that the same sad result was about to be achieved by the acquisition of exclusive control of transportation routes, that also appears to be a false alarm when two ports are able to offer outlets from the coal fields.

Cordova possesses an excellent harbor, and is the terminus of the Copper River & Northwestern Railroad, belonging to the Morgan-Guggenheim Alaska syndicate. On the word of its general manager, it is ready to build a line, already located, to the coalfields in eight months.

Controller Bay offers the other outlet, one not so far by half, and there the Controller Railway and Navigation Company awaits the patenting of terminal grounds to begin the construction of its road and dock.

It has been urged that the interests behind these two roads are identical, but not a shadow of proof has been advanced to controvert the postive affirmations to the contrary made by the officers of both roads. And these denials are amply supported by the history of the two ventures. Mr. R. S. Ryan, a former delegate from Alaska, is the promoter of the Controller Bay enterprise. Between this gentleman and the Guggenheim faction crosspurposes have always been the rule. He fought them bitterly in the last election, as Alaskans well remember, and was instrumental in defeating Orr, their candidate for Congressional Delegate.

The Syndicate has given every evidence of satisfaction with Cordova as a permanent terminal. They have gone ahead with improvements there, and are now in possession of the entire waterfront. Mr. E. C. Hawkins, their general manager and chief engineer, has repeatedly expressed his belief in the superiority of Cordova as the logical outlet for coal, relying on the natural advantages of its harbor to offset the greater distance from the coal mines. In this judgment, the Syndicate has shown every willingness to back him up. Nothing they have done would indicate any thought of another port.

Prior to 1909, the existence of an adequate deep water channel in Controller Bay was suspected by only a few. Enclosed by a long narrow spit and three outlying islands, the bay at low tide is anything but promising. Miles of mudflats, the deposits of heavily laden glacial streams, are exposed on all sides. Apparently they fill the bay. It is easy to see how the engineers of the Alaska Syndicate, when weighing the respective advantages of Valdez, Cordova, and Katalla as ports of entry into the interior, failed to give Controller Bay very serious consideration. After a disastrous attempt, costing nearly three million dollars, to erect terminals at Katalla, which is practically an unprotected roadstead, they were glad to fall back upon Cordova whose natural landlocked harbor cannot be questioned.

This was in the fall of 1907, and it was not until two years later that the United States Coast Survey Boat *Patterson*, commanded by Captain Denson, made a systematic survey of Controller Bay, and the official chart for the use of mariners



Photograph by Hegg, Cordova

THE COPPER RIVER AND NORTHWESTERN THE RAILROAD OF THE MORGAN-GUGGENHEIM ALASKA SYNDICATE, WHICH FOLLOWS THE COPPER RIVER INTO THE INTERIOR, AND WHICH IS READY TO BUILD A BRANCH TO THE COAL FIELDS AS SOON AS THEY ARE OPENED

was published. The 1909 chart authoritatively established the fact that Okalee Channel for a distance of nearly eight miles within the entrance carries six to seven fathoms of water at mean low tide, average high tides adding ten feet more. What was even more surprising, it indicated a fairway from three quarters to half a mile in width, enough to insure a safe harbor for all classes of vessels.

At low tide the flats are exposed on the mainland out to a distance of three miles, and up to within a few feet of the channel proper, which, like a river between cut banks, keeps itself scoured of the glacial mud by tidal action and its own current. Okalee Channel might almost be described as a river - undoubtedly it was such in prehistoric times - which a rising tide forces out of its banks over the adjacent mud flats outlining Controller Bay. Tributary to it are the numerous glacial streams which drain the lowlands to the north. The channel's fairway is ample for the manœuvring of the largest ships, being wider than that of any European harbor, and approximately the width of the Hudson River fairway.

In the Coast Pilot Notes, issued by the Department of Commerce and Labor, and accepted as unquestionable by navigators the world over, the harbor is described as follows:

Okalee Channel between the north end of Wingham Island and Kanak Island is fiveeighths of a mile wide with a depth of six to seven fathoms at entrance, and these depths, or more, can be taken through the greater part of the channel. The channel is a secure harbor, but is little used in the absence of aids. Masters of vessels familiar with the Alaska coast expressed great confidence in the possibilities of Controller Bay as soon as buoys and other aids essential to navigation in all harbors were installed.

The objections raised on the score of floating ice are not supported by local opinion: Controller Bay has been under



Photograph by Hegg, Cordova

THE DOCK AT CORDOVA WHICH IS BEING DEVELOPED BY THE ALASKA SYNDICATE AS THE TIDEWATER TERMINUS OF ITS RAIL-ROAD TO THE INTERIOR AND AS A POSSIBLE COAL PORT WHEN THE FIELDS ARE OPENED

regular and careful observation through several hard winters, and such objections are known to be groundless. As the waters of the bay never freeze over, the only difficulty would lie in enough ice being brought down by the fresh-water rivers to menace docks and shipping during the action of the tides. Closer acquaintance with winter conditions has shown that this difficulty is not in the least formidable. Nor are the high winds, upon which some stress has been laid, excessive, and they blow evenly and steadily, and always offshore from the east and northeast. The writer occupied a tent which has been standing for two years or more without wind damage, ten feet from high water mark on the Controller Bay flats.

After becoming perfectly familiar with Controller Bay in good weather and bad, in all craft, from a native "kyak" or dugout canoe to a power launch, one can have no doubt of the potentialities of its harbor.

The unfavorable reports about Controller Bay, published at the time of Secretary Fisher's visit, are as little pertinent to the matter in question, as objections to the channel into New York harbor, raised on the score of Little Hell



BRITISH COLUMBIA COAL AT CORDOVA WHICH, WITH OIL FROM CALIFORNIA, SUPPLIES FUEL FOR ALASKA UNTIL CONGRESS MAKES IT POSSIBLE PROPERLY TO DEVELOP ALASKAN COAL FIELDS

Gate's unfitness for ocean greyhounds. Strawberry Bar, where rough water was encountered, is nearly five miles from Okalee Channel and the harbor proper. It is a submerged sandspit that bounds the bay on the north. For a short cut to Katalla it is passable in good weather at high tide only and for the smallest



Photograph by La Voy, Katail.

KATALLA, DESERTED BY THE SYNDICATE AFTER IT HAD SUNK NEARLY \$3,000,000 IN A VAIN ATTEMPT TO ERECT TERMINALS ON THE ALMOST UNPROTECTED ROADSTEAD

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THE MAIN CAMP ON THE CUNNINGHAM CLAIMS WHICH, AFTER NEARLY EIGHT YEARS OF INVESTIGATION, WERE DECLARED ILLEGAL. SECRETARY FISHER NOW ADVOCATES A LEASING SYSTEM FOR THE DEVELOPMENT OF ALASKAN COAL

boats. Completely exposed as it is to the open ocean, surf breaks there constantly. At this bit of water, the Secretary's boatman found it necessary to land some of the timid members of the party before he crossed into the open sea and thence to Katalla where the U. S. Revenue Cutter *Taboma* lay at anchor, having never so much as entered Controller Bay.

Despite the President's explanation in his message on the subject, some credence seems still given to the fiction that the Controller Railway and Navigation Company have gained exclusive control of the waterfront. It is true that by the per-sistence of this company an elimination was secured from the large adjacent area of National Forest; and being first in the field they have made four locations which appear to have a shade the advantage. Be that as it may, the freedom of the eighty rods reserved by law between each of these claims, not to mention the remainder of the shore front which is still open, effectually prevent undue control of the situation, as do likewise the reserved powers in the bill which authorizes the railroad to build over the tide flats, here as always a part of the public domain.

It is interesting to note an aspect of the elimination episode which has escaped general comment. Along the whole adjoin-ing coast, only three possible harbors exist which could serve the Bering River coal field: Cordova, Katalla, and Controller Bay. Katalla was proved im-practicable, and Controller Bay was virtually wiped off the map for the time being when its shores were held as part of a National Forest. Under solicitation to release some of this area for commercial purposes, the Administration faced an embarrassing choice. To comply promised to raise - as it did raise - the cry that special interests were being favored in the person of the applicant; not to do so left Cordova, where the Alaska Syndicate is entrenched behind every foot of available waterfront, in undisputed control of coal transportation. Whichever it did, clearly the Administration stood to be equally damned.

One encounters everywhere in Alaska discontent over the inability of the country to utilize its own fuel resources. Since all the coal lands in Alaska were withdrawn from entry five years ago, the hope has been sustained that Congress was about to effect some arrangement by which

relief would be secured from the tax of having to pay exorbitant prices for British Columbia coal. The discontent is not to be wondered at.

Practically all the coal-bearing areas in the Bering River and Matanuska fields were covered with claims prior to this order. Wherever they were within the law definite rights became established. Passing upon these rights has already occupied nearly eight years, although in many cases the purchase money had been received and receipts issued. During all this time, definite action has been taken in regard to only one set of claims, the notorious Cunningham group, in which patents were refused. Other illegal entries ought to have been detected and similarly dropped before this, or else patents should have been granted. It is the prolonged paralysis which has aggravated the people of Alaska, not concern over the fate of particular entrymen, the majority of whom are not permanent residents.

The delay has been due to the inability of Congress to pass a leasing bill or otherwise determine how Alaska coal is to be mined. In the interval the Department of the Interior has been marking time.

However, the burden of the delay should not be borne exclusively by Congress. Alaskans themselves share the blame. For as many prominent Alaskans as are summoned before Congressional committees on Alaska affairs to give information and advice, as many different varieties of opinion will be disclosed. The invariable exchange of mutual recrimination and the utter lack of unanimity as to what is needed and desired in Alaska, results in Congressional distrust of all information and a natural diffidence and hesitancy about taking any action. Alaska's Delegate to Congress, also, comes in for a large responsibility for this inaction.

From the Alaskan point of view, Congress is faced by a comparatively-simple, definite question of administration which has been distorted and magnified out of all reason. Unquestionably the leasing system will be the ultimate solution.



ONE OF THE TUNNELS ON THE FAMOUS CUNNINGHAM CLAIMS WHICH BECAME THE BONE OF CONTENTION IN THE STRUGGLE OF CONSERVATIONIST AND ANTI-CONSERVATIONIST ABOUT THE PROPER METHOD OF DEVELOPING THE COAL FIELDS

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The Administration favors it; experience in the several coal-mining states — in Western Australia and elsewhere — has proved its superiority; it has the support of practically all who have studied the situation in Alaska. Congress has only to devise a suitable leasing arrangement, and to apply it without delay to those lands upon which claims have already been forfeited, and to others as they revert to the public domain. So exhausted have all the coal claimants become that, rather than face the possibility of more delay, most of them would be willing to assist the Government to wipe the slate clean for the new system by relinquishing their as a coaling base for the navy. If the occasion should arise, the Government could build and operate therefrom its own coal road. Certainly nothing at present seems to justify the building of a Government road. Two competing lines are ready to connect the field with tidewater at two different ports as soon as the coal can be mined, and additional outlets are available at Controller Bay for possible future competitors. Furthermore Alaska's chief protection against extortionate rates will have to be, as it is elsewhere, regulation. Freight shipped in or out will automatically come under the regulation of the Interstate Commerce



HEADQUARTERS OF THE CONTROLLER RAILWAY AND NAVIGATION COMPANY ON THE FLATS OF CONTROLLER BAY WHICH IS LESS THAN HALF AS FAR AS CORDOVA FROM THE COAL FIELDS

half-established property rights for some preferences in the awarding of leaseholds. From those who demurred, and were able to perfect their titles, their holdings might be purchased by the Government, or, in what would prove to be a very small number of cases, patents could be granted without any prejudice to a fair trial of the leasing system in the rest of the field. Indeed, side by side, a comparative test of the two schemes could be made.

The coal carrying situation is even simpler. No legislation is needed, unless public interests would be safeguarded by the reservation of a suitable tract on the shore of Controller Bay to be used Commission, as interstate pusiness does elsewhere. For instance the Copper River and Northwestern Railroad unquestionably controls the splendid entrance into the interior which the valley of the Copper River affords. The situation there is strikingly like that which existed when a right-of-way was first secured along the shore of the Hudson River. And similarly the ill effects of a virtual control of transportation will be obviated by Governmental regulation.

Alaska wants now two things: prompt, sane legislation and powerful capital. Without them the tremendous obstacles with which Nature has protected her vast resources will not be overcome for generations.



OUR IMMIGRANTS AND THE FUTURE

NOT THE NUMBER BUT THE KIND OF IMMIGRANTS - RUSSIAN JEWS, SOUTH ITALIANS AND POLES AND SLOVAKS - GIVES GROUND FOR APPREHENSION

BY

E. DANA DURAND (THE DIRECTOR OF THE CENSUS)

HE agitation in recent years for a further restriction of immigration into the United States lends particular interest to the statistics published by the Census Bureau with reference to the foreign-born population of the country. These statistics show that, although there has been less increase in the foreign-born population during the last decade than is generally supposed, the change which has been going on in the composition of that population has been very great and furnishes food for serious thought if not for apprehension.

Too much emphasis has perhaps been laid in recent popular discussion upon the increase in the number of immigrants. It is true that the number of immigrants reported for the decade 1900-1910 was

nearly nine millions, two and one hal times as many as for the preceding decade and more than 75 per cent. greater that for 1880-1890, which was the decade o greatest immigration during the nine teenth century. It must be remembered however, that we now have a much large population to absorb an increased immi gration than we had before. Moreover the net addition to the population through immigration during recent years has been much less than would be indicated by the number of immigrants. There has been a very large return current, the importance of which is often overlooked. More that 2,576,000 immigrant aliens arrived it the country during the three years ending June 30, 1910, but during the same period a little more than 1,000,000 of the foreigi born departed from this country, so that

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the net addition from immigration was only 1,571,000. The census statistics of 1910 show that only about five million persons were then living in the United States who had come to this country since 1900. In other words, by reason of departure or death, the approximately nine millions of immigrants during the decade added only about five millions to the population of the country.

Nor does this mean that we have five million more foreign born in the country at the present time than we had ten years ago. The immigration has had to replace deaths and departures among the foreign born who were here in 1900. The actual addition to the foreign born white population has been only a little more than three millions, the figures being 10,214,000 for 1900 and 13,344,000 for 1910. The rate of increase, which amounted to nearly 31 per cent., was, to be sure, decidedly greater than that during the same period in the native white population, which was 21 per cent.; and was, also, much greater than the increase in the foreign white population from 1890 to 1900, which was 12 per cent. Nevertheless, the percentage of increase in the foreign white from 1900 to 1910 was less than in any other decade since 1830, except 1870 to 1880 and 1890 to 1900. Immigration comes in waves, being affected by variations in economic and political conditions abroad, and still more by variations in economic prosperity in this country. The effect of business depression in checking immigration and increasing the return current to foreign countries was conspicuously shown even by the slight and temporary depression of 1907. Should there be any considerable halt in the prosperity of the country during the next decade, it is probable that the immigration would be less than during the past decade.

It is not true, therefore, that the foreign born constitute a larger proportion of the total population at the present time than ever before. The proportion of



A SHIPLOAD FROM SOUTHERN ITALY A PART OF THE 2,576,000 IMMIGRANT ALIENS WHO CAME TO THIS COUNTRY DURING THE THREE YEARS ENDING JUNE 30, 1910

OUR IMMIGRANTS AND THE FUTURE



LEAVING NEW YORK FOR EUROPE IN THE PANIC YEAR 1907 DURING THE THREE YEARS ENDING JUNE 30, 1910, MOKE THAN A MILLION OF THE FOREIGN BORN RE-TURNED TO EUROPE, LEAVING A NET INCREASE OF ABOUT A MILLION AND A HALF

foreign-born whites in 1910 was precisely the same as in 1890, 14.5 per cent. In fact, there has been no very conspicuous change since 1860. In 1850 the foreign-born white population constituted 9.7 per cent. of the total. In 1860 the proportion rose to 13 per cent.; 1870, 14.2 per cent.; 1880, 13.1 per cent.; 1890, 14.5 per cent.; 1900, 13.4 per cent.; and 1910, 14.5 per cent. The number of the foreign born increased from only about four millions in 1860 to more than thirteen millions in 1910, but the native white population had trebled during the same period.

The really important thing is the change in the character of the foreign born who are coming to our shores. Prior to about 1890, much the greater proportion of the immigrants were from the countries of Northwestern Europe or from Canada. At the present time these countries contribute only a comparatively small part of the total, whereas the countries of Southern and Western Europe contribute more than two thirds.

For example, in the year 1882, in which

the immigration was greater than during any other year of the nineteenth century, 251,000 of the 789,000 immigrants were from the German Empire; 106,000 from Scandinavian countries; and 179,000 from the United Kingdom-these countries together contributing five sixths of the total number of immigrants coming from Europe, and two thirds of the total from all countries combined. In 1910, on the other hand, out of the 1,042,000 immigrants only 31,000 were from the German Empire, 48,000 from Scandinavian countries, and 99,000 from the United Kingdom, these countries furnishing less than one fifth of the total immigration. The combined immigration from all the countries just named in 1910 was less than that from Austria-Hungary alone, less than that from Italy alone, and less than that from the Russian Empire and Finland alone. The countries of Southern and Eastern Europe, which contributed only one tenth of the total immigration in 1882, contributed almost seven tenths in 1910.

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The effect of this extraordinary change

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in the character of immigration is naturally shown only in much slighter degree in the census statistics of the foreignborn population. The foreign born now residing in the United States include a very large remainder of those who came in the earlier heavy immigration from born in Southern and Eastern Europe constituted only 10 per cent. of the foreign-born white population in 1890; in 1910 the proportion had risen to 37 per cent. In 1910 there were in this country about 6,820,000 persons born in Northwestern Europe, 4,900,000 born



A TWENTIETH CENTURY PURITAN

Photograph by Brown Bros.

A MODERN IMMIGRANT OF THE CLASS THAT HUDDLES IN THE GREAT CITIES. THE CENSUS OF 1910 SHOWS THAT IN THE CITY OF NEW YORK MORE THAN 45 PER CENT. OF THE ADULT WHITE POPULATION WERE FOREIGN BORN. NEARLY A FOURTH OF THE TEN YEARS' INCREASE IN FOREIGN-BORN POPULATION IN THE UNITED STATES OCCURRED IN THIS ONE CITY

Northern and Western Europe. Nevertheless, the change is striking. In 1860, nearly 90 per cent. of the foreign-born whites in the United States consisted of persons born in Northwestern Europe. The proportion still stood at 79 per cent. in 1890, but by 1910 it had fallen to 51 per cent. On the other hand, persons

in Southern and Eastern Europe, and 1,565,000 born in other continents, three fourths of the latter being Canadians.

A somewhat more detailed statement of the changes that have taken place in the composition of the foreign-born white population since 1900 appears in the following table:

OUR IMMIGRANTS AND THE FUTURE



COUNTRIES	TOTAL 1910	TOTAL 1900	INCREASE PER CENT.	PER CENT. OF TOTAL POREIGN- BORN WHITE	
			1900-1910	1910	1000
England, Scotland, and Wales	1,222,460	1,166,863	4.8	9.2	11.4
Ireland	1,352,564	1,615,232	-16.3	10.1	15.8
Norway, Sweden, and Denmark.	1,251,792	1,062,124	17.9	9.4	10.4
Holland, Belgium, and Luxemburg	172,317	137,708	25.1	1.3	1.3
Germany	2,501,576	2,813,413	-11.1	18.7	27.5
France and Switzerland	242,060	219,612	10.2	1.8	2.1
Spain and Portugal	84,548	36,702	130.4	0.6	0.4
Northern and Western Europe	6,827,317	7,051,654	-3.2	51.1	69.0
Russia and Finland	1,708,356	640,710	166.6	12.8	6.3
ltaly	1,342,800	483,963	177.5	10.1	4.7
Austria-Hungary	1,667,442	636,968	161.8	12.5	6.2
Balkan States and Turkey in Europe	117,346	24,928	370.7	0.9	0.2
Greece	101,206	8,513	1,088.8	o .8	0.1
Europe, not specified	23,940	22,573	6.1	0.2	0.2
Southern and Eastern Europe	4,961,090	1,817,655	172.9	37.1	17.8
Canada and Newfoundland West Indies, Mexico, Central and South	1,199,120	1,172,745	2.2	9.0	11.5
America	253,167	126,387	100.3	1.9	1.3
Asia, Africa, Australia, Oceanic Islands, etc.	115,656	45,376	154.9	0.9	0.4
Non-European Countries	1,567,943	1,344,508	1 6 .6	11.7	13.2

THE FOREIGN-BORN WHITE POPULATION OF THE UNITED STATES IN THE YEARS 1900 AND 1910 SHOWN BY THE PRINCIPAL COUNTRIES OF BIRTH

It will be seen that the number of persons living in the United States who were born in Northwestern Europe, actually decreased from 1900 to 1910, while the number born in Southern and Eastern Europe increased 173 per cent. — not far from trebling in ten years. The Germans are still the most numerous single element in the foreign-born population, but they have decreased 11 per cent. since 1900. The Irish, who ranked next to the Germans in number in 1900, have fallen off one sixth, and are now less numerous than the persons born in Russia

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and Finland, or than those born in Austria-Hungary, and only slightly exceed those born in Italy. It should be remembered that our population coming from Russia includes very few Russians proper, but is composed chiefly of Jews and Poles. Persons born in Austria-Hungary include comparatively few of the German stock of that country, but consist mainly of Bohemians, Slovaks, Poles, and others of non-Teutonic origin. The Italians in There has been no very great increase in the aggregate number of persons born in non-European countries, although those born in Mexico and in Turkey in Asia show high percentages of increase,

The statistics in the preceding table relate only to the white population. It is a well-known fact that almost none of the Negroes or Indians in this country were born abroad, but that, on the other hand, nearly all our Chinese and Japanese



A RUSSIAN JEWISH QUARTER A PROBLEM BROUGHT BY THE LATER DAY IMMIGRATION

this country are largely from Southern Italy, and are generally considered a less desirable element than the North Italians would be.

Especially striking are the percentages of increase in the number of those born in Greece and in the Balkan States and Turkey, although the absolute numbers are still comparatively small. Of persons born in Greece, there were nearly twelve times as many in 1910 as in 1900. population is of foreign birth. Owing to the restrictive laws the number of Chinese in the United States has steadily declined since 1880, but there has been a very rapid increase in the number of Japanese. In 1890 there were only about 2,000 Japanese in this country, in 1910 more than 70,000. The Chinese numbered 107,000 in 1890; at present they are about 70,000.

Statistics comparing the total number

OUR IMMIGRANTS AND THE FUTURE



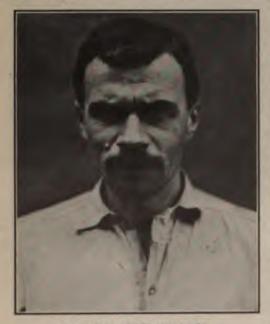
SCANDINAVIAN FARMERS IN THE NORTHWEST A PART OF THE OLDER STREAM OF IMMIGRATION, THE BACKBONE OF MANY COUNTIES IN 10WA, MINNE-SOTA, AND WISCONSIN, AND THE STATES FARTHER WEST



CANADIAN LUMBERMEN IN NEW HAMPSHIRE THERE ARE MORE THAN A MILLION CANADIANS IN THIS COUNTRY BUT THE NUMBER HAS INCREASED ONLY 2.2 PER CENT. IN THE LAST DECADE

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of the foreign born with that of the native population fail to show the full importance of the former in the economic and social life of the country, for the reason that the age and sex distribution of the one class is very different from that of the other. Adult immigrants relatively far outnumber immigrant children. A large proportion of the children of the foreign born are born after their parents reach this country, and swell the total of the native population with which the foreign born are compared. How different is the age composition of the two classes may be seen from the fact that, in 1900 (figures for 1910 not yet issued), of the total number of foreign-born whites, 95 per cent. were 15 years or more of age, while of the native whites only about 61 per cent. were as old as that. For this reason the foreign born constitute a much larger percentage of the adult population than they do of the total population. In 1900 of the total number of persons of all races of fifteen years of age and over, nearly one fifth (19.7 per cent.) were whites born abroad; while, of the total number of whites of that age, the foreign-born were 21.9 per cent.



A POLISH STEEL WORKER OF THE BETTER CLASS OF THE IMMIGRANTS FROM SOUTHERN AND WESTERN EUROPE



AN IRISH POLICEMAN A TYPE OF THE OLD STRAIN OF IMMIGRATION FROM THE BRITISH ISLES AND NORTHERN EUROPE

Again, there is a large and increasing preponderance of males among the foreignborn population. The earlier immigration, coming mostly from Northern and Western Europe, was much more largely a movement of families than the present immigration is, although the Jewish immigrants from Russia come mostly in Thousands of the more recent families. immigrants are married men who leave their families behind and come to this country for temporary employment only. For the year 1910, the male immigrants were nearly two and a half times as numerous as the female immigrants, 736,038 as compared with 335,532. The figures, however, give a somewhat exaggerated impression of the preponderance of males in the net addition to the population from immigration, as there is, however, a still greater proportionate excess of males in the returning current of emigration. Nevertheless, it appears that among the foreign-born whites in the United States in 1910, who had been in this country les than ten years, there were 155 males to every 100 females. Of all foreign-born whites combined, the males numbered 7,522,000 and the females 5,821,000, or 129 males to every 100 females; in 1900 the propor-



UNWELCOMED WORKERS THE JAPANESE OF WHOM THERE ARE ONLY 71,722 IN THIS COUNTRY

tion was 117 to 100. These figures contrast strikingly with the sex distribution of the native white population, in which there were 103 males per 100 females.

The combined effect of the disparity in age distribution and that in sex distribution is shown in the fact that the foreign born constitute a very much larger proportion of the males of voting age (21 years and over) than they do of the total population. In 1900 the foreignborn whites were no less than 23 per cent. of the total number of males of voting age, and it is probable that the figures for the census of 1910, when available, will show them to constitute fully one fourth of the total number. Of the white men of voting age in the country in 1900, those born abroad constituted 26 per cent. Of course it should not be understood that any such proportion of the actual voters were born in foreign countries, for many of the immigrants have not yet become naturalized, and the proportion not naturalized is, in fact, also increasing.

The question as to the desirability or undesirability of any given class of immigrants depends less upon the characteristics of the immigrants themselves than upon the characteristics of their children born in this country and of their children's children — chiefly upon the degree to which they become assimilated to the older native stock in respect to language, customs, and ideas.

The census of 1910 will for the first time present statistics showing the principal characteristics of the persons born in each foreign country, and also of the natives whose parents were born in each foreign country. The data, however, are not yet available. It is possible now to show the magnitude of the class of native persons of foreign parentage. The population of the United States in 1910 was made up of the following elements:

THE ELEMENTS OF POPULATION IN 1910

	_		
1910	NUMBER	PER CENT.	
White			
Native, total		68,389,104	74.4
Native parents	•	49,488,441	53.8
Foreign-born paren	ts	18,900,663	20.6
Foreign-born .		13,343,583	14.5
Negro		9,828,294	10.7
Indian		265,683	0.3
Chinese		70,944	0.1
Japanese	•	71,722	0.1
Other Asiatics	•	2,936	
Total .	•	91,972,266	100.0



A TYPICAL DAY LABORER ONE OF THE 1,342,800 ITALIANS IN THIS COUNTRY

THE WORLD'S WORK



A GERMAN FARMER'S HOUSE IN THE SOUTH THE GERMANS -2,501,576 — are still the most numerous foreign born in the country though only a few are in the southern states which have only 2.5 per cent. of foreign born



A CONTRAST IN PHYSICAL STATURE A NEW YORK SUBWAY CONTRACTOR AND SOME OF HIS ITALIAN LABORERS

The native whites of foreign parentage (i. e., with either one or both parents foreign born) constitute more than one fifth of the total population of the country and nearly one fourth of the total white population. This class, together with the whites who were themselves born abroad, number more than thirty-two millions and constitute 35 per cent. of the total population of the country, and almost two fifths of the total white population.

The economic, social, and political difficulties due to heavy immigration are greatly increased by the exceedingly unequal geographic distribution of the immigrants. The foreign born have largely, concentrated in cities, and most of them have settled in the northern and western states, very few going to the South.

In 1910 there were about 9,640,000 foreign-born whites in urban communities (i. e., places of 2,500 or more inhabitants) and only about 3,700,000 in rural com-Thus, 72 per cent. live in munities. cities; the corresponding figure for 1800 was 61 per cent. To put the matter in another way, the census of 1910 shows that, of the total urban population of the country, considerably more than one fifth, 22.6 per cent., consists of foreign-born whites, while of the rural population they constitute only 7.5 per cent. The recent immigrants from southern and eastern Europe have gone very largely to the cities. Of the persons born in these countries and resident in the United States in 1910, no less than 78 per cent. were found in urban communities. Among all the foreign-born nationalities, the lrish have shown the greatest preference for urban life, more than five sixths of all persons born in Ireland who lived in the United States in 1910 being city dwellers.

The proportion of the natives of foreign parentage who live in cities is also much larger than in the case of the natives of native parentage. Of the total urban population in 1900 the foreign-born whites plus the native whites of foreign parentage represented more than one half (53 per cent.).

It is probable that the marked increase in the tendency of the foreign born to settle in cities is due, not so much to the change in the character of the immigrants themselves, as to the fact that free public lands and lands that can be purchased for low prices have largely disappeared, so that the immigrants more and more seek manufacturing industries rather than agriculture. There has, however, never been a time when the immigration was chiefly to agricultural communities, and it is probable that at no time since 1850 have less than 50 per cent. of the foreign born been city dwellers.

In many of the larger cities of the country the foreign born decidedly outnumber the native population of native parentage. New York City, which is to-day the largest organized municipality in the world, is probably also the most heterogeneous in its population. In 1910, of the 4,767,000 inhabitants of the metropolis, 1,928,000 (or more than two fifths) The native were foreign-born whites. whites whose parents were born abroad numbered 1,820,000, or almost another The native whites of native two fifths. parentage numbered only 921,000, or less than half as many as the foreign-born whites. Of the adult white population of the city more than 45 per cent. are foreign born. The extraordinary growth of New York City has been very largely due to immigration. The number of the foreign-born whites in the city increased nearly 700,000 during the last decade, while the number of native whites of native parents increased less than 200,000. Nearly one fourth of the total increase in foreign born population in the United States occurred in this one city.

Several of the other large cities of the country fall but little below New York in the proportion of the foreign born. In Chicago more than one third (35.7 per cent.) of the total population is of foreign birth, more than two fifths are natives whose parents were born abroad, and only a little more than one fifth are native whites of native parentage. In Boston, Cleveland, and Detroit the proportions are not very different from those In Milwaukee, which was in Chicago. a mecca for German immigration two or three decades ago, there is a larger proportion of native whites of foreign parentage than in any other city, namely, 49

per cent., but the proportion of persons themselves born abroad is somewhat lower than for the cities mentioned above, being about 30 per cent.

Of the nineteen cities of more than 250,000 inhabitants, there are nine in which the foreign-born whites exceed the native whites of native parentage. In all but four of these nineteen cities the foreign-born whites plus the native whites of foreign parentage constitute more than half of the total population, the exceptions being Baltimore, New Orleans, Washington, and Los Angeles. The tremendous economic, political, and social importance of the foreign elements in these great cities would be even more forcibly shown by the percentages which they constitute of the total adult population.

The differences between the several grand geographical sections of the country with respect to the proportion of the foreign born are largely due to the differences in the proportion of urban population. Where cities abound, the foreign born and their immediate descendants are the most numerous. The following table shows for four great groups of states the percentages of the total population, represented by the several main classes.

The proportion of the foreign element is highest in the North Atlantic states, including New England, New York, Pennsylvania, and New Jersey. In these states one fourth of the total population consists of whites born abroad, while they, together with the native whites whose parents were born abroad, constitute 55 per cent. of the total number. New England, once looked upon as the most essentially American section of the country, now has less than two fifths of its population consisting of the native born of native parentage. There has been a decided increase in the proportion of the foreign born in the North Atlantic states during the past decade.

Very large numbers of the foreign born and their immediate descendants are also found in the remainder of the Northern states and in the West. The proportion is, however, lower than in the North Atlantic states. In the North Central states, moreover, the native whites of foreign parentage are one and two thirds times as numerous as the foreign whites, while in the North Atlantic states the former class does not greatly exceed the latter in number. This difference is due to the fact that the recent immigration has more largely gone to the North Atlantic states while the effect of the older immigration to the central sections of the country is shown in the large proportion of the second generation.

The South has comparatively few of the foreign born or of their immediate descendants, the two classes combined being only about one fifteenth of the total population. This is partly due to the

TABLE SHOWING THAT IMMIGRATION TENDS TO CONGEST WHERE GREAT CITIES AR	TABLE	SHOWING	THAT	IMMIGRATION	TENDS	то	CONGEST	WHERE	GREAT	CITIES	ARF
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			I	. NORTH ATLANTIC STATES	NORTH CENTRAL STATES	WESTERN STATES	SOUTHERN States
Total population, 1910		·		25,868,573	29, 888,542	6,825,821	29,389,330
Per cent. of total							
Native white, native parents 191	0			42.8	54.4	52.4	63.1
" " 190			•	47.1	53.7	49.4	60.6
Native white, foreign parents 191	0			· 29.6	27.8	24.5	4.3
" 190		•	•	28.4	28.4 .	26.7	4 · 5
Foreign-born white, 1910 .				25.7	15.7	19.0	2.5
""1900	•	•	•	22.5	15.8	18.6	2.3
Negro and other colored 1910.				1.9	2.1	4.1	30.1
				1.9	2.1	5.3	32.6

fact that the Southern states are still primarily agricultural and partly to the presence of the Negroes, who perform the cheap labor which in the North falls so largely to the foreign element. The proportion of foreign born in the Southern states has increased but little since 1900, and the proportion of native whites of foreign parentage has actually decreased.

Such efforts as have been made to distribute immigration more widely over the country have thus far had little success. Of the total increase of 3,130,000 in the foreign-born population of the entire country from 1900 to 1910, more than 1,900,000 was in the North Atlantic states, and most of the remainder was either in the eastern part of the North Central section or in the Mountain and Pacific Coast states. It is obviously highly desirable that more vigorous measures for

the dispersion of the incoming thousands should be undertaken. The high prices of agricultural products point to the need of more intensive cultivation of the soil. A large proportion of our immigrants were, in their home lands, farmers accustomed to such intensive cultivation. In the past the wages of farm labor - account being taken of the usual lack of employment — have been continuous relatively lower than city wages, but it is doubtful whether, cost of living considered, this is now true, and certainly it cannot long remain true. The chief factor which will continue to draw the new arrival to the city is the presence there already of most of the fellow-countrymen, friends, and relatives who have come to America before him. Whether this "snowball" influence can be overcome by any practicable means remains to be seen.

HOW ONE BILLION OF US CAN BE FED

THE RAINFALL OF THE UNITED STATES CAPABLE OF SUPPORTING 1,000,000,000 PEOPLE — WATER AND NOT LAND SETTING THE LIMIT TO POPULATION

BY

W J McGEE

MERICA is reaching an economic balance between production and consumption by its growth of manufacturing and by the utilization of power; and it is timely to consider the stability and possible permanency of that balance. Shall we be able to feed our increasing population?

Our growth has been beyond precedent or parallel. Our increase in population from 4,000,000 in 1790 to 92,000,000 in 1910 is unequalled in the world's history; and our production of staples — foodstuffs, cotton, wool, and leather — has somewhat e::ceeded our advance in population, though increase in per capita consumption and waste are curtailing export. Our manufactures, especially during the last half-century, have far outrun both population and the production of materials for food and apparel; and our utilization of power has grown much more rapidly than our manufactures. To-day we use mechanical energy to the extent of some 30,000,000 horsepower, or the equivalent of say 360,000,000 man-power. Since much of this is employed for long hours or continuously day and night, and since the unit is the adult male workerrepresenting only about a quarter of the total population - the aggregate power employed by our ninety millions is approximately equal to the power of 1,440,000,000 primitive people, or about as many as the total human population of the globe. The conquest and utilization of power during recent decades is the most striking fact in our history, if not the most effective factor in our growth; it has outrun all other lines of advance, save only that of the intensified intelligence — perhaps best

expressed by the capacity for invention, social and moral no less than mechanical — guiding the material growth. Of all the world, we are the Power-People.

With manufacturing and transporta-tion — the chief uses for power — the occupation and mode of life of our people are undergoing changes which strike at the very root of our industrial and social (indeed national) existence; a decreasing proportion of our men and women are occupied in the primary industries of producing materials for food and clothing, and an increasing share are occupied in the secondary industries of manufacturing and moving commodities and in the incidental industries arising in a complex society — so that urban population is outstripping the rural, while the cost of living has already risen above that of any other age or country. Since food and clothing, with suitable habitations, are necessaries of life for those engaged in manufacturing and transportation and incidental occupations, no less than for those occupied in primary production, and since these necessaries are derived mainly from the soil, the secondary in-dustries (with the cities, towns, and villages in which they are carried forward) must, in the last analysis, be viewed as dependent on the soil and measured as a burden on that source of individual and collective existence; for no less than in the days of Piers Plowman it remains true that-

> Let come to each whate'er befall, The farmer still must feed them all.

This country took the lead among nations in manufacturing and in railway construction and operation by reason of abounding coal and iron, coupled with our inventive genius and the superior nourishment of our workers; yet the concentration of energy on this growth was made feasible only through a teeming soil yielding materials for food and apparel so lavishly as to sustain not only their producers but the secondary and incidental workers with the families of all.

During the half-century 1850-1900 our marvelous advance in manufacturing and transportation was accompanied by an extension of settlement and agriculture. whereby the necessaries of life were supplied at a rate fully keeping pace with population, so that the burden of the secondary industries on the soil was little The value of our manufactures is felt. now more than twice that of the primary products from the soil, including timber, while the sum annually paid for transportation (which pretty accurately gauges the complexity of modern life) is nearly a third of the value of the primary production. Reckoned as an impost on the soil, this transportation tax is something more than \$1.25 per acre for the entire area of mainland United States, or \$5.25 per acre on the 475,000,000 acres of improved land; reckoned as a personal impost it is \$150 per family (of five), or about one third the average cost of living.

Of late, with the increasing average distance of movement, the cost of transportation is limiting production, and still further diverting energy and population from farm to town; the highly productive lands are so far in cultivation already that agricultural settlement can no longer keep up with the growth of secondary industries at the old rate; while crude farming has often impoverished the soil and reduced its original productivity. In a word, our manufacturing and transporting industries resting directly on mineral resources and the use of power have reached a magnitude approaching the apparent capacity of the country to produce the prime necessaries of life; so that attention naturally turns to the resources yielding material for food and clothing (and hence measuring our ulti-mate population and strength among the nations of the world), and to the question of multiplying the yield to meet growing needs.

At the same time manufacturing and transportation have gradually changed the ideals and standards of life among our people: The primary producer is essentially a freeholder, the head of a homeowning family whose members coöperate according to their strength in the common labor — so that the industrial and social unit tends to become the independent family; the secondary worker, especially

in those industries using mechanical power, is essentially a wage-earner to whom the maintenance of a family and home are a burden rather than a benefit, so that the civic unit tends to become either a detached worker or an industrial group i. e., a special class - as conditions or issues may determine. Our form of government was founded on the idea of the independent cooperative family represented by its head, and during the earlier half of our national existence the prevailing type of citizenship conformed to this idea; but, with the stupendous development of secondary and incidental industries during the later half of our history, the type of citizenship altered until to-day probably a majority of our electors are industrial dependents - and attention naturally turns to the relation between our industries and institutions, and to the question of maintaining that independent citizenship on which alone free government can safely rest.

Mainland United States (i. e., the chief body of our territory, exclusive of Alaska and insular possessions) comprises about 3,000,000 square miles, or a trifle less than 2,000,000,000 acres, of plain and mountain, prairie and woodland, with sage-plain and chaparral and marshland.

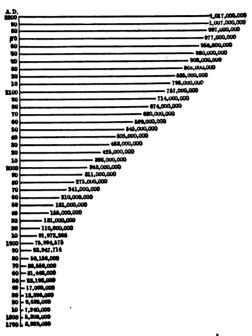
Settled first in the humid East where a luxuriant natural growth bespoke productivity, nearly every acre the pioneers cultivated yielded rich returns — two heads of grain were grown where a blade of grass grew before, luscious fruits or pliable fibres were substituted for bitter shrubs, and the well-watered acres teemed with material for food and clothing; settled later in the sub-humid interior and semi-arid West, the returns were still richer --- the pond-gemmed prairies smiled into marvelous harvests, while under irrigation a hundred heads of grain replaced the blade of buffalo-grass and a hundred head of kine grazed where an antelope or two wandered before - and diverted thought from the inadequate How different the course of rainfall. empire had the Pilgrims landed at the Golden Gate instead of at Plymouth Rock, and the Cavaliers in San Diego Bay instead of on the Chesapeake, and both

learned early the vital value of water and the relative worthlessness of mere land!

For, advancing inland from the Atlantic Coast, the settlers merely fixed more firmly the simple standards of humid Europe in which water, like air, is accepted without thought or measure, as a bounty of Providence, and only the land and its appurtenances (natural and artificial products above the minerals below) are objects of consideration and measure-ment and property-right. Were these standards just (as they are still purblindly viewed by many), the adjustment of our industrial relations might perhaps be postponed some generations; for our 2,000,000,000 acres peopled to the density of Belgium (some 640 per square mile) would sustain a population of 2,000,000,000, and Uncle Sam would still be rich enough to give farms to millions more. Unthe standards are fallacious; happily, and our lands habitable and productive under existing conditions are virtually exhausted.

In truth (as we are just learning) productivity and even habitability are not attributes of land in itself so much as measures of the water with which the land is supplied. Irrigation has given much to this country: It has reclaimed many millions of acres; it has improved agricultural methods and enormously increased crop yields; it has raised standards of production and of the social and civic organization depending on ample production of the staples of life; yet best of all, it has stirred realization of the paramount place of water among resources and led to its quantitative measurement as the basis of living. Under irrigation, twenty-five acre-feet (one foot of water covering twenty-five acres) of water properly distributed, will sustain a family of five for a year; the best results follow its application on five acres of land to an aggregate of five feet in depth as needed during the season. At this rate the population would indeed be one per acre, or 640 per square mile, in terms of land; but it is justly measured only as one for each five acre-feet of the water which alone renders land productive. Now the annual rainfall of mainland United States - the

sole original source of our fresh waters — is barely 5,000,000,000 acre-feet; it ,averages hardly two and one half feet



THE CURVE OF OUR POPULATION'S INCREASE

FROM 3,929,000 IN 1790 TO 91,972,266 IN 1910 CAR-RIED ON TO 2200 WOULD GIVE US 1,017,000,000 PEO-PLE, ABOUT THE LIMIT OF THE COUNTRY'S LIFE SUSTAINING CAPACITY AS JUDGED BY ITS RAINFALL

(30 inches) over our 2,000,000 acres. So our greatest possible population, measured by our highest standards of primary production, would not exceed 1,000,000,000 - a number which at the current rate of increase will be reached in three centuries, or when the span since the landing at Jamestown is doubled.

Realization once awakened — as it was chiefly by experience in semi-arid districts - the primary place of water among our measurable resources is evident. For men and other animals it is the leading food. The average human ration is some six pounds daily, four and one half liquid and one and one half nominally solid; but of this so-called solid, actually more than one third is water — that is, more than five sixths of our daily sustenance (and indeed a like proportion of our bodies) Within the body there is no is water. assimilation, no metabolism or growth

process, in the absence of water; not does germination or any other vita process take place without water or apparently, otherwise than as a manifestation of its inherent properties. In plant life water is essential to germination, to tissue-making, to all growth — in fact the vitality of our planet appears to be directly dependent on the water distributed by atmospheric movement and freely circulating through the soil and its products.

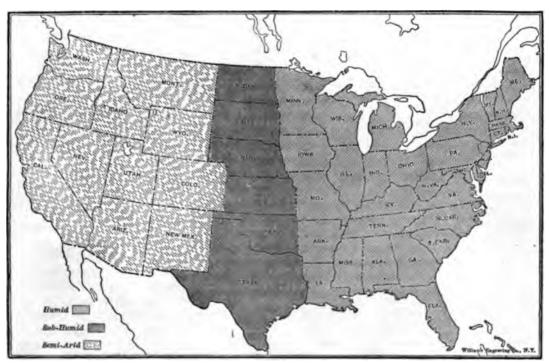
The water required for the growth of given crop plants, determined by measuring transpiration from the leaves during growth, averages from 300 to 600 time: the weight of the plants after drying and, in addition to that passing through the plants, the soil requires an even large quantity of moisture to maintain a suit able texture, much of which passes away through. evaporation and seepage. Or this basis the agricultural duty of wate in this country has been determined as the production of one thousandth par of its weight in average plant crop.

Of the substance so produced, only a part is available as food for animals and men, and this is transmuted into anima tissue through the alchemy of vital proces only with considerable loss; probably no more than a tenth of the vegetal produc is actually converted into animal tissu or rendered available in animal energy Thus, a pound of grain is the equivalen of two tons of water used by the growin wheat, and a pound of beef the equivalen of fifteen to thirty tons of water con sumed by the beeve chiefly in the form c feed; and the adult who eats 200 pound each of bread and beef in a year consume something like a ton of water in drin and the equivalent of 400 tons in brea and 4,000 tons in meat, or 4,401 tons i all - figures corresponding fairly wit the results of intensive agriculture in ari districts where five acre-feet or 6,80 tons of water (including run-off and los by seepage) per year afford a good livin for each inhabitant.

Of course all these figures are bu approximations; they will be rectifie and refined as time passes and experienc advances; yet to-day they show that the time-honored standards for measurin

capacity for production and population must change, and that the potential strength of countries must be expressed in terms of water supply rather than in terms of acres or square miles.

In relation to natural water supply, mainland United States comprises three divisions: (1) the humid section or Eastward states — thirty-one in number extending from the Minnesota-Louisiana column to the Atlantic, commonly viewed as the chief part of the country though forming only two fifths of its area; (2) the sub-humid section, or six median states from the Dakotas to Texas, containing a fifth of our area; and (3) the semi-arid section or Westward states (eleven in number, including Arizona and New Mexico) making up the remaining two fifths of the country. southern Appalachians), averaging some forty-eight inches, or four fifths of that required for full productivity. In the state of nature found by settlers, the surface slopes, the rainfall, and the vegetal cover (generally forests on the uplands and grasses on the plains) were adjusted to a natural balance in which the rains and melting snows soaked into the soil, mainly to be used in plant growth or to reappear in springs and seepage forming clear streams — of which the "blue Juniata" of the ballad was a type; the residue saturated the subsoil and underlying rocks, forming a reservoir available for plant growth during droughts — a store estimated as equivalent to twenty-five feet in depth of water or more than six years' rainfall within the first hundred feet of the surface. Such was



THE RAINFALL MAP OF THE UNITED STATES IN THE HUMID SECTION (EASTWARD STATES) THE AVERAGE ANNUAL FALL IS 48 INCHES. IN THE SUB-HUMID (MEDIAN STATES) REGION IT IS 30 INCHES, AND IN THE SEMI-ARID (WESTWARD STATES) COUNTRY IT AVERAGES 12 INCHES, THOUGH IT VARIES FROM MORE THAN 100 TO LESS THAN 2 INCHES. ABOUT 60 INCHES IS REQUIRED FOR FULL PRODUCTIVITY

Over the humid section the mean annual rainfall ranges from about twenty-five inches in Minnesota to fifty-five in Mississippi (and more than seventy in the the land on which our unprecedented development was started and shaped a land well watered by moderate rainfall and accumulated moisture, generally well drained by clear streams, and rendered fertile through by-products of vegetal growth gathered during the ages.

SEMI-ARID SECTION 8,000,000,000 ACRE-FEET ON 800,000,000 ACRES	SUB-HUMID SECTION 1,000,000,000 ACRE-FEET ON 400,000,000 ACRES	ACRE-FEET ON 800,000,000 ACRES			
MEAN	ANNUAL	RAINFALL			
GROUND WATER I SD00000000 ATEREE D0000000000 ATEREE CONTRACTOR	N FIRST 100 F (Calimoted) 10,000000000 ACRE FEET 6004L100 10,97478 BAINFALL	T FROM SURFACE ISJOOJOOJOCO ACREFEES EQUAL TO S.YEANS RAINFALL			
		GROUND WATER LOST SINCE SETTLEMENT (Estimated) 4.000100.004 Arro foot spini to 3/2 yeary minfail			

THE NATION'S WATER SUPPLY

SHOWN FOR THE SEMI-ARID, SUB-HUMID, AND HU-MID SECTIONS. THE DARK SHADING REPRESENTS THE ANNUAL RAINFALL, AND THE LIGHT SHADING THE PERMANENT SUPPLY OF WATER IN THE FIRST HUNDRED FEET UNDER THE SURFACE OF THE GROUND. IN THE HUMID REGIONS MORE THAN AS MUCH AS 1¹/₃ YEARS' RAINFALL HAS BEEN LOST FROM THIS PERMANENT SUPPLY BY UNSCIENTIFIC LUM-BERING AND FARMING

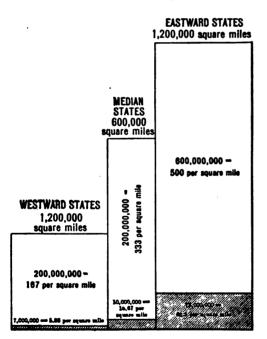
This natural home for a people, however, was sadly abused by short-sighted and over-greedy clearing and farming. With deforestation of slopes, the storm waters ran off over the surface instead of sinking through spongy duff and humus into the soil, and the clear and steady streams became torrents during the storms and ran low or dry between - it is the brown Juniata now, though only part of its watershed is cleared. With hasty, profitseeking tillage the natural protective cover was removed, the rich mulch and humus were dissipated, and much of the rain flowed from the fields in turbid floods, always taking the cream of the soil and often eroding gullies, instead of soaking into the subsoil to feed growing plants and maintain the store of ground water. The shrinkage of agricultural capital through the drainage of the ground water reservoir was long neglected, albeit attested in the falling of springs by which most pioneer homesteads were located, in the frequent necessity for deepening wells, and in the gradual drying up of

brooks, as settlements advanced; it is best measured by the lowering of water in wells — in Michigan during an average period of 18 years 794 wells lowered 2.2 feet, in Minnesota during 14 years 920 wells lowered 3.45 feet, in lowa during 21 years 1160 wells lowered 3.6 feet, or a mean of 1.8 feet each decade; of late the depletion of the store is increasing the danger of droughts, with loss of crops in the country and water-famine in towns. As the forests and fields were skinned in response to the demand for products attending the growth of the secondary and incidental industries, these, too, added to the abuse of the country; culm heaps became eyesores, coke ovens poisoned the air with gaseous waste, sewage polluted the shrunken and torrent-ridden streams, and factory towns were often foul blots on the fair face of nature no less than reproaches to the freedom and equality for which our Fathers fought.

Happily, the tide is turning, and the Eastward states promise to come into their own in that service to mankind for which they are adapted, both through superior water supply and consequent productivity in staples, and through proximity of the food-yielding areas to those resources for secondary industries which tend to form centres of dense population. The signs of renaissance are many: culm heaps are re-mined, coke ovens are giving way to by-product furnaces, and even in factory towns civic spirit is blossoming in waterworks and hospitals, improved streets and homes, and enlarged schools and parks, all tending to promote that healthfulness and attractiveness of dwelling-places whence patriotism springs. In rural districts four signs are especially gratifying: intensive cultivation ("trucking") adjacent to cities, in which the entire rainfall is used and sometimes augmented by irrigation; great increase in value of intensively-cultivated land; extension of State and National forests largely to protect headwaters and to maintain the natural flow of streams; and both private and public parking of selected tracts, primarily for beautification, yet in such wise as to restore the natural balance between rainfall and to cover and slope.

Most significant is the control of land connected with municipal water supplies; for despite an archaic and unconstitutional figment imported into this country through judicial decisions holding that water is a mere appurtenance to land, our Eastern communities are ever learning that water is the prime necessary of life and that the lands over which it is conveyed (if not on which it is collected) are but a secondary and appurtenant resource. Still the humid section, with its 75,000,000 population, is scarcely beyond the threshold of progress; of its 800,000,000 acres of soil annually receiving more than 3,000,000,000 acrefeet of rainfall (or nearly two thirds of the entire supply of the country), only a third are productive and most of these only to a fraction of their capacity; when the 3,000,000,000 acre-feet of water are fully utilized they will sustain 600,000,000, or eight times the present population.

It is the manifest destiny of the well-



OUR PRESENT AND OUR POSSIBLE POPULATION

THE SHADED PORTIONS REPRESENTING THE **PEOPLE** NOW IN THE UNITED STATES BY THREE DIVISIONS, 75,000,000 IN THE EASTERN STATES, 10,000,000 IN THE MEDIAN STATES AND 7,000,000 IN THE WESTWARD STATES IN RELATION TO THE 600,000,000, 200,000,000 AND 200,000,000 WHICH THESE THREE DIVISIONS WOULD SUPPORT IF ALL THEIR WATER RESOURCES WERE USED

watered Eastward states (including some 70,000,000 acres of swamp and overflow lands not now occupied,) after reserving a quarter or a third of the area in forests for protecting the running waters and supplying timber, to come under intensive cultivation in which each ten-acre lot will sustain a family of primary producers and perhaps an equal number of those living by secondary production. This will involve multiplying the crop yield; not only must the product of wheat and barley be doubled to equal that of the English and German fields, but the acres of land and tons of water must be made to respond to invention and labor in those diversified products required for the elaborate modern dietary - fruits, berries, vegetables, eggs, poultry, dairy products, meats, no less than grains. Here opens a field for our genius hitherto engaged chiefly with secondary occupations; here lies the true way to conquest over nature, to the subjugation of natural forces for human welfare — for the face of nature must be transformed. The traveler who now sees between the capital and the metropolis of the country more wild land than fields will then view landscapes more completely artificialized than those between London and Liverpool, or Paris and Amiens; and of all the abounding products, the best (if there be aught in the promise of our early history) will be the sturdy manhood and graceful womanhood of an independent citizenry strengthened by joint exercise of brain and hand in the open country.

Over the median states from the Dakotas to Texas, the mean annual rainfall averages a scant thirty inches, or half the water required for full productivity though from 60 to more than 80 per cent. of it falls during the six summer months. This is supplemented by natural sub-irrigation from the mountainous country farther westward to an average of three or four inches, whereby the store of ground water is kept up and serves as a partial protection from drought. Indeed this subterranean supply (locally measuring 10 or 12 inches) eked out by the meagre and variable rains, served to sustain a fairly luxuriant natural growth before

settlement and later to produce the crops required for habitability. It remains the agricultural insurance of the section. The natural range first of the buffalo and then of domestic stock, the sub-humid section lent itself readily to extensive farming in which machine and horse were balanced against area, and the yield was measured in terms of men rather than acres — and the cropping was wasteful and destructive, except in so far as the plowed land better absorbed rainfall than the grass-land. Its destiny must be a continuation of extensive cultivation, since the water supply is inadequate for full productivity; its 400,000,000 acres receive from above and below about 1,000,000,000 acre-feet, which at five acre-feet per capita would sustain a maximum population of 200,000,000, (twenty times that of to-day,) or a family to each 40-acre lot with another living in town or on transportation. Already the expanses of this "Great American " which to the pioneer were treeless Desert.' for days of travel, are grove-dotted, and within two generations the mooted question as to the influence of forests on rainfall will be settled - though at the best the increase will doubtless be more in equability than in quantity of life-giving rains and dews.

Over the Westward states the rainfall ranges from less than 2 to more than 100 and averages about 12 inches, aggregating some 800,000,000 acre-feet yearly, or a fifth of the productivity standard; so that hardly one in five of the 800,000,000 acres can be made fully productive. Fortunately the diversified surface and attendant irregularity of rainfall render it feasible to concentrate the meagre waters (largely gathered in the mountains and performing their first duty in maintaining forests and snow-fields whereby the streams are steadied in flow) on alluvial areas, where the yield is varied and prolific - indeed the section gives object lessons in agriculture to the country and to the world.

Under the effective treatment learned from experience within a quarter century, the water is put where it is needed when it is needed; and the value of the annual

product reaches hundreds and the price of the watered soil runs into thousands of dollars per acre-a five-acre lot yielding a better and easier living for a family than a quarter section or even a full section (640 acres) on the Plains. The annual agricultural product of California is comparable with that of all the gold produced in her entire history. and mineral-bearing Arizona and Utah and Idaho are a hundred-fold richer in food-stuffs than in ores; and the irrigated valleys tend to pass at once from sage-dotted desert into suburbs where independent yet cooperating families are well supplied with roads and schools and churches, and served by telephones and mails even better than the average The diversity of nature in Eastern cities. is reflected in the thinking and living of the people; individuality grows large and character intense; human faculty luxuriates like the growing plants and forms the richest crop of our semi-arid section. Its manifest destiny is to continue raising standards of perfection in apple and orange and grape, standards of yield in staple crops, standards of method in cultivating and caring for crops, standards of utilization and enrichment of essential resources, standards of self-supporting yet comfortable living, and (as provinisolation passes) standards of cial patriotism born of pleasant homes. Of the 160,000,000 acres for which the water supply suffices, probably more than half will eventually be irrigated; a part is adequately watered, considerable areas receive rain enough for forest growth, and there are vast areas of meagre rainfall available for stock range and the "dry farming" made feasible by subterranean flow from neighboring ranges; and the aggregate rural and urban folk may well, through wise use of the waters, come to exceed the mean ratio of one to each five acre-feet of water and attain 200,000,000 - thirty times the present population of the eleven Westward states.

The key to America's industrial progress was the application of power through invention. Thus far both the invention and the power plant have been largely confined to the secondary industries of

manufacturing and transportation; and to these lines our creative genius has been directed. A change is inevitable — indeed it has already begun, since a great department of the Government is helping to make primary production no less respectable than it was when the Nation was founded.

In truth the primary producer is the great power-user. The plane of most effective energizing on the planet is the infinitely complex one (in soil and organism) in which water is evaporated by the power of the sun. Neglecting all this power save the fraction utilized in evaporation from growing plants, it is easily computed that, with a transpiration 450 times the weight of the dry plant and a product of 6 tons per acre (with the mechanical equivalent of 780 food-pounds of energy required to warm a pound of water one degree Fahrenheit and a co-efficient of 967 for the latent heat of vapor), the energy expended during a growing season of four months of ten-hour days is 1,714 horse-power per acre. On this basis, our 475,000,000 acres of farm land, even if the yield average only one and one half tons, use a sum of mechanical energy-exceeding 200,000,000,000 horsepower, or nearly 7,000 times the aggregate mechanical power utilized in manufacturing, transportation, and incidental industries. This use may — indeed must — be multiplied with our growth. Here opens our most promising field for the application of intelligence to that conquest over nature which is the end and aim of human effort; in this field lie the richest rewards within reach of constructive genius — the prize of control over that power with which the Within a generfarmer now idly plays. ation the biometricians abroad and Burbank and others in this country have shown that men may devise and virtually create living forms adapted to their needs, much as corn and wheat and domestic stock were slowly artificialized in ages past — in short, that the field of invention is passing from the realm of the mechanical and physical into that of the vital and physiological, in which the development of power, once started, becomes automatic and continuous. Through inventions and applications on the lower plane Americans

became the leading power users of the world; and as our genius turns toward its most promising field our farms will be our best laboratories and our farmers must become the Power-People par excellence.

Despite a discouraging economic balance indicated by high cost of living and decrease of exports (due chiefly to extravagance in transportation and excessive enrichment of captains of industry), what a future opens before us as our resources are duly balanced and developed! What promise lies in the life-giving waters, in the soil made fertile by rains and irrigation, in the forests conserving moisture and controlling streams, in the abounding mineral fuels and ores, and in a strong citizenry amply fed and clothed from teeming crops!

The limit of our capacity for production and population lies not in the land or its living forms - both susceptible of immeasurable improvement — but in the supply of water on which life depends; for without water there are no plants, no soil, no animals, no men, no intelligence to control lower nature. In the light of current knowledge our water supply would sustain a population more than ten-fold that of to-day, about half of which might be occupied in primary industries. Should invention go far enough, this limit may be raised; for if, through plant energy or otherwise, water may be produced from hydrated and oxidated earth-matter, then will mankind rise to a new plane of progress, and the desert will blossom.

The leaders in human progress are of the Caucasian race and of Aryan (chiefly Anglo-Saxon or Germanic) speech; and in expanse, in climate, in resources, and in opportunities for development, mainland United States is better adapted than any other area for the continued advancement of this leading type of mankind — it is a natural home not merely for a great people but for the world-leading people, and unless it fulfills its manifest destiny, progress will fall short and the human world will In this richly endowed country suffer. patriotism, begotten of union between man and soil, must produce a higher humanity unifying the race and guiding the material and moral progress of mankind.

A CABLE RATE FOR COMMON USE

TO OPEN THE OCEAN WIRES TO THE SMALL MERCHANT AND TO SOCIAL MESSAGES -AN INTERVIEW WITH THEODORE N. VAIL, THE HEAD OF THE BELL TELE-PHONE AND WESTERN UNION TELEGRAPH AND CABLE COMPANIES

BY

ARTHUR H. GLEASON

Mr. Theodore Vail gave mankind a new lever in its lift toward a completely social organization when he originated the cheap "night-letter" and "day-letter" by telegraph. He gave it a new grasp when he added the deferred cablegram and, incidentally, started a rate war. Why these conveniences did not come sooner, why they are feasible now, and what sort of man solved the complicated problem of cheap tolls, Mr. Gleason tells in this article. — THE EDITORS.

> IPLING sings of the cable, "I sent a message to my dear, a thousand leagues and more to her" — but that is just what we haven't been

doing, though we should have well liked to do it. If we are a mighty and imperial newspaper, we send a wire to our man wallowing in the equatorial swamps, or scratching his way toward the dim Polar Sea. Wizards of finance speed words over to their London firm to buy at 116½. But if we are just an obscure ardent lover, or the wide-wandering husband of a faithful home-keeping wife, or the father of an emigrated daughter, we don't send a message to our dear, because we can't afford it.

We are living in two worlds. We share with all the rest of mankind immediacy of news. While the politician is busy in releasing his peroration, we are already reading his modest introduction. We become eye-witnesses of battles, fires, disasters, pageants, carnivals, coronations. We are present in the room with international crises, and watch each pulsebeat and nerve-twitched pose of the Sick Man of Europe.

But when we turn from that large public life, all is changed. The small trader is locked up inside his own country. He can't peddle his wares over the frontier lines, because talk is too costly. To learn the other fellow's mind eats up money. So he clamps down the boundaries of his narrow world, and never casts his eye over the edge. Obscure lives, with their network of human sympathies, have been somewhat neglected in the onward sweep of applied science.

These two worlds of swift news and tardy intimacy are out of relation with each other. One is rotating on its sober axis at the pace of fifty years ago. The other is spinning merrily with the new century. It is as if a man should go to business in an aeroplane, but light his home with tallow dips.

Into this hold-up of high rates, where only one message in a hundred is social, human, domestic, Theodore Vail, president of the Western Union, thrusts a potent hand, and institutes a system of daily and week-end cable letters, which will render the world of family life and affection a sharer in romantic benefits. Other cable companies instantly follow where he has shown the way, and by their rivalry extend the benefits of his plan even hasten his own advance, perhaps.

At a touch he makes the world more neighborly, having decided to push back the horizon line, and let in some of the vision on the lives of common folk. The little family episodes, which are the very stuff of life, will be exchanged while they are still warm with human quality. There is small joy in telling your Australian niece that baby has a tooth, when, by the time you have received the Antipodean congratulations, the little beggar is chewing through beefsteaks.

From ten A. M. to three P. M. of the day,

most of the cable business is done, the hottest, swiftest hour being ten in New York and three in London. For a brief sixty minutes the two Stock Exchanges throb in unison, the tides of panic or of prosperity flowing through both close-knit organisms in one unbroken current, of which the carrier channels are the seventeen Trans-Atlantic cables.

That hour of ten to eleven is furious with tiny flash messages of two or three words each, in which the brokers in London and New York scalp the variations in stock prices between the two exchanges. This crowded hour, when cable business touches its highest peak, is known as the hour of "arbitrage" business. The \$4,000,000 stock cable has carried 600 messages in one hour, 1900 messages in four hours, or almost eight a minute.

It is Mr. Vail's plan to send full length letters at reduced rates between England and the United States. The cable companies, carrying out his plan, will send messages in the unutilized portions of the day and night, reserving the feverish midday hours for the urgent public news and the messages of high finance.

Four flights below the click of the sending and receiving instruments of the Western Union service, in a large windswept room, Theodore Vail sat and talked of the future. He wore a black silk skull cap over his white hair. Seeing him for the first time sitting rather massively, almost inertly, in the chair, you would think him tired and a little stolid. He is heavy in body, heavy in face. But there is something large and emancipating in the way he talks. He opens vistas in a lowpitched even voice, and, without the slightest effort to impress, he conveys the sense of a man of unusual vision, with the executive position and power to build up into system what is seen by his inner eye.

"In the early days of transportation," he said, "the stage coach stopped at each village and cluster of houses. Then came your train, stopping at each town. Then, later, the longer runs, and so, gradually, the express train was evolved. And, finally, the long swift through carry between far-distant points, and there is 'the limited.' Such is the development of transportation, from the constantly broken and delayed journey to the expedited continuous long carry.

With telegraphic communication it has been just the opposite. The swift, uninterrupted message of prime business importance between distant points was the first thing to be obtained. At any cost there must be uninterrupted speed and efficiency - the expedited instantaneous communication. But, lately, we have found that there was another and separate class of business, less urgent, lying in the region between the flash message by telegraph and telephone and that of the mail. First we installed the night-letter permitting fifty words to be sent over night at the cost of 10 words of express service. Then we put in the day-letter service. We were told we should lose the \$2,500,000 of business which we received from those people who had been sending telegrams with an excess number of words. We were told that these people, instead of paying the extra rates for speed in sending, say nineteen words (an excess of nine words over the regular ten), would drag out their message to fifty words and send it by the slower day letter method, at the cheaper rates. So we would load our wires with more words, the same number of messages, and smaller returns.

"But none of that proved true. We have held that two and a half million of business intact, in spite of the day-letter. The reason is plain. When a man is paying two to five cents a word for extra words, what he wants is speed. He won't wait for the non-urgent day-letter, slightly delayed. So that urgent business still stays with us, while we receive the additional day-letter business — social, industrial which used to go by 'United States mail.'

"Now the cable situation is like that of the telegraph. There is a class of peremptory business which must receive instantaneous flash service. But we believe there is a large amount which now goes by mail but which would make use of a non-urgent cable at reduced rates. We have set ourselves the task of discovering that business and winning it over to the use of the cable.

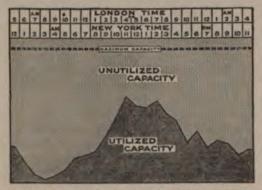
"A man goes home Saturday evening

after the week's toil and worry. His family is in London. He can write a letter which will reach them twelve days later. But here at last is a chance to send them that same letter (for thirty words will communicate a real family message), and it will be in their hands on Tuesday morning.

"We believe that a large proportion of the social and business messages will make use of a system which provides communication half way between the instantaneous wire and the delayed slowmoving mails. It is our hope to capture 90 per cent. of the word traffic that now goes by mail. That is the goal toward which we are moving."

Well aware that he had said a startling thing, Mr. Vail paused and sketched out a strong slanting 90 per cent. on a sheet of white paper.

"Take a typical cable wire. At present it is doing 100 per cent. of its business on



THE CAPACITY OF THREE CABLE LINES THE WESTERN UNION, THE ANGLO-AMERICAN, AND THE DIRECT UNITED STATES, WHICH, WORKING IN BUSI-NESS CONNECTION WITH EACH OTHER, AT PRESENT USE BUT 25 PER CENT. OF THEIR CAPACITY

25 per cent. of its capacity. Right there at the centre of the day, it is paying all its expense of maintenance, its original cost, its return to the stockholders. On either side of those central hours of activity, there is a $37\frac{1}{2}$ per cent. of capacity going idle. If we can fill up those two unused capacities of $37\frac{1}{2}$ per cent. each, it will be at almost no added cost. The increase of business will be almost pure gain. When all is done that can be done in increased facilities and efficiency and there are no improvements in the surroundings of the working force to be made, then possibly we can bring down the cable rates to $12\frac{1}{2}$ cents a word.

"We will increase efficiency of facilities and bring down the cable rates as fast as the people give us the business. There should and will be proper dividends paid to the stockholders — dividends to which a public utility is entitled. Beyond that, the company does not ask anything. The public should get the advantage.

"With few exceptions, the cable system of the world is to-day complete. The great trade routes are covered. As that trade develops, other lines will be laid to handle increased traffic. But they will duplicate existent lines. Two great trade regions are still left on the map of the world for the future to develop. One is Siberia and Manchuria. The other is South America, south of the Equator, not north of it. If our business is left free to develop in units of 100 and 1000, instead of in fragments of ten, our nation can take possession of the trade opportunity in South America. We can lead the world."

Some of the cable kings are already planning a new wire to South America for that trade opportunity — the one great wire at present needed. It would run to Cuba, the Barbados, and then on down the East Coast. Some day, a wire will be laid across the Bering Strait over in the rich Asiatic Territory.

Of the cables needed for trade not our own, one is between the Azores and Bermuda. This would connect Europe with the United States and Canada by one more electrical bridge. Another desirable cable would be between Mauritius and the West Coast of Australia. A useful extension of existent cables would be that of connecting the Central and South American cables with San Francisco. The all-British girdle requires a cable from Ascension to Jamaica via the Barbados, and from there to Bermuda and Halifax.

Cable companies do not fear the competition of wireless. Because the given message can be interfered with by other messages, and because all messages within fifty miles can be blurred out of recognition by one powerful instrument pulsing out high-geared ether waves, they believe that

wireless will never carry the dependable trans-oceanic business. They believe that the future of wireless is as an ally and complement of the cable, connecting lightships and lighthouses with the shore, in places where the shallow cable would be ground to bits by waves on rocks.

Mr. Marconi has stated his hope for wireless — "Two hundred words a minute at one cent a word, and the general use of wireless telegraphy instead of the mails for a very large proportion of the personal correspondence that now passes between America and Europe."

While the cable has failed as yet to fulfill the early hopes of cheap universal rates, it has long ministered efficiently to great human needs. Besides its own star rôle, it has often served as substitute and understudy for other systems when they fell sick from the weather or the rush hours.

A severe storm swept the country, from the Alleghanies to the Atlantic Coast, a few winters ago. Telegraph poles and lines were levelled in all directions, interrupting communication between New York and the West. A New York Bank, desiring to protect some large interests in San Francisco, arranged with the Western Union's New York office to cable a message from New York to England, thence via the Eastern Telegraph Company's Submarine Cables through the Mediterranean, the Suez Canal, Indian Ocean, up to China, thence across the Pacific to its correspondent in San Francisco, being relayed a dozen times.

So overloaded are the London to Paris wires that every day numerous messages are cabled from London to New York and then to Paris, because of the prompter service. Such messages are called "turnbacks."

During the 1888 blizzard, communication was held between New York and Boston by way of cable to Paris.

When the line was opened between England and Spain, a message required from nine to ten hours. Before the Pacific cables were laid, a message to Manila cost \$2.35 a word, traveled 14,311 miles, and underwent nineteen different transmissions. Now the cost is \$1.00.

Fifty years ago, it took a London or Liverpool merchant a half year to receive an answer to his letter sent to Calcutta. Now it is a matter of a few hours.

In recent years, a message of 68 words was dispatched in $2\frac{1}{2}$ minutes. It was sent 12,608 miles, and the answer was received within seven minutes. A patron in Texas complained of poor service recently because his message reached the Liverpool Cotton Exchange half a minute after four o'clock, just too late to make the sale. He had turned it in at 3:53, Greenwich time, in Texas. He felt aggrieved that seven minutes was not ample time for its journey to New York, to Newfoundland, to Ireland, to Liverpool, to the floor of the Exchange.

The people of the Argentine Republic were so interested in the launching of their great battleship Moreno, at the yards of the New York Ship Building Co. in Camden, N. J., on Saturday, Sept. 23, 1911, that the Central and South American Telegraph Co. asked the Western Union to arrange a special wire to flash the announcement. The Moreno glided into the water at 2:33 P. M.; instantly Camden flashed "2:33" to New York, New York cabled to Colon in the same instant, Colon flashed it to Valparaiso and Valparaiso to Buenos Aires. Buenos Aires acknowl-edged its receipt and bulletined the information at 2:33'P. M. In other words, the news arrived in Buenos Aires in the fraction of a minute, even before the ripples caused by the battleship's entrance into the water had subsided.

The Western Union has summarized their business from the American side over their own cables.

Financial	na	tur	al	
products, meat, cotton, etc.	,		•	17
Press		•		15
Social				12
Exporters and Importers				8
Steamship business (keeping lines i	n t	ou	ch.	
with boats, booking, etc				7
Miscellaneous	•	•	•	ц

The surprise in that table of comparative traffic is that the diplomatic and Government business is so slight as to cut no figure at all in the total volume. It lags in among half a hundred items cluttered together under "Miscellaneous." Compare our meagre touch with consulates and embassies with that of England, which spends a million and a quarter dollars a year in cabling official Government despatches.

The cable letter is aimed first at that 12 per cent of social interchange -- to raise its volume mightily — and second, at commercial correspondence. The people now cabling will cable more fully with the reduced rates. Even under the old system there was much "filed" business, reports, statements, turned extended and in throughout the day, and reserved till after business hours and then sent. For still longer reports, these firms used the mails, with the ten day delay. They will turn to the cable letter. New firms of smaller grade, who have relied largely upon the mails, will become cable users.

One of Canada's Postmaster Generals, M. Lemieux, has said: "Every reduction in rates would open the door to a class of trader who cannot now afford to use cables."

There is a double value to the cable letter. It saves time, closing the deal, while it is still hot, and the other man in mood. And the cable lends an advertising value to the proposition. It enhances its importance in the eyes of the recipient. If a business man finds on his desk four communications — a cable, a telegram, a letter, and a postal, he will be apt to regard them as of about that relative importance, with the cable a sure leader for his attention.

Atlantic cable rates could have been lowered a decade ago with the cable letter system, if there had been a man big enough The idea had been publicly to do it. exploited, but it had to wait for execution for Mr. Vail with courage to fight the conservatism of capital. It is with his coming into control of the Bell Telephone and the Western Union in conjunction that the night-letter and the dayletter systems have been installed. He has made every private telephone of the land a telegraph and cable station. man with a telephone is called up and the st-arrived telegram is read to him over

the wire. He has the privilege of calling up the nearest telegraph station that is open and sending his message over his telephone wire. As the result, a man in the country can receive or send an important message at 2 A. M., even if the village telegraph station has been tightly closed for eight hours.

This has put every man with a Bell telephone in telegraphic communication with every other Bell telephone user in the country. Mr. Vails's new schedule of cable tolls is to put him in touch with the whole world — and at a reasonable rate.

Of the need of combination in wire transmission, Mr. Vail says:

"Any wire system to be universal, to give a universal service by electrical transmission of intelligence, whether spoken or written, must be one system, all the wires under one control and operated by the same methods and under the same policy.

"From every place the service must radiate to all points in all directions, each place being a centre from which communication must go direct to the place to be communicated with, and the lines or circuits of communication or transmission must be direct and continuous. If the distance is beyond that possible for direct communication, the transfer or relay must be from and to lines or circuits belonging to the same system under one control and terminating in the same offices."

The great principle to observe is that every possible use must be made of every possible facility. All of everything must be utilized. "Any part of the plant that can be used for several purposes at the same time must be so used. A separate system for telegraph long distance trunk lines and a separate system for telephone long distance trunk lines has duplicated the trunk wire plant of the United States. In ten years, if the telegraph and telephone are worked in unison, the long distance lines of either will do the business for both.

"The plant for the joint use of the telegraph and long distance or toll telephone can be one and the same, constructed, maintained and looked after by one organization — it will be one plant. The investment, the interest on

A CABLE RATE FOR COMMON USE

the investment, the depreciation, the maintenance of the duplicate plant, can all be saved. This investment will amount to hundreds of millions of dollars at an annual cost of tens of millions. All this saving can go into increased efficiency, new services, or reduction of charges.

"Although the same trunk plant can be used at the same time for both; the ex"The only hindrance to the i tion of all these features or innexcept the time necessary for retion and re-organization and re-ecis the question of just how far this ation can go and not be techn violation of the trust laws. No being done that can be a possible so far as human judgment can



MR. THEODORE N. VAIL

WHOSE SYSTEM OF DAY-LETTERS AND WEEK-END LETTERS BY CABLE AT GREATLY REDUCED RATE HE HOPES, CAPTURE 90 PER CENT. OF THE WORD-TRAFFIC THAT NOW GOES BY MAIL

change systems proper, the apparatus and the operating organization, are distinct and separate and must always remain so they cannot be combined. The telephone instruments likewise are distinct from the telegraph instruments and cannot be substituted for one another. Nevertheless it is obvious that both economy and efficiency can be achieved by a close cooperation of the systems. but it is safer to go slowly than to retrace any steps.

"When all this is worked ou spondence will be by wire - cont and documents only by mail.

"When the telegraph is treat by-product of the telephone p does not take much imagination to can be done in the broadening at sion and cheapening of telegraph



THE WORLD'S UNREST

THE WAR IN THE DESERT OF TRIPOLITANIA - THE RUSSIAN GAME IN PERSIA AND MONGOLIA - THE NEW ERA IN CHINA

> HE war on the African desert, the massacres in Persia by the Russian soldiers, and the revolution in China — the three centres of active unrest, mark dramatic steps in great movements that have been going on for many years.

> It took Italy only six days to present an ultimatum to Turkey, declare war, send a

fleet across the Mediterranean and bombard the city of Tripoli. But it was thirtythree years after the treaty of Berlin, when Austria and Germany tacitly admitted Italy's designs upon Tripolitania, before Italy found herself in a position to share the spoil. The Italian expedition captured the city of Tripoli and made landings at several other places. The Turkish army, cut off from all help or even communication with Turkey, had little hope of a successful ultimate outcome in spite of its determined resistance. Tripolitania is lost to Turkey. But what is lost to Turkey is not altogether gained for Italy. Tripolitania is a fourth as large as the United States. Its pacification is a work of years. It is estimated that Algeria has cost France \$750,000,000, and the French brought to their task a powerful army and the tact and experience gained in their long years of colonization. With less experience and fewer resources, Italy has a similar problem to face, the pacification and development of a vast desert Empire peopled by warlike nomads. The coast line of Tripolitania is as long as ours from Maine to Florida, and the province stretches inland for more than one thousand miles.

For many years Russia has had designs on the Persian Gulf, and little by little her sphere of influence has moved southward - and the corresponding English sphere of influence to protect the overland route to India comes over Persia from the Indian border. In the way of the Russian game stood W. Morgan Shuster, the Treasurer-General of Persia, an American, formerly a member of the Philippine Commission, appointed to his post in Persia on the recommendation of President Taft. This, in connection with Mr. Shuster's criticism of Russia, added much to Russia's resentment of our attempt to force the Czar's Government to recognize the passports of Americanized Russian Jews. Mr. Shuster's administra-

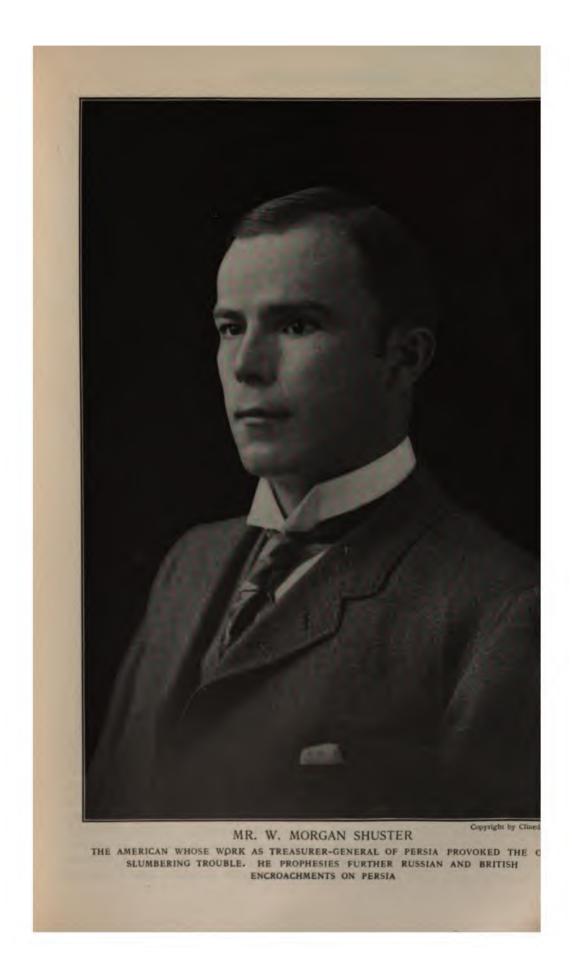
THE WORLD'S UNREST



IHE WAK IN IHE DESEKI OUTSIDE THE CITY OF TRIPOLI WHERE THE ITALIAN TROOPS HAVE FIRST THE PROBLEM OF SUB-DUING THE TURKISH ARMY AND THEN THE TASK OF PACIFYING A COUNTRY A FOURTH AS LARGE AS THE UNITED STATES, PEOPLED BY NOMADIC TRIBES



HIS EXCELLENCY GEORGE BAKHMETIEFF THE NEW RUSSIAN AMBASSADOR WHO IS HANDLING THE DELICATE QUESTIONS THAT ARISE IN THE PRESENT RELATIONS BETWEEN THE UNITED STATES AND RUSSIA



THE WORLD'S WORK

tion gave the Persian finances a balance instead of a deficit in less than a year. But in his vigorous and efficient conduct of his office he gave Russia an excuse to make demands on Persia, or Russia made his work an excuse — it matters little. Russia requested Mr. Shuster's removal and Great Britain acquiesced in the demand. The Persian National Assembly refused to remove him. In not go to war with Russia for that would mean the end of the little independence left. Martial law was proclaimed in the capital and Mr. Shuster was dismissed. The Russian and English paths of empire have moved on another step.

In another quarter, also, Russia has pushed forward her influence. For years she has wished to increase her interests in Mongolia, a province more than half as



A PERSIAN PROTEST AGAINST THE DISMISSAL OF SHUSTER WHO HAD RESCUED THE COUNTRY FROM BANKRUPTCY AND, IN A YEAR DISTURBED BY REVOLUTION, CHANGED A DEFICIT OF \$500,000 INTO A SURPLUS OF \$800,000

the capital, Teheran, great crowds collected to protest against his dismissal. They collected, also, in Tabriz and in other cities where Russian troops were quartered. Riots followed and then massacres of men, women, and children by the Russian soldiers. In Resht, five hundred people were killed, and in Tabriz the Persian constitutionalists and the Russian guards were in conflict. But Persia could large as China proper, by building the trans-Mongolian railroad. And naturally she is now ready to protect this province, which has taken advantage of the present weakness of the Pekin Government to shake free. Simultaneously with the reports about Mongolia, came the news of a similar situation in Chinese Turkestan. With Manchuria under foreign domination, and with Mongolia and Turkestan



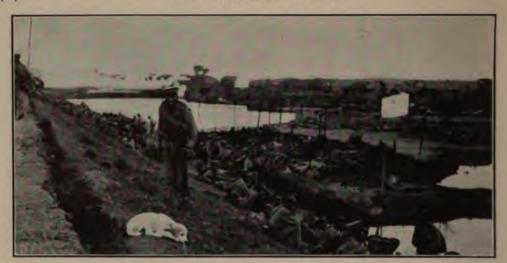
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PREMIER YUAN SHI-KAI (IN THE CENTRE OF THE PICTURE, FACING THE READER) HEAD OF THE IMPERIAL FORCES, AND LONG CON-SIDERED CHINA'S MOST CONSTRUCTIVE STATESMAN

on the way to be Russianized, China has lost direct and independent control of nearly one half of its territory.

While Russia is fastening its tentacles on Mongolia and Turkestan, there are, in China proper, two or three governments and a great lack of government. At Shanghai, Wu Ting-Fang for the Revolutionists and Tang Shao-Yi representing the Pekin Government, have concluded an agreement to submit the form of the future government of China to a National Conven-

THE WORLD'S WORK



IMPERIAL TROOPS AWAITING THE ENEMY NEAR HANKOW IN THE CHINESE REVOLUTION WHICH PROBABLY AFFECTS DIRECTLY MORE PEOPLE THAN ANY PRE-VIOUS REVOLUTION IN THE WORLD'S HISTORY

tion, pending the assembling of which there is an armistice. This situation is somewhat complicated by the election of Dr. Sun Yat-Sen as President of the Republic of China at Nankin. But in spite of this, the calling of the Convention has improved the situation and the prospects of peace. One important fact to be noted is that the



THE BURNING OF HANKOW AROUND WHICH THE HARDEST FIGHTING OF THE REVOLUTION HAS TAKEN PLACE

present rebellion is not a protest against foreign aggression so much as a protest against Manchu tyranny and misrule. It is the demand for a progressive China from the Chinese themselves. For nearly twenty years the story of the awakening of China is intimately bound up with the career of one man, Yuan Shi-kai. Politically he has been sometimes allied with the Progressive party and sometimes with the reactionary element under the old Dowager Empress. But by his works he is known as a Progressive. He has been the dominant figure in China since the death of Li Hung Chang, whose pupil he was.

After the disastrous war with Japan in 1894, for which Yuan Shi-kai was held partially responsible, he was put in charge of the troops in the metropolitan province. With the help of German officers he formed an army of 12,500 men trained in the European fashion — the first modern soldiery in China. From this grew by 1910 a fairly well trained and equipped army, half again as large as that of the United States — an army in which every soldier had two hours of Western teaching a day, and for which the officers were trained in military schools. Yuan Shi-kai, though a Progressive, joined with the reactionary Dowager in 1899 against the Emperor. But the next year, during the Boxer rebellion, we find him, as Governor of Shan-tung, ignoring the Imperial edicts, and dealing so summarily with the Boxers that not a foreigner was hurt in his province. In 1902 he was in charge of the Northern Railway, and "wherever he was he gave as much attention to the city government as to that of the province or the nation; and, in spite of having no foreign education himself, he began building up a system of public schools in his province, the like of which there is nothing in all China."

The most patent signs of progress in China, the army, the schools, and the railroads, are the work of Yuan Shi-kai more than of any other one man. But the Radical reformers held not only that he had betrayed the Emperor to the Dowager Empress in 1898 but that he was instrumental in the Emperor's death in 1908. At any rate, the Prince Regent Chun dismissed him for a time because he had "rheumatism of the leg." When the present revolution commenced and he was recalled he answered that his rheumatism was still bad. But the Manchu rule was almost at an end; it needed his strength to help it so much that it was willing to take him on any terms. The revolution was making headway in the South, and even the National Assembly at Pekin had shown a revolutionary tendency. On October 27th, Yuan Shi-kai took command of the Imperial army. Eleven days later the National Assembly appointed him Premier. In his cabinet he appointed several active sympathizers While the first with the Revolution. attacks on Nanking and Hankow were repulsed by the Imperial troops, later these cities and also Wuchang, Hangyang and Foochow fell into the hands of the Revolutionists. The Revolutionists at Shanghai formed a cabinet, with Wu Ting Fang, former minister to the United States, as director of foreign affairs. Dr. Sun Yat Sen, the agitator long in the United States and Europe collecting funds, joined this group on his return to China. Another party set up a republic at Chi-fu, and in the interior General Li Yuanhung was in command of the rebel armies.

Early in December Prince Chun abdicated his regency, leaving Yuan Shi-kai to deal as best he could with the Assembly at Shanghai and the leadership of Sun Yat Sen. However the warfare or negotiations between Yuan Shi-kai and the more radical progressives turn out, one thing is certain: the old régime of the Manchus is at an end. Since the time of Li Hung Chang all the stronger men in the Government have been Chinese without Manchu blood, and when the final test came the Manchus dropped out, leaving two Chinese parties contending for control. The republicans won over the monarchists, and China was pro-claimed a "republic." On December 29th, Dr. Sun Yat Sen was chosen president. Thus China has ended the dynasty of the The Chinese Empire is overdespots. turned, and the most populous nation of the world has begun a new era. There have been few events in the world's history that affected more people.

WOODROW WILSON-A BIOGRAPHY

FIFTH ARTICLE

OUT OF PRINCETON INTO POLITICS

THE TRUE STORY OF HIS NOMINATION FOR THE GOVERNORSHIP OF NEW JERSEY—THE ASTONISHING MANNER IN WHICH SOME OF HIS SUP-PORTERS LEARNED THAT THERE ARE MEN WHO MEAN WHAT THEY SAY—IS THIS "INGRATITUDE "?

BY

WILLIAM BAYARD HALE

(AUTHOR OF "A WEEK IN THE WHITE HOUSE WITH PRESIDENT ROOSEVELT")

HE State of New Jersey at the beginning of the year 1910 was in the case of many another commonwealth in this Union of States. It was in the grip of the politicians and the corporations, and the good people resident within its borders had about as much voice in the management of their public affairs as they had in deciding the weather or determining the phases of the moon. For years the state government had been run by agents of "the interests" — for a time the Pennsylvania Railroad predominating, more recently a combination of electric light and power companies, gas companies, and trolley lines, controlled by the Prudential Insurance Company and the malodorous United Gas Improvement Company of Philadelphia.

Latterly it was the Republican Organization that had been in power at Trenton, but the system was really a bi-partisan one. The Republican bosses, Senator John Dryden, Senator John Kean, ex-Governor Franklin Murphy, ex-Governor Edward C. Stokes, and David P. Baird, had come to be known as the "Board of Guardians," in which the public service, railroad, insurance, and other corporation interests were duly represented. The Democratic Organization was the private property of James Smith, Jr., a politician who had made his way into the United States Senate in consequence of having delivered the vote of the Jersey delegation to Mr. Cleveland at the Democratic National Convention of 1892, and who had retired from that body under criticisms connected with certain scandals incidental to the framing of the Wilson Tariff. Ex-Senator Smith is a polished man of affairs whose business interests are identical with those of his friends on the Republican "Board of Guardians." His chief lieu-tenant was James R. Nugent, a typical representative of the old-style, strong-arm methods in politics. "Bob" Davis. arm methods in politics. the thrifty boss of Essex County, sometimes rebelled against his feudal lord and sometimes played in with him, but be-tween Smith and Davis, the Organization through a dozen lean years had existed to garner the spoils of municipal jobs and contracts in Newark, Jersey City, and Hoboken; to fill a few minority memberships on state commissions of one sort and another; and to furnish the Republican machine with needed help in time of danger.

However, the great moral movement which during the last five years has been abroad in the land, had not left New Jersey unaware of its gathering power. The leaders of both parties were forced to heed it. In the Republican party, Everett Colby, George L. Record, and others stirred up a dangerous enthusiasm among "new idea Republicans." Somehow, somewhere, by someone, there was suggested to Mr. Smith's Organization a plan of getting aboard the reform wagon and riding on it into power. The fight against privilege and the championship of democracy in college life captained by the President of Princeton University had attracted the attention of the state and now suggested him as a man who could lead a party to victory under the banner of political reform. President Wilson was a student of public affairs of authority throughout the country; he was an accomplished and persuasive speaker; a man of lofty character and winning personality. Indeed, from outside the State, from the press of many cities, had come the suggestion that the nation would be fortunate if it could place such a man as Wilson in the Presidential chair.

It is easy enough to see how the idea of running Wilson for Governor needed only present itself to the imagination of a shrewd boss to become immediately congenial. Mr. Smith had a son at Princeton and had on one or two occasions exchanged greetings with the head of the college, but there was no real acquaintance between the two men, and the Democratic leader no doubt naturally imagined that a learned collegian would be as putty in the hands of an experienced politician-especially if his eyes were rose-spectacled by the promise of a nomination for President. The man was a hero for progressive, independent citizens everywhere and especially within the state where he was best known; a spontaneous popular feeling that he would make an ideal Governor had arisen; what could be better politics than to become sponsor of his nomination and use his popularity for a ride back to power?

During the early summer of 1910, President Wilson was told by a number of his friends that he could probably have the Democratic nomination for Governor if he desired it. These intimations became so numerous and so pointed and were accompanied by so many assurances of the benefit the party and the state would derive from his acceptance that Mr. Wilson was constrained to lend them a favorable ear. His work at Princeton was apparently arrested — that he realized.

And yet the prospective nominee was profoundly puzzled. While sentiment among the best class of voters throughout the state was strong, the practical overtures came from the Organization headed by Smith. Mr. Wilson was perfectly aware of ex-Senator Smith's political character and history; he knew what the Organization was. How could such a gang support him? What quid did they expect for their quo? Were they deceiving themselves as to their man? Did they fancy that his life-long detestation of corrupt politics was simply pose? Or were they merely willing to take him because they knew he was the only sure chance of party victory? Willing to have an incorruptible Governor if it were impossible otherwise to get a Democratic Governor? Did Smith regard the schoolmaster as a simple soul who would hand out corporation favors without knowing? Did he expect to get a United States Senatorship through the Democratic legislature which Wilson's popularity was likely to elect?

On that point, Mr. Wilson made specific inquiry of the gentlemen who came to him on their puzzling errand. He required their assurance that Mr. Smith would "Were he to not seek the Senatorship. do so, while I was Governor," he told them, "I should have to oppose him. He represents everything repugnant to my convictions." They told him categorically that Smith had no idea of going back to the Senate; that he was a man thought to be sick with a dangerous constitutional ailment and borne down by domestic bereavement and that he was definitely out of politics. Furthermore they called his attention to the fact that the election laws of New Jersey called for a primary, in which the respective parties by popular vote selected their candidates for Senator. James Smith, Jr., would not enter that primary race. Nothing could be more convincing on that score.

Talking afterward of his perplexity at this time, Governor Wilson said:

"I was asked to allow myself to be nominated, and for a long time it was impossible for me to understand why I had been asked. The gentlemen who wanted to nominate me were going outside the ranks of recognized politicians and picking out a man whom they knew would be regarded as an absolutely independent person and whom I thought they knew was an absolutely independent person. I tried to form a working theory as to why they should do it. I asked very direct and impertinent questions of some of the gentlemen as to why they wanted me to make the run. They didn't give me any very satisfactory explanation, so I had to work one out for myself. I concluded on the whole that these gentlemen had been driven to recognize that a new day had come in American politics, and that they would have to conduct themselves henceforth after a new fashion. Moreover, there were certain obvious practical advantages to be gained by the old-time managers. Whether they could control the Governor or not, a Democratic victory would restore their local prestige and give them control of a score of things in which the Governor could not command them, even if he wished. It was one thing to put a Governor in and a Legislature; it was another to control their counties and municipalities."

The sequel will show how accurate was this theory.

On Tuesday, July 12, 1910, a number of gentlemen gathered in a private room of the Lawyers' Club, 120 Broadway, New York, to have dinner and to inquire of Mr. Wilson whether he would allow his name to be presented to the New Jersey Democratic State Convention. At that meeting were present Robert S. Hudspeth, national committeeman for New Jersey; James R. Nugent, state chairman; Eugene F. Kinkead, Congressman; Richard V. Lindabury, George Harvey, and Milan Ross. But one practical inquiry was made of Mr. Wilson; it was voiced by Mr. Hudspeth, and was in substance this:

"Doctor Wilson, there have been some political reformers who, after they have been elected to office as candidates of one party or the other, have shut the doors in the face of the Organization leaders, refusing even to listen to them. Is it your idea that a Governor must refuse to acknowledge his party Organization?"

acknowledge his party Organization?" "Not at all," Mr. Wilson replied. "I have always been a believer in party Organizations. If I were elected Governor I should be very glad to consult with the leaders of the Democratic Organization. I should refuse to listen to no man, but I should be especially glad to hear and duly consider the suggestions of the leaders of my party. If, on my own independent investigation, I found that recommendations for appointment made to me by the Organization leaders named the best possible men, I should naturally prefer, other things being equal, to appoint them, as the men pointed out by the combined counsels of the party."

On July fifteenth, Mr. Wilson issued a public statement in which he said that if it were the wish "of a decided majority of the thoughtful Democrats of the state," that he should be their candidate for Governor, he would accept the nomination.

The announcement caused a sensation. It was received with enthusiasm by many men of both parties, yet there were not lacking those who were so suspicious of Smith and his associate bosses that they could not believe the nomination was to be given Mr. Wilson without pledges from him. Again, some of the best and most intelligent men of the Democratic party, while they did not doubt the integrity of the proposed nominee, did fear that his inexperience in practical politics would make him an easy instrument of the gang. Mr. Wilson had been assured that only his consent was necessary for his un-challenged nomination, but in fact opposition to it at once arose and continued until the convention balloted. Three other Democrats, Frank S. Katzenbach, George S. Silzer, and H. Otto Wittpen, immediately entered the ring. Wittpen was the successful Mayor of Jersey City and the sworn foe of "Bob" Davis; Davis, though lately he had quarrelled with Smith, was now reconciled, and threw his Jersey City Organization for Wilson's candidacy.

After issuing his statement, Mr. Wilson went to the little town of Lyme, Conn., where he has been in the habit of spending his summers, and — spent his summer. He moved not one of his ten fingers in behalf of the nomination. Certain other people, however, were moving everything moveable to that end. The fact that the Smith crowd were advocating

him puzzled many who otherwise would have been his foremost supporters. It was only (as Mr. Wilson afterward learned to his amazement) by sharp dragooning that a majority sufficient to make him the choice was seated in the Trenton Convention on September fifteenth.

The speech made in that body by Clarence Cole, formally putting Princeton's President in nomination, was interrupted by jeers, cat-calls, and sarcastic questions. A few remarks made by Mr. Smith were, however, closely listened to. The Big Boss said that he had no personal acquaintance with Mr. Wilson. Mr. Wilson and he did not move in the same world. He had never conversed with him. Had conditions been different, he should have preferred a candidate identified with the Organization. But it was necessary to find a man who could be elected. Mr. Wilson was a Democrat and he could be elected; he knew nobody else who for a certainty could be. Therefore he was for Wilson, who had consented to accept a nomination without any private obligations or undertakings whatever - he was for him on the ground that it was time New Jersey had a Democratic Governor.

These were sagacious sentences — and had the incidental merit of telling the truth. It is undeniable that Smith organized the Wilson candidacy; it is the curious fact, however, that he could ensure its success only by publicly separating himself from it as far as he could.

On the first ballot, 709 votes being necessary to a choice, Woodrow Wilson received 749 and was declared the nominee for Governor. Hastily summoned from Princeton, eleven miles away, he appeared on the platform and made a speech of acceptance so ringing in its assertion of independence and so trumpet-toned in its utterance of the principles of progressive democracy that the convention was fairly carried off its feet. Few of the delegates had ever seen or heard Mr. Wilson. Had he made that speech before the ballot — there would have been no ballot. Having made it, he became the candidate of a united and enthusiastic party.

The language in which Mr. Wilson

made clear to the convention the circumstances under which he was accepting the nomination was as follows:

I did not seek this nomination. I have made no pledge and have given no promise. Still more, not only was no promise asked, but as far as I know, none was desired. If elected, as I expect to be, I am left absolutely free to serve you with all singleness of purpose. It is a new era when these things can be said.

In the first speech of his campaign, at Jersey City, September 28, the candidate said:

Some gentlemen on this platform can tell you more specifically than I can that I did not seek the nomination as Governor. They were generous enough to offer it to me, and because they offered it to me they were generous enough to let me understand that I was under no obligation to any individual or group of individuals.

Now this story of Mr. Wilson's nomination is worth telling in some detail because, in the first place, it is a funny story, in the light of its sequel; and because, in the second place, it has to do with the charge of "ingratitude" — the gravest brought against New Jersey's Governor. "What do you think of Woodrow Wilson," a New York reporter asked Mr. Richard Croker on the latest of those brief visits which the ex-Tammany chieftain deigns occasionally to pay to the land and city, now bereft of his political leadership. "Nothing to say," replied Mr. Croker. After a few pulls at his cigar, however, he brought out: "An ingrate is no good in politics."

Which is sound political sagacity. Is Wilson an ingrate?

After a few speeches in which it was apparent that the nominee had a little difficulty in bringing himself to ask anybody to vote for him, Mr. Wilson developed unusual power as a campaigner. The speeches required of a candidate are not of the nature of those in which a college president or a polished occasional orator is practised, but this candidate had things to say on which his convictions were so strong and his sense of their importance so great that he soon learned language that caught the ear and won the

warm attention of the great body of the plain voters of New Jersey. He talked to them of the need of dragging public business out of private rooms where secret interests and professional political jobbers conspire, into the open air where all might see what is being done; of the need of new political machinery that the people might resume the control of their own affairs; he talked of the vast social and industrial changes of the past twenty years, making necessary the renovation of all our old social and industrial ideas; of the need of new relations between workingmen and their employers, now that these are days of great corporations; of the need of regulating strictly those corporations; talked simply, straightforwardly, of all manner of specific public things in a way that brought them home to the individual voter with a new sense of his own personal concern in them and awakened in him a new realization of his duty, his power, and his opportunity. He not only did this; he lifted political discussion to a new plane, till at every meeting the audience was thrilled with the consciousness that the problems of to-day are gigantic, critical, big with the purposes of Providence, as they heard this man picture them on the broad background of history, in the inspiration of a soul aflame with love of common humanity and faith in its progress toward splendid futures.

One incident of the campaign was the candidate's reply to a list of questions, presumed to be embarrassing, asked him in an open letter by a Progressive Republican, Mr. George L. Record. Mr. Record into careful form nineteen queries put requiring Mr. Wilson to declare himself on such subjects as a public service commission with power to fix rates; the physical valuation of public service corporation properties; direct primaries; popular election of United States Senators; ballot reform; corrupt practices legislation; employers' liability for workingmen's injuries; and finally his own opinion of the Democratic bosses, namely, Smith, Nugent, and Davis.

With instant readiness, with audacious glee, Mr. Wilson gave his answers: he "cepted the whole Progressive Republican

programme and asked for more; no Republican could satisfy a Progressive Democrat's appetite for reform. As for Smith. Nugent, and Davis, he would join anybody in denouncing them; they differed from Baird, Kean, Stokes, and Murphy in this, that the latter "are in control of the government of the state, while the others are not, and cannot be if the present Demo-cratic ticket is elected." Mr. Wilson went cratic ticket is elected." Mr. Wilson went further; he asked himself a twentieth question which Mr. Record had been too polite to ask: What would be his relations with those men if elected Governor? "I shall always welcome advice and suggestions from any citizen, whether boss, leader, Organization man or plain citizen, but all suggestions and advice will be considered on their merits. I should deem myself forever disgraced should I, in even the slightest degree. coöperate in any such system or any such transactions as 'the boss system' describes.

Election day was November 8th. On that day the people of New Jersey, for many years a Republican state, chose Woodrow Wilson for Governor by a plurality of 49,150. Two years before, Taft had carried the state by a plurality of 82,000. Wilson had changed the political mind of 66,000 out of 433,000 voters. You will bunt hard to find the like of that in American politics. At the same ratio, if the new Democratic National Convention were to nominate him for the Presidency, Wilson would transform Taft's 1908 plurality of 1,270,000 — that marvelous, almost unparalleled plurality — into a Democratic triumph by 1,630,000 popular votes.

On the same day, the majority of those Democrats who took the trouble to mark their ballots in this particular, selected James E. Martine as their choice for United States Senator. The total Democratic vote for Senator was only 73,000. Martine received 54,000. Nobody voted for James Smith, Jr.

James E. Martine was an honest and faithful Democrat, with radical views; a spell-binder of the farmer type, leatherlunged and of peripatetic platform habit; as genial and good-hearted a man as ever breathed — and as unfitted for the digni-

ties of membership in the august body that sits in the Northern end of the National Capitol. Regularly, for years, he had been put up as candidate for any old office to which there was no hope of Once he had run for sheriff; election. twice he had run for Congress; four times for the assembly; four times for the state senate. Defeat had ever been his cheerfully accepted portion. It was a well-established rule that Martine was always to run — never to reach anything. Now, to general astonishment, Wilson's popularity bad given Democrats a majority on joint ballot of the two houses of the legislature; a successor was to be elected to United States Senator John Kean, and Martine had been permitted to lead in the primary!

Ten days after the election, James Smith, Jr., called on Governor-elect Wilson at his home in Princeton. The ex-Senator is a gentleman of taste, of Chesterfieldian manner and delightful conversation, and his congratulations, we may depend upon it, were gracefully phrased. Equally graceful was his modest confession that he found his health now greatly bettered, and his intimation that he now indeed felt justified in taking into serious consideration the idea of asking reëlection to the United States Senate.

Governor-elect Wilson, when he had satisfied himself that he heard aright, expressed the very great astonishment which he felt; he then said to Mr. Smith that he regarded the idea as impossible, and he begged him to abandon it forthwith. Followed a long conversation, in which Smith sought to justify his political past, while the Governor-elect made more and more explicit his warning that he would never permit the election. The ex-Senator permit the election. turned the talk on Martine's qualifications, or lack of them - which Mr. Wilson refused to discuss. The issue was not Martine, but the party's faith. The primary had elected Martine, and there was nothing for the legislature to do but ratify that election.

"The primary was a joke," said Smith.

"It was very far from a joke," rejoined the Governor-elect. "But assume that it was. Then the way to save it from being a joke hereafter, is to take it seriously now. It is going to be taken seriously, and there will be no more jokes. The question who is to enjoy one term in the Senate is of small consequence compared with the question whether the people of New Jersey are to gain the right to choose their own Senators forever."

Smith's candidacy was now made publicly known, and the party sharply divided, the Organization declaring its purpose and its ability to carry the legislature for him, and the decent rank and file denouncing the attempt to steal a Senatorship for a discredited politician who dared not run in the primary. The greatest eagerness was shown as to the attitude of Governor-elect Wilson. He, however refrained, for a little while, from taking either side publicly, hoping his public interference would not be necessary. Privately, he sent many men of influence to Smith to urge him not to try the race. These measures availed nothing.

As a last effort to save Mr. Smith from the humiliation he was determined should overtake him if he persisted, Mr. Wilson called on Mr. Smith by appointment at his house in Newark. It was in the late afternoon of Tuesday, December 6. The Governor-elect said he had come to say that, although he had as yet taken no public stand, it was his intention, unless Mr. Smith withdrew from the Senatorial contest, to announce his opposition to him.

"Will you be content in having thus publicly announced your opposition?" asked the aspirant.

"No. I shall actively oppose you with every honorable means in my power," replied the Governor-elect.

"Does that mean that you will employ the state patronage against me?" inquired Mr. Smith.

"No," answered Wilson. "I should not regard that as an honorable means. Besides, that will not be necessary."

The Governor-elect then laid down this ultimatum:

"Unless I hear from you, by or before the last mail delivery on Thursday night, that you abandon this ambition, I shall announce my opposition to you on Friday morning." The last mail Thursday night brought no message from Smith, and Mr. Wilson by telegraph released to the morning newspapers a statement he had prepared denouncing the Smith candidacy. Half an hour later came a special delivery letter from Smith, asking for a few days' delay. The denunciation had gone out.

It was a bitter fight. The Governor did not wait for the assembling of the legislature; he appeared before large audiences in the chief cities — and, making a clear statement of the case, asked the people to see to it that their representatives voted right. Among the legislators there was panic; none of them had ever heard of such a thing as this smiling defiance, by a mere novice in the political field, of a boss who had ruled twenty years. Not all of them had instant faith in the outcome. But there never was any doubt about the result. As Governor Wilson afterward told the story, he brought no pressure to bear upon the wavering members of the legislature. He merely told them to follow their consciences, and tried to assure them that they would suffer no harm if they did so. He said to them:

"Do not allow yourselves to be dismayed. You see where the machine is entrenched, and it looks like a real fortress. It looks as if real men were inside, as if they had real guns. Go and touch it. It is a house of cards. Those are imitation generals. Those are playthings that look like guns. Go and put your shoulder against the thing and it collapses."

They took heart and put their shoulders against it, and it collapsed.

On January 28th the New Jersey Legislature elected James E. Martine to the United States Senate, giving him forty votes. The Organization mustered four for Smith.

Such is the tale of Woodrow Wilson's "ingratitude."

The most moderate and charitable account of the matter that any way reaches its pith is that which Wilson himself once gave:

"They did not believe that I meant what I said, and I did believe that they meant what they said." In their sophistication, they had gold-bricked somebody, certainly, but not the school-master nor the people of New Jersey. They had digged a pit and fallen into the midst of it themselves. For the intended victim to escape was, of course, rank ingratitude!

Next month Mr. Hale will carry to a conclusion the story of Governor Wilson's administration, as far as it bas progressed. —THE EDITORS.

SCIENTIFIC PROGRESS

"AEROLOGY" THE NEW SCIENCE - HOW IT EXPLORES THE UPPER ATMOSPHERE

BY

CHARLES FITZHUGH TALMAN

BOVE the highest ice clouds, which float more than six miles above the surface of the earth, there is a region in which there are no storms.

Here the air is cold and dry, and so tenuous that a human being could not live in it, if he should succeed in reaching so great an altitude.

This region is called the "isothermal layer of the atmosphere," and its discovery is one of the capital achievements of the new science of "aerology." For it has established the remarkable fact that, above a certain height, the air stops growing colder.

In the year 1902, a French meteorologist, M. Teisserenc de Bort, who had sent aloft a great number of balloons, carrying thermometers and other apparatus for testing the upper air, discovered that in every case, after a height of about $6\frac{1}{2}$ miles was

attained, the steady fall in temperature abruptly ceased, often giving place to a slight *rise* in temperature for a certain distance upward. A new "shell" of the earth's atmosphere had been reached the isothermal layer, or, as its discoverer now prefers to call it, the "stratosphere."

The temperature at the bottom of the stratosphere averages, in European latitudes, about 68 degrees below zero Fahrenheit. The stratosphere is not, however, uniformly high over different parts of the world; it is lowest over the poles and highest over the equator. Hence, in equatorial regions, the regular fall in temperature of the lower air with ascent of the thermometer continues to a greater height than elsewhere. This accounts for the paradoxical fact that colder air is found over the equator than anywhere else in the world. The lowest air-temperature ever recorded — 119 degrees below zero Fahrenheit - was found at a height of twelve miles over the heart of Africa!

Perhaps this is not the place to discuss in detail the scientific results of the worldwide campaign of aerology — one of the most fascinating developments of the twentieth century. Suffice it to say that these results have upset a great many beautiful theories of our forbears concerning the atmosphere.

Ours is an age that demands a tangible return for the energy expended in research. Of the practical bearings of aerology the most obvious is the immense service it is rendering, and is destined to render, to aeronautics.

If marine meteorology is useful to the sailor, aeronautical meteorology — the practical outgrowth of aerology — is indispensable to the aeronaut. It is the newest of applied sciences — its first formal textbook (by Dr. Linke, of Frankfort, Germany) having been published in the year 1911.

A few decades ago meteorologists were busily studying and charting the windsystems of the globe — the lower winds, that are vitally important to the seaman. To-day aerologists have entered upon the gigantic task of mapping the upper winds, which concern the aeronaut. The first tentative step in this direction was taken a few months ago by two Americans, Messrs. Rotch and Palmer, who published a series of "Charts of the Atmosphere for Aeronauts and Aviators."

The weather forecaster once concerned himself only with the *bottom* of the weather, so to speak; for instance, with the ground plan of a storm, as it appears upon a daily weather map. Now he is called upon to survey the storm as far up as it goes, and to tell the aeronaut just what winds and weather he will encounter thousands of feet above the earth.

A striking illustration of the new order of ideas is seen in Germany, where on January 1, 1911, was founded the world's first aeronautical weather bureau.

Every morning, between 7 and 8 o'clock, at fourteen stations scattered over the German Empire, the movement of the upper air currents is observed by means of small free balloons - technically called pilot-balloons" - whose tracks are determined with the aid of theodolites. The results of the observations are flashed by telegraph to Lindenberg Observatory, where this service has its headquarters, and thence bulletins are sent broadcast over the country for the information of such of the great host of German aeronauts as may be planning aerial journeys. This novel weather bureau - the happy creation of Dr. Richard Assmann, director of Lindenberg Observatory — is the precursor rather than the prototype of a class of institutions destined to become common. Its utility is limited by the fact that only one meteorological element, the wind, can be observed with the simple pilot-balloon, and its perfection awaits the establishment of an extensive network of observatories. equipped with the more elaborate apparatus of upper-air research.

The pilot-balloon is one of four principal aerial vehicles now used in the exploration of the atmosphere; the others being the sounding-balloon, the captive balloon, and the kite. No meteorological apparatus is sent aloft with the pilot-balloon, which therefore serves only to measure, by its observed drift, the direction and force of the upper air currents. By night an illuminated pilot-balloon (an invention of the past year) carries a small storage battery and an electric lamp inside the gasbag, which is colored bright red, so that the lighted balloon may be easily distinguished from the stars when it reaches great altitudes.

The sounding-balloon - often known by its French name, ballon-sonde - is the happiest invention of aerology, and has led to the most remarkable discoveries in this department of science. It is a small free balloon, which carries no human aeronaut, but instead a set of superhuman meteorological instruments, which register continuously and automatically through the whole course of the journey. In its commonest form the sounding-balloon is made of india-rubber, and when launched is inflated to less than its full capacity with hydrogen. As it rises to regions of diminished air pressure it gradually expands, and finally bursts at an elevation approximately determined in advance. A linen cap serves as a parachute, and the case containing the instruments falls gently to the ground. This usually happens many miles - sometimes two hundred or more - from the place of ascent. Attached to the apparatus is a ticket offering the finder a reward for its return, and giving instructions as to packing and shipping. Sooner or later it usually comes back. In fact, the large percentage of records recovered, even in sparsely settled countries, is not the least surprising feature of this novel method of The instruments attached to research. sounding-balloons register the temperature of the air, the barometric pressure, and sometimes the humidity. The record is traced on a revolving drum or disc, usually coated with lampblack. The whole apparatus weighs a little more than a pound (except the type now generally used in England, which weighs only three and onehalf ounces). By means of sounding-balloons the air is explored to greater heights than can be reached by any other form of apparatus now known to man. An altitude of 12 miles is frequently attained; 18.9 miles (nearly 3¹/₂ times the height of the tallest mountain) is the present "record," made September 1, 1910, at Huron, S. D., by the United States Weather Bureau. It was by the aid of sounding-balloons that the stratosphere was discovered.

For observations which have to be recorded quickly — as in connection with weather forecasting — captive balloons or kites are used, though of course they can not reach such heights as the soundingballoons. Thus the highest kite-flight hitherto achieved — viz., at Mt. Weather Observatory, Va., on May 5, 1910 — reached an altitude of 23,826 feet (4½ miles). The instruments attached to captive balloons and kites are somewhat heavier and more complicated than those used with sounding-balloons. They frequently include an anemometer, for registering the force of the wind.

With these instruments the survey of the upper air is now carried on systematically under the general oversight of an international committee, with headquarters at Strassburg, and the network of aerological observatories and stations is spreading rapidly over the globe. A model in-stitution of this class is the Royal Prussian Aeronautical Observatory at Lindenberg; the head and front of aerological research in Europe. At Friedrichshafen - known to fame as the home of Zeppelin - the German Government has maintained, since April, 1908, the so-called "Kite-Station on Lake Constance," where daily kite or balloon ascents are made from a moving steamboat. Other important aerological centres of Europe include the Royal Observatory of Belgium, at Uccle, famous for its remarkably high sounding-balloon as-cents; the private observatory of M. Teisserenc de Bort, at Trappes, near Paris, where was made the epochal discovery of the "isothermal layer"; the active institu-tion founded, through the munificence of Professor Schuster, by the University of Manchester at Glossop, England, which occasionally sends up whole flotillas of sounding-balloons - one every hour for twenty-four hours. Half the countries of Europe maintain at least one institution apiece for upper air research.

In the United States, atmospheric soundings are made regularly at but two places — the Weather Bureau observatory at Mt. Weather, 8 miles from Bluemont, Va., on the crest of the Blue Ridge; and Blue Hill Observatory, near Boston. Occasionally, however, our Weather Bureau carries out

a series of sounding ballon ascensions at favorable places in the Middle West, as was the case when the record height was attained in South Dakota. The Meteorological Service of Canada has recently made some remarkable sounding-balloon ascents at Toronto and Woodstock. There are aerological stations in Egypt, India, Java, Samoa, and Argentina, and on the peak of Teneriffe. Every year additions are made to the list. Finally, aerology has of late become a regular part of the routine work of oceanographic and polar expeditions, while many expeditions have been organized for aerological research alone. The Prince of Monaco has been the Mæcenas of some of these; the Emperor of Germany of others.

Just a word about the uppermost atmosphere: the books tell us that air is a mixture of oxygen and nitrogen, with a little carbonic acid, a little argon, a little watervapor, and an infinitesimal amount of other gases. According to this definition, the atmosphere at great altitudes is not "air." The heavier gases of the atmosphere accumulate at the bottom; the lighter float on top. Above a certain level we believe that the atmosphere consists chiefly of the very light gas hydrogen, of which only a trace is found at the earth's Within a few months, evidence surface. has been offered to prove that even the hydrogen dwindles out at great altitudes, giving place to a still lighter gas, unknown in chemical laboratories, which it is proposed to call "geocoronium."

The rarefied atmosphere of these lofty regions will no longer support our balloons. Even at eighteen miles the air is only about $\frac{1}{76}$ as dense as at sea-level; and this is far indeed below the "top" of the atmosphere.

The study of the atmosphere above the greatest height attainable by balloons, forms a separate chapter in the science of aerology — and one of the most interesting. Here we must depend, in part, upon observations of meteor trains and auroras. The drift of meteor trains tells us something of the movement of the upper currents; their spectra, and those of auroras, give us a clew to the chemical composition of the atmosphere at various levels. Optical phenomena — the upper range of the twilight and of the general light of the sky — tell us something of its density.

Occasionally a gigantic volcanic eruption — such as that of Krakatoa in 1883 hurls a mass of fine dust to a height of fifty miles or more, where it floats for a few years, giving us the interesting phenomenon of "noctilucent clouds"; hence another peg on which to hang our aerological theories.

Even the phenomena of sound are invoked to aid the aerologist. The echoes of great explosions from the bounding planes between atmospheric strata of different densities, scores of miles above the earth — as in the case of a violent dynamite explosion on an Alpine railway a few years ago — have been studied by aerologists, with illuminating results.

And aerology is yet in its infancy.

HOW WE FOUND OUR FARM

JACOB A. RIIS

The WORLD'S WORK will publish an article every month about getting on the land

T WAS settled that we were to have a farm. The matter had been up for discussion for months — a pleasant concession to the democratic spirit of our household; for, Mrs. Jake having demonstrated conclusively (1) that, our little hoard was demanding investment; and (2) by columns of figures cunningly arranged and added up, that the farm was a paying investment, the thing was really as good as done. There remained the question, which farm? Our inclinations ran to fruit, potatoes, and sheep. Fruit, because with much travel

and observation in the far Northwest, had come the conviction that the Eastern soil could grow as fine apples and peaches as could be found in the Hood River country, or the Wenatchee Valley, given as much and as intelligent care of trees and products - apples as fine to look at and as good to eat, if not better. Potatoes, because they were a good crop, of which there couldn't be enough; everybody eats potatoes. Sheep - well, be-cause I like them. Hens and bees were side issues. Mrs. Jake allowed the hens, if I would let her feed them; else she knew they would get too fat. To which assented with a mental reservation. Plump hens do look so comfortable. The bees she left to me, seeing that they did their own foraging and were capable generally of taking care of themselves.

Now, where was our farm? The Agricultural Bureaus of Massachusetts and New York had sent us opulent pamphlets, fairly swelling with information about farms for sale. Painfully plowing through them — real sub-soil plowing, for whenever she found one to her liking she put the owners through a process of quizzing that would have discouraged anybody bent on evasion — Mrs. Jake had evolved an eligible list of some thirty or forty, with three hot favorites. Speak not to me of feminine intuition being a figment of the brain: they were the very ones that eventually proved worth while, and yet to my duller masculine understanding they were in no way distinguishable from the lot.

Meanwhile, they were all to have a trial. We did the sensible thing: we took a week in the autumn sunshine and went up to see for ourselves. It was no end of good fun, even if it involved the pulling down of some of our images; this, for instance, that every farmer is a born philanthropist.

From that delusion we recovered on the first day. We were up at the time a thousand feet surveying a wide landscape and a wretched weather-beaten hut, upon the door-step of which huddled a dozen scrawny chickens seeking shelter from the bitter blast. "Good farm for crops," was the way it had looked in print. 1 will say for the owner that, after sizing us up, he "guessed we wouldn't like it on the hill farm"; but we responded curtly that we were from Missouri, at least half of the family was, and wanted to be shown. The way up was carved out of the solid rock. I doubt if there were a dozen loads of soil on the entire hill; it was just one enormous wart of slate. Heaven knows how the trees grew which we passed going up. Now that we were perched on the perfectly hard bald top, our friend swept the horizon with his whip: "It is nice when you get up here!" The "crops" were represented by a bag of hickory nuts, "good to have around for Thanksgiving."

I forget how we got down. We found ourselves next on nice rolling land half a score of miles away, piloted about by a pathetic old man whose wife was in the hospital. He needn't have told us; the house smelled it; it was awful. He was all alone, keeping house for his hands, baking bread, and getting three meals a day. "I can do it," he said and brought out a cake of the substance of a grindstone. I think we both would have done almost anything for the lonely old man, and in a sudden panic lest he ask us to sample it we bolted for the open. We took note, in going, of some very excellent King apples on badly neglected trees, struggling bravely against an adverse fate. The farm was all right, but then, one has to *live* in the house.

Our next and unwilling host was a tenant farmer. His wife was dead. The man was "lacking," said our conductor, meaning that he had gone out of his head. Before our week was over we had learned the sad suggestion of both: the wife worn out by a life of toil, the husband.helpless, bewildered without her. In the scheme of things the wife's and mother's function had always seemed to me, until then, to be as the heart of the home. I saw her now as hands and head as well. Wherever she had dropped out, discouragement reigned.

Despite the portents of a "wet moon," morning dawned bright and clear. The smell of fresh-lighted wood fires was on the breeze as we drove into the hills on the

Massachusetts border. To the left loomed the Catskill crags; beyond the creek which we followed stretched a country of smiling farms, "all bought up in the last five years," said our driver, and added: good reason; it's as cheap as the Western land and well watered, within three hours of New York and four of Boston. Whv should a man bury himself out there then?" Every field and copse shouted a loud amen. Woodbine and purple grapevine over-running crumbling stone fences against a background of crimson and gold, made it seem a veritable fairyland of delight. Our spirits rose high. The sight of a girl in a red jacket feeding a flock of chickens summoned up visions of a second Petaluma, of eggs and broilers numberless as the sands of the ocean. The sign on a cross-roads store "Home Cured Pork" plunged Mrs. Jake and the driver into deep discussions of pigs and the profit in hams. Every turn of the road added to our stock of information. Here was a man banking celery or something in a muck bed, mysterious term no longer: it was an old lake-bottom, drained out, that was his gold mine. We drove through a sleepy little village set in an amphitheatre of hills, from which decaying old farmhouses looked down upon the flourishing bottoms. Hundreds of acres, relapsed into brush and woods, to be had for a Why? They had prospered once, song. those farms; land had been cleared. The houses had once been good, their lines were fine. They had certainly cost twice what their present owners were asking now for land and all. Again, why? We had not come to the end of the second day, at least I had not, before my interest in their reasons for selling greatly outbalanced that in most of the farms themselves; for many of them were a sorry lot. Sometimes the people were old and tired, needing rest. The "stone age" had worn them out, with the generation before them. The evidence of it was there in the mighty stone fences, miles upon miles of them, picked by hand and piled by hand, the hand that guided the plow, too. It was enough to wear any-body out, strength, patience and all.

That and the unending chores, all work

and no play, had frightened the boys away. The bright ones had gone to the city; the dullards, grubbing away in the old rut, robbing the soil, not tilling it, made the farm duller than ever. The girls had fled to the factory. "Anyhow, they are not much good on a farm said "Oh! one. I saw Mrs. Jake bristle. are they not?" was all she said, but I caught the contemptuous look with which she took in what be had made of it. Over and over again they gave us another reason, all unwittingly, those farmers who were so anxious to sell. It was in answer to some question why this was not done, or that; why the orchard was not pruned, sprayed, why some good acres were not cleared, why they let an unsightly swamp remain an eyesore and a loss, when, by draining, it could be made the most valuable field on the farm: "that looks too much like work!" Ignorance, indifference, incapacity brooded like a cloud over their land. I am speaking of the farmers who wanted to sell, having skinned off the valuable timber to make a quick profit, if timber they had. There were others, but they were not selling out. The day of brains in farming was moving in on their land and replacing the day of mere brawn and endless weary toil.

Our driver pulled up in front of a low straggling house standing at the head of a sweeping valley that opened a long and charming view toward the sun — fine slopes for fruit, potatoes being dug then; on the farther hill beyond the brook a huckleberry patch that brought its owner four hundred dollars last year, so he said, and I believe it. That huckleberry patch was his undoing. Hard work was not his long suit; this was easy money, too easy. It was not enough to keep him, just to tempt him: if he could only lay his hands on some ready cash, he saw chances to make more lying all about, so he thought. But the farm left him no margin, so it had to go. It was cheap, and it grew cheaper as fear lest we pass it by took hold upon him. There were two or three little brooks rippling down the hillsides, and a nasty slough right behind the house which they might fill and make a duck-pond, water power too with a

little fall. Already I heard the music of it plainly in the valley. Water has a strong fascination for me, and here was plenty. But Mrs. Jake turned it down. It could not be made to yield enough of a profit, she said, for we had to build new barns. That was it. It was always the same story. The farms that had human appeal could not be made to pay; those upon which the profit stuck out all over I wouldn't have touched with a ten-foot pole. That grew by degrees to be the real line of division between us. Who would have thought it?

There was, for instance, the farm over in the Massachusetts hills within a stone's throw of the Connecticut line. It was the very cunningest place that was ever seen, and kept - why, the very hens when they laid their eggs delivered them into the hands of the farmer, through a trap-door contrived at the back. The little flock of sheep looked as if they came right out of a picture book. You could have eaten off the barn-floor, and every con-ceivable mechanical contrivance was there. And the brook bad been dammed and made into a pond with fish in. That was what was the matter with that farmer. He was a Connecticut Yankee, though his lands were over the line, and, having exhausted every chance of making further improvements there, his fertile mind was busy with patents that needed money, ready money, always the same. May they bring him fame and fortune, those patents; contentment such as he had there, he will not find again. I wanted that farm with the nice sheep and the fish-pond and the cute little tricks; but Mrs. Jake pointed out that he had made the last penny that could be made out of its lean lands by endless little economies and makeshifts. To us it would be a loss; no profit in it at all.

We drove sadly away, but presently I had my revenge. We were up on a sky farm, one of the three favorites, where the land was the richest grass land ever. Mrs. Jake strode over it, head in air. Here were profits, with hay at I forget how many dollars a ton, I never can remember figures. Such hay, too. A farm that would pay from the very outset. Fine view, too. Yes, the view was fine. The sun rose in the far Eastern hills of Massachusetts, and set behind the Western crags of New York, never out of sight for a minute when it shone at all. I have not often seen so grand a view. But it left me cold. The house was a wretched shack without individuality, on the bald top of the hill, without trees, without background, utterly without appeal. I should get the mollygrumps if I stayed a week, I know I should. And not a glint of water in the landscape. I sat on the step of the house and shivered until even Mrs. Jake took pity on me, and with a sigh let her visions of a corner in hay depart.

Glorious forests hedged in the next farmhouse we bided at. The mercury was down almost to freezing, but there was no cordwood piled by the kitchen door. "It is so much trouble to haul it," said the farmer's wife, "my husband wants a hay farm, where there isn't so much work." I glanced apprehensively at Mrs. Jake, but her robust soul held nothing but contempt for that farmer. Here was his wife shivering with cold, winter knocking at the door, and to haul wood "too much trouble!" We did not buy that farm, or the next, in spite of its bounding brook. That one was beheft with "sand rights." What are they? Why, a former owner had found valuable deposits of moulding sand some two or three feet under his acres, and had sold it to a company that came when it pleased and turned the farm over, as it were, taking away its own and leaving the particular field about three steps lower than it had been. And it might come any time, when the crops were sown or growing - whenever, in fact, it had need of the sand. Nice farm otherwise, but a running earthquake like that under you - no thanks!

And so we came, traveling eastward through the glorious autumn days, at last to the town of Barre, as nearly as 1 can put my finger on the map in the very heart of the old Bay State in which 1 had always secretly longed to plant our homestead. When we went out that morning and stood on the common of the beautiful

little New England town, undefiled by the smoke of factory chimneys, mellow sunlight upon the tall elms and maples - upon grass so green that even to Mrs. Jake the suggestion of hay seemed a profanation, we both exclaimed: "Oh, if it were here!" It was with almost a solemn feeling that we drove over the hills to the last farm on our list. And, as we crossed a murmuring brook and, mounting up on the other side, turned into a country lane with an old square house standing at the end of it, we felt that it was there indeed, that the Crown Hill farm, which from the first we had liked the name of, was the end of our journey. We had found what we sought.

Let me try to set before you the farm of our dreams, as it stood revealed in life. A house a hundred years old, with large rooms and two mighty chimneys, of the kind men build no more, one with an oldfashioned bake-oven in the sitting room. Perfectly simple, but with noble lines and sound timbers. Repairs in plenty to make on house and barn — we are shingling the house even now — run down, yes, but in its day a fine old property that can be made so again. Behind the house a swelling hill that rises to a thousand feet with slopes ideal for fruit. Two hundred and odd broad acres, shut in by pine woods and with little groves here and there, where partridges build their nests and hatch their young. Bounded on two sides by a rippling brook in which little trout leap that shall have a chance to grow big and fat before they are caught. Beyond the road broad stretches of lowbush huckleberry, crimson in the October day. Cool springs on the hillside; foxes, coons, and deer in the woods. What mortal could want more?

Almost I forgot Mrs. Jake, which would have been outrageous, for she has agreed that my share of the farming shall be the hunting and fishing on our land, if I will leave her hens alone. But the human appeal of Crown Hill almost swept her under too, yet not quite. I held my breath through anxious days, while she rallied the agricultural sharps from farm and college and discussed soil, exposures, crops and heaven knows what, as if they had anything to do with it. But the fates were kind. The verdict was that, given energy and brains and some outlay to repair old waste, there was no reason why the farm should not be made to yield a profit now and many hereafter, when our young fruit trees grow up to bear. So now the farm is ours, the brook is ours. the woods, the partridges, the hills, the coons - they are all ours. The huckleberries we will give to the sheep. And if. as my pessimistic neighbor says, you cannot build a fence high enough and tight enough to keep them in, or the murdering dogs out — what is the matter with a couple of collies, I should like to know, if we do have to get them over there where they train them for their work?

I see with prophetic vision the little lane leading up from the road lined with blossoming cherries in May. I see our porch overrun with crimson ramblers, black starlings building in the two giant maples in front of the house -1 heard them whistle, all right - I see acres and acres of apples on the south slopes of our hill, Bell Flower, Northern Spy, Gravenstein that came from the land where I was born, and the russet apple beloved of boys and of some men 1 know - trees pruned and sprayed and tended as they are out West, and with raspberries and gooseberries and currants between the rows. I see other acres of peach-trees on the northern slope that shall demolish the hoary old lie that you can't raise peaches as good as the best in those hills. I see our farm become sanctuary for all the wild things of field and forest, except the foxes for whom I reserve my gun. see peace and prosperity abiding on Crown Hill for evermore, the cunning calculations of its mistress made good, and more than good. I saw it all that day when we had left the farm and gone down to the little depot by the brook, saw it in the masterful look she cast upward over her domain as she pulled down the flag from its socket and signaled the train that was whistling around the curve. My, it beats all! I didn't know there was a flag, or that she was the stationmaster, till I saw her do it.

THE MARCH OF THE CITIES

MORE THAN \$700,000 IN IMPROVEMENTS FOR 7,000 PEOPLE

HAT do we need with a new form of government?" demanded Our Most Prominent Citizen. "The commission idea

may be a good thing for Galveston, or Des Moines, or any of the larger cities where there is opportunity for graft and for maladministration, but this is Grand Junction, Col. We have only about 7,000 people, and we know each other and what our city officials are doing. We had better let well enough alone."

But, because the majority of citizens did not agree with him, Grand Junction has been able to prove that, even in cities of less than 10,000 inhabitants, where there is small chance for graft or public thievery; miracles for good can be wrought by intelligent government.

It was the saloons that were responsible for the reform wave in Grand Junction; they mixed liquor with politics in a way which was too much for the every-day citizen to endure, so, in April, 1909, the citizens voted the saloons out and made provision for the charter. They placed the framing of it in the hands of its friends, and a commission composed of five was authorized, each man to be at the head of a department of city government previously held by a salaried official. The preferential system of voting was tried and proved to be a success.

Two years of the charter government has demonstrated its success, and fully go per cent. of the voters now pronounce it an improvement over the old disorganized form. Even the former enemies of the system are now its friends.

In the last year of the old form, the total cost of administration was \$56,788.49. The estimate for the present year is \$49,986.43 — a saving of \$7,000. The first year under the business administration represented a reduction in the warrant indebtedness of the city, of \$20,000.

Formerly the city enjoyed a revenue of

\$10,000 annually from the saloons; the new government has been maintained without that help and with an increase in the tax levy of but two mills.

In addition to this showing of economy, the commissioners have increased the wages of city employees fifty cents per day, or \$5,000 per year. They have equipped the city with an expensive auto-fire truck out of the ordinary revenues; have provided a free garbage collection; have improved parks; established a municipal wood-pile and a municipal bathing pool. But the greatest benefit of all has been the increased confidence of the people in their officials—which is exemplified by the authorization granted at a special election for the expenditure of nearly three quarters of a million dollars in public improvement.

The new charter has taken a decided stand in forbidding absolutely the contract method of accomplishing city work. By so doing, it has saved \$7,000 on the sewer system just completed.

The paving of the down-town streets — for years an impassable bog during winter—is nearly finished. The estimated cost was \$150,000, but the completed work will be considerably less.

The mountain water system for which the tax payers voted \$450,000 is probably as great a municipal contract as was ever undertaken by a community the size of Grand Junction. Water will be carried by gravity, through underground conduits, a distance of thirty miles down the mountain side direct to reservoirs located high enough to give plenty of pressure for fire purposes. No contractor will share in the profits of this enterprise; for it is being managed personally by the Commissioner of Water and Sewers.

These are but a few of the achievements of the commission system in a small town a town however, of public spirit — which authorizes the expenditure of one hundred dollars for every man, woman and child within its borders.

The World's Work

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THE WORLD'S WORK

MARCH, 1912

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NUMBER 5

THE MARCH OF EVENTS

ATIONAL politics, as we take it, is at once a duty, a diversion, a sport, and a nuisance.

There is justification of a Presidential election every four years in the educational value of such an experience. We hear important principles and policies discussed, and we come in contact with the real leaders of the people. We take a measure of the way we are going.

a measure of the way we are going. But, along with this serious and important work, we mingle a lot of trivial and dissipating gossip and speculation. We ask whether Mr. Roosevelt emphasized tweedledum or tweedledee, and whether Governor Wilson was really austere or only direct in his conversation with his friends of the gentle military titles. Thus in social diversion do we waste our time and magnify trifles every four years.

As a sport every campaign brings its excitement. We argue and lay wagers; we enjoy the combat; we applaud the belligerent orators. And this sporting quality of a vigorous campaign is healthful exercise and worth while.

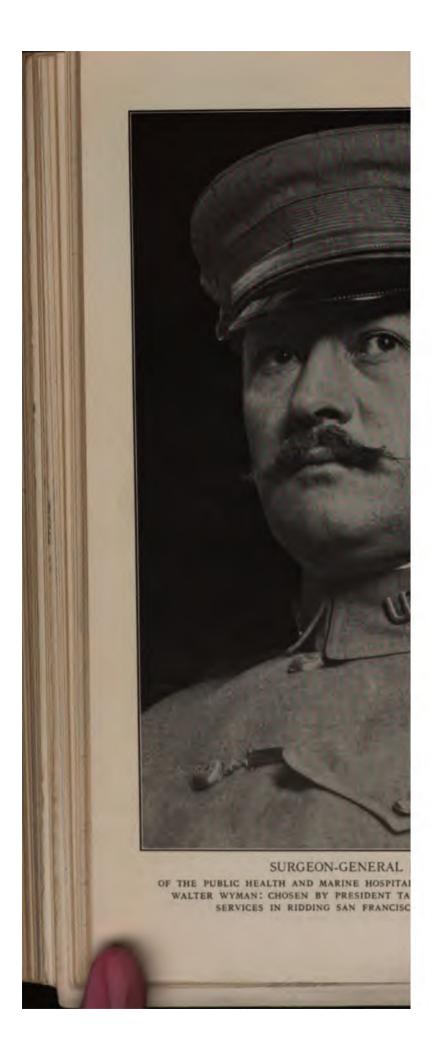
But we make our politics at such a

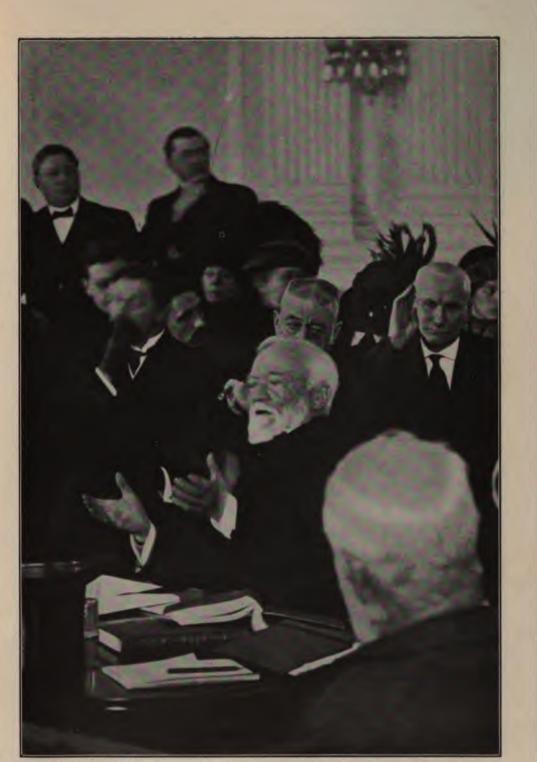
time also a nuisance. We hesitate in business; we become timid in forming commercial or financial opinions and in making plans; if trade be dull, we blame the politicians, and saying a thousand times that politics hinders us makes the saying true. Of course, too, there is a direct bearing on trade of possible changes in policies.

But has it occurred to you that the shrewd and unexcited man may find an advantage in this very situation? When everybody else has a tendency to hesitate, that is the very time when a shrewd man may profit by renewed diligence. The degree of disturbance is always exaggerated. You may measure the truth by a frank examination of your own affairs.

The wise use of a Presidential campaign is seriously to study the men and subjects that it brings forward, to form clear judgments and to make your influence felt as earnestly as you can; then to enter into and enjoy the contest, but to omit the silly details; and all the while to go about your work with at least as much zeal and confidence as if all your neighbors and competitors were doing their best.

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MR. CARNEGIE: "THERE IS NO COMPETITION." "STEEL NEEDS NO TARIFF." Other assertions that startled the Stanley Steel Investigating Committee of Congress were : "The time has arrived when it is absolutely necessary for the Federal Government to come in and fix maximum prices." "The consumers are absolutely at the mercy of these corporations." "I recant what I said in 1888 about the 'Bugaboo of Trusts' and the return of the age of competition"





MISS HARRIET L. KEELER THE NEW CITY SUPERINTENDENT OF SCHOOLS OF CLEVELAND, O., WHO BELIEVES THAT POOR CHILDREN SHOULD BE FED IN SCHOOL: AND THAT "THE WORLD HAS GONE AS FAR AS MAN CAN TAKE IT ALONE"



THE FALL OF NANKING UPPER PICTURE: THE REMAINS OF THE IMPERIALIST CAMP, OVERLOOKING NANKING MIDDLE PICTURE: THE FLAG OF THE REPUBLIC, OVER GENERAL CHII'S HEADQUARTERS LOWER PICTURE: REVOLUTIONISTS BRINGING AN IMPERIALIST CAPTIVE INTO CAMP

MR. ROOSEVELT?

N NOVEMBER 8, 1904, the night of his election to the Presidency, Mr. Roosevelt said:

On the 4th of March next I shall have served three and a half years, and this three and a half years constitute my first term. The wise custom which limits the president to two terms regards the substance and not the form, and under no circumstances will I be a candidate for or accept another nomination.

There was no necessity for his making this statement except his own feeling that such a clear understanding with the people would enable him the better to do the duties of the great office. It was in the nature of a contract which meant this:

"I wish to make sure that no act of mine shall be done with reference to my own political fortunes or shall seem so to be done; and, to remove all temptation and to prevent misunderstanding, 1 now declare that 1 will not seek to be nor consent to be President again." That was the meaning of it. It was a good impulse that prompted this declaration and it was made with sincerity and wisdom.

Three years later, on December 11, 1907, Mr. Roosevelt said:

I have not changed and shall not change that decision thus announced.

Nor has he said at any time since that he has changed his decision. But there has lately arisen such a clamor for his nomination that it is confidently expected, apparently by an increasing number of men, that if he be nominated he will not refuse. These friends say that he ought not and cannot refuse. Read, for example, the explanation in this magazine by ex-Governor Fort of New Jersey of his reasons why Mr. Roosevelt ought to change his decision. That is typical of many such explanations and "demands"—a personal argument and little more.

Π

What does this clamor for Mr. Roosevelt mean to the Republican party? It means a confession that Mr. Taft has failed as a party leader, that the division in the party has not been healed but has become wider, and that there is a practical certainty of defeat if he be renominated. All this may be true. But the call for Mr. Roosevelt means also a confession that there is no other Republican who can win the election. It means a confession of an amazing paucity of men in the party who can command the party's confidence. It means Mr. Roosevelt or defeat, or — both.

If it be granted that only one man can save the party, the party ought to be defeated. Any party that reaches such a predicament ought to be defeated; for it thereby confesses that it has ceased to be a party held together by principles or large policies, but has degenerated into the personal following of an individual. There is a sad confession, therefore, in this clamor — a confession that may turn out to be the forerunner and partial cause of defeat.

And what does this call for Mr. Roosevelt mean to him? It means that those who make it confess that the party is in so bad a plight that only his personal popularity can save it, that it has been done to death by the leader of his own choosing whom he is now asked to oppose, that an honored precedent and a solemn personal resolution must be set aside to save the personal political fortunes of party leaders. For who dares say that any great principle is at stake? As between possible Republican nominees, it is a struggle chiefly of personalities. What large policy separates Mr. Taft from Mr. Roosevelt or Mr. Cummins? Perhaps a shade of difference in protection, or a shade of difference about treaties of arbitration. For the rest, the differences, great as they are, are merely personal. This, then, is the low level of a personal political struggle, not of a statesmanlike contest. And Mr. Roosevelt is asked to enter this personal struggle.

Ш

It is worth recalling that the mood and thought of the people are not the same as they were in 1904, when Mr. Roosevelt was last a candidate. The House is Democratic and the Senate, too, may

become so. The Republican factions are irreconcilable. Campaign contributions must be made public. Party ties are looser than ever before. Mr. Bryan's shadow has passed from the Democratic The old Senate oligarchy has horizon. been overthrown. Most of the old bosses are gone. The people are trying new devices to use their power themselves. Most of all, the long-suppressed demand for tariff-reduction has been heard; and this most important subject is even yet outside the wide range of Mr. Roosevelt's didactic activities. He will now hardly be likely to get credit for discovering its importance or to profit by the strong tide in favor of its reform. However spirited his manner, he must ride in the rear during this charge. Big Business has bought copies of the ten commandments and has heard them expounded from the Supreme Court. The year 1912 is not the same as the year 1904.

1V

Let us assume that he will be nominated, without his active seeking and that he will accept after a bitter personal struggle and against precedent and against his own patriotic resolution — what then? A campaign in the forced false note of heroworship; the resentment by independent men both of the vanity and of the servility implied in the confession that a party's fate lies in the hands of one man; then, in all probability, defeat — not an heroic defeat but only a hero's defeat. That would be repeating Democratic history under Mr. Bryan's leadership.

Or suppose Mr. Roosevelt should be elected? Then it would be a personal triumph rather than a party victory; and his third administration would be a continuation of the personal struggle whereby it was won — a bitter administration, however brilliant.

V

Now, by contrast, consider this ending of the present noise: Mr. Roosevelt, after his exceedingly successful and distinguished career as President when for seven years he gave a healthful stimulus to our whole political life and lifted it to a new

level, now decisively withdrawn from all partisan struggles; assuring his toozealous friends that no party-crisis warrants the breaking of his honorable resolve; remaining apart from the personal turmoil that his own energy brought when he shook the stagnant calm of public life into wholesome struggle and set a new standard of activity — it was a great task that he did just when it needed doing, a new impulse that he gave when politics had sunk to a sodden level; but that task is done, that day is gone, new personalities are come, new duties, needs of other qualities think of Mr. Roosevelt with this great achievement to his credit, giving his days henceforth to friendly aid of the forces that he set going. No amount of further political activity can bring him the position of influence and of dignity that is now within his reach, nor the profound respect of the great body of silent citizens, which he can keep and strengthen by dismissing his followers who have caught his manner without catching his nobler spirit or his larger vision.

But, if he should mistake the voice of a bewildered and desperate faction for the voice of the nation, he would follow a dying sound. For, in our democracy at least, no man can long remain a hero who permits the noise of hero-worship to echo in the chambers either of his vanity or of his patriotism. Defeated or elected, he would not be the natural greater Roosevelt but a revival of himself, in danger always of a comic repetition of deeds that no more need doing.

VI

The natural nominees of the two parties — the bosses and Big Business keeping their hands off and allowing the people to name the men that most naturally now represent the masses — would be President Taft and Governor Wilson. One represents the bewildered inefficiency of one party, and the other the best aspirations of the other party in its hope of rejuvenation.

The call for Mr. Roosevelt must be classed not a normal and calm but excited and mistaken act of desperation, an unfair temptation to him, a violence to an

honored national tradition and to a patriotic resolution of his own, and a humiliating and ominous confession of impending defeat.

A PLEA FOR FAIR JUDGMENT

AS THE national conventions come near and political activity becomes fierce, it is a good time to make sure that we do not form political judgments of which we shall be ashamed later. It is a good time to make sure that we judge public men fairly.

For instance, President Taft. While he has not been a tactful or inspiring political leader, he has been by far a better President than most men who have held the great office. Now when his mistakes and misfortunes are emphasized by his critics, let us remember in fairness that he has kept his patriotic course true. He has made judicial appointments with care and in good conscience. He has enforced the Sherman Anti-Trust Law. He has done all that he could to further such excellent plans as the postal savings banks and a parcels post. He has made economies in the administrative branch of the Government. He has had instructive inquiries made into tariff-schedules and into railway finance and values. He has had a clean and patriotic administration. If it has not been invigorating and inspiring, it has been safe and of high aim. He is not the kind of man by temperament for leadership; but among clean, commonplace presidents, he will take high rank; and most presidents have been merely clean and commonplace. Our political system generally puts such men in the office in quiet times.

For another example, Mr. Roosevelt. Heaven knows he is energetic enough even in the calmest weather. It is a dull day when by word or deed he does not give the newspapers an acceptable item; and in a time of political excitement, he is a centre of whirlwinds. But, suppose if you can that he wished to be forgotten, how could he accomplish it? It is not probable that reporters really annoy him; but how could he avoid them if they did annoy him? A man of another tempera-

ment might be an ex-President in quiet,

but hardly he. Yet does any man, in his calm judgment, imagine that Mr. Roosevelt, with all his energy and all his somewhat tiresome self-consciousness, is such a man as a large part of the press now picture him? It is a good time to recall the real Mr. Roosevelt and to refuse to accept the current caricature.

Or Governor Wilson. He has made New Jersey a respectable commonwealth. He has set forth the Democratic philosophy of government and of life with a force and clearness new to this generation; and he has lifted his party to a much higher plane of thought and purpose and economic character than it has held for a very long time. If he changed his convictions about such machinery as the referendum, and if he wrote an inquiry about his eligibility to an academic pension, if he suffered an amusing and inconsequential flood of Wattersonian words (what a comedy Kentucky sometimes gives the country!), are these base acts in an honorable man's career? The disproportionate publicity given to such things as these may indicate the probability of Governor Wilson's nomination.

Again, Senator La Follette has for a long part of his career thriven on abuse and ridicule. But misrepresentation has not checked the development of his career. It may possibly have confirmed him in some of his more advanced (or "radical" if you prefer) ideas, for his is the fighting temperament. But many men who harshly criticize him now do more harm to themselves than to him.

For the point of these paragraphs is not so much a defense of the men who are in the field for the Presidential nomination as a defense of ourselves against the low and cheap vice of misrepresentation and misjudgment. An unjust judgment of any man in public life may be an injury to that man; but the easy habit of forming unjust judgments is sure to be an injury to right public opinion; and this is a more serious matter. For precisely in proportion to the prevalence of unjust judgments does public opinion become untrustworthy. Before you form or accept or repeat cheap partisan judgments of eminent men, think of the kind of critics that easily excel in such unworthy exercise, and desist. Any common stump politician can outdo you in passing snap judgments on men whose character and labors are among the chief assets of the country. For the foregoing men (and the list might easily be extended) are men that any country might be proud of.

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A CORPORATION'S EMPLOYEES

A STOCKHOLDER of the United States Steel Corporation, Mr. Cabot, of Boston, has caused an investigation to be made into the working conditions of the employees of the corporation. This is a friendly investigation of precisely the sort that ought to be made when there is any suspected reason for such information. And the supposition is that it will lead to a correction of some of the worst conditions to be found in the whole working world.

In the Pittsburg survey made by the Russell Sage Foundation, it was shown that the 8-hour day in the steel-working trades has practically disappeared; that most of the employees engaged in processes of making steel work 12 hours; that many work seven days in the week, either without a full day of rest, or with a free Sunday one week and 24 hours of continuous duty the next.

Speeding-up methods have augmented production in every department. Even where no new processes or machines have been introduced, the output has increased and in many cases is double what it was fifteen years ago. . . These physical conditions, coupled with the prolonged tension, result at many points in the working life of the mills, in human overstrain.

This investigation was made in 1908. The United States Bureau of Labor has made a report of conditions in 1910:

Working hours were reported for 90,564; of this number 44,993 had a working week of 72 hours or over, which is, in effect, at least a 12-hour day for six days a week. Approximately one third of all the employees had a regular working week of more than 72 hours, which practically means some work on Sunday. Over 22,000 had a working week of 84 or more hours, which means at least 12 hours every day in the week, including Sunday. Approximately three fourths of all the employees had a working week of over 60 hours; 11 per cent. of all the employees had a working week of just 60 hours; while only 16 per cent. had a working week of less than 60 hours.

Since these figures were compiled the United States Steel Corporation and many of the independent companies have adopted a plan for giving one day of rest in seven even to those employees engaged in processes necessarily continuous.

There is, however, no evidence that any move has been made to eliminate the 12hour day. But it is only by abolishing such a working schedule that the steel companies can free themselves from the charge of maintaining conditions out of harmony with American standards. In most other industries a shorter work-day has come to be the standard. Indeed, it was as long ago as the administration of President Van Buren that 10 hours was established as the working day in Government service, and in 1869 Congress passed an 8-hour law for Government work.

The steel industry cannot be operated on a 10-hour basis, because the processes are continuous. The mills must be operated 24 hours in the day, and that means that either two shifts of men, each working 12 hours, or three shifts of men and an 8hour day.

The paper industry also is continuous, but the largest paper mills in the United States are operated by three shifts of men, each working 8 hours, and, although there are some paper mills still operating on the 12-hour schedule with the two shifts, the 8-hour mills seem to be able to compete with them successfully. The smelters of the Rocky Mountain Ore Districts have to be operated continuously also, and these, too, have adopted three shifts and an 8-hour day.

Was Judge Gray not mistaken, then, when he said, as he was lately reported to say, that "the treatment accorded by our Corporation to its employees compares favorably with that of any line of industry in this country or any other country at the present time, or any period in the history of the world?"

The Bureau of Labor's report gives these facts about the wages of these workers: . "Of the total of 90,599 employees . . . 44,913 receive less than 18 cents per hour. Those earning 18 and under 25 cents per hour number 22,975, while 22,711, earned 25 cents and over. A few very highly skilled employees received \$1.25 per hour, and those receiving 50 cents and over per hour number 3,915.

Eighteen cents an hour means \$2.16 for a 12-hour day. Practically 50 per cent. of the employees earn less than \$2.16 a day. More than 21 per cent. earn \$1.92 a day. And steel works and rolling mills in Pennsylvania were in operation, in 1910, an average of 286 days, according to the Pennsylvania Bureau of Industrial Statistics. That would provide an income in 1910 of less than \$617 for 50 per cent. of the workers, and less than \$549 for 21 per cent., less than a family can get the necessities of life for.

And in this whole industry unionism has been eliminated. No part of these 300,000 workmen are organized.

Now this is not an industry of doubtful financial success. It is the very industry, too, in which the system of selling stock to employees on favorable terms has been held up as a proof that they are well treated. But, until further facts come out or some change is made, this great corporation will rest under the conviction by public opinion of profiting by ill-paid labor done under inhuman conditions.

H

The good point is that a stockholder has caused an investigation to be made for the information of his fellow-stockholders. They have direct responsibilities in the matter, and they alone can put the management of the corporation on effective trial before public opinion. Query: Are you a stockholder in any corporation that may be treating its working force inconsiderately? If you are, is it not your personal concern to find out the truth and to correct the evil if there be evil?

When any considerable number of holders of stock in corporations bring this responsibility home to themselves, we shall be getting at the root of the matter in a proper and fundamental way. And if you draw dividends, haven't you such a responsibility?

CREDIT FOR THE POOR MAN

IME and again the WORLD'S WORK has directed attention to the system of credit-banks that has overrun Europe — organizations whereby farmers and other men of small resources and credit so coöperate as to secure loans for productive uses at low interest. lt is a system, in other words, whereby the poor man can establish and profit by a credit and build up his business and lift himself into a higher economic class. It is perhaps the best economic and truly educational invention of the last century. In Germany alone more than a billion and a half dollars were so lent last year at about 5 per cent. interest — lent safely to poor men who otherwise could not have commanded loans at all.

Now Mr. David Lubin of the International Institute of Agriculture, whose society has published and distributed many explanations of this system of credit-banks, is coming to the United States to hold meetings to induce our business men and farmers to adopt it. It would be hard to find in the whole range of human experience a more useful help to the tillers of the soil in the United States.

THE RECALL OF JUDGES IN CALIFORNIA

THE people of California were bossridden for fifty years. Political advancement lay through the favor of the officials of the Southern Pacific Railroad, and through no other channel. Even judges — judges of the Supreme Court, as well as judges of the county courts — came to the bench only by way of this railroad favor. Perhaps this control of the courts was the most exasperating thing in all the long history of political misrule.

A year ago, California swept the railroad machine into the scrap-heap and elected a progressive Governor and legislature. One of the first acts in their comprehensive programme of reform was to submit to the people constitutional amendments providing for direct legislation, for the recall as well as for the initiative and the referendum — the recall

even of judges. President Taft declared himself against so "radical" an "attack" upon the independence of judges. Conservative opinion throughout the country expressed alarm lest judges might be recalled by the hasty action of the people when the people were moved by deep resentments. The amendments we're adopted by a vote of four to one.

California may be fairly taken as an extreme example of such resentments as the conservatives fear. When the recall was adopted, men sat on the bench of the Supreme Court, of whom it was known beyond a doubt that they owed their position to the friendship of the railroad, and of whose actions on the bench the railroad had no reason to complain. lf deep resentments were to sway the public mind, here was the occasion. But no responsible person in California has yet suggested that any judge be recalled. The power is in the people's hands, but they seem conservative in using it against the courts. They no doubt regard it as a gun behind the door.

GERMANY'S POLITICAL CRISIS

THE most surprising and important fact in contemporary European history is the strength of the Socialists in the present German parliament — the Reichstag. At the dissolution of the last session, they mustered 53; this year's elections give them 110 members and make theirs the largest individual group in Germany's imperial legislature.

The significance of this fact is enhanced by several circumstances: Under the present suffrage laws of Germany, Socialists vote under a tremendous handicap. The empire was divided into parliamentary districts in 1871, and that division is still in force, though since 1871 the population of the cities and industrial districts has increased out of all proportion to that of the agricultural districts. The strength of the Socialist vote is in the cities, and under a fair apportionment they would be entitled to many more seats. In the last Reichstag, 2,150,000 Conservative voters were represented by 112 members, while 3,200,000 Socialist voters had only

43 members. That is, it took only 2,000 votes to return a Conservative member, but 7,600 votes were required to elect a Socialist. East Prussia contains 400,000 voters and has 17 seats in Parliament; Berlin, 500,000 voters and only 6 seats. That is, in the agricultural country, every 23,500 electors has a Reichstag member; in the industrial city, every 83,000. The city man's vote counts for less than one third as much as the agriculturist's.

In Germany, elections go by majorities, not by pluralities as with us, and when no candidate shows a majority, a secnd ballot is persease. In this case the

nd ballot is necessary. In this case the ocialists were stronger at the second balk ting than at the first. In the reballoting, the made far greater gains than they had h d for; that is to say, in a surmber of districts, Progressives pris. Is combined upon the Socialist and . . A curious result was reached Kaiser division" of Berlin. In cand. in th the first election, the Socialists captured every election district in Berlin, except the one in which the Emperor's city palace is located and in which his Ministers live. Here the Socialists led, but on the second ballot, the Ministers and the Government's civil employees, headed by the Imperial Chancellor, Dr. von Bethmann-Hollweg himself, went to the polls and voted, not for their own candidate, a Conservative, but for the Radical candidate, securing his election by a majority of 7 over the hated "Red."

À circumstance which must have been particularly humiliating to the Emperor was the election of a Socialist in his own district at Potsdam, the chief imperial residence and the chief garrison town. To make that matter worse, if possible, Dr. Liebknecht, who will have the Kaiser for one of his constituents, had just been released from prison, where he had served a sentence of eighteen months for activity in the anti-militarist propaganda. Nothing could more emphatically declare the difference between the Kaiser's government and his people.

11

The final results appear to be: Socialists, 110; Radicals, 42; Liberals, 46; other progressives, 7; total "Left," 205; Clericals (Roman Catholics), 93; Particularists, 29; Conservatives and allies, 69; total "Right," 192; Independent, 1.

total "Right," 192; Independent, 1. It is clear that the chancellor, Dr. Bethmann-Hollweg, cannot carry on the government through the old "bloc" the combination of Conservatives and Catholics - by means of which he has heretofore secured majorities for his measures. The balance of power is in the hands of the National Liberals, whose chief is Ernst Bassermann. With Liberal assistance, the Government ought to be able to get its army and navy bills through - but that assistance will cost somethin *j*. The session will be a stormy one. It may be a short one. It can he dly be so short but that the vital qu tions of ing the redistricting the empire and h hstag Ministry under control of th **utional** - that is, the creation of a co Germany — will be raised.

The Kaiser is an able and prilliant with a record of daring and man effective deeds. He has a dominating sense of the value of dramatic action. The moment is opportune for a coup. It might take the form of a dissolution of this legislature, the raising of the anti-English or some other patriotic cry, and a new appeal to the people. The Reactionaries advise and expect some such course as that. What a pity it is that the Emperor, with all his ability and brilliancy, is not sufficiently alive to the movement of the age to throw off the trammelling superstitution of "divine right," break the shackles of bureaucracy, and put himself at the head of the popular awakening which has suddenly made Germany, despite its Mediæval government, one of the most progressive and prosperous of modern nations, and which might make it, under democratic rule, led by an Emperor as sympathetic with the aspirations of the people as he is bold, energetic, imaginative, and magnetic the most enviable of all!

The "Socialist" vote of Germany does not denote belief in the doctrines of Socialism; it represents actually dissatisfaction with the present Government. What a chance for a great ruler!

IN THE INTEREST OF PEACE

HE interest with which the fate of

the General Arbitration Treaties is awaited ought not to be allowed to divert public attention from another, and a much more immediately practical concern of the friends of international peace — namely, the fate of the treaties negotiated last year between the United States and Honduras and the United States and Nicaragua, now awaiting confirmation by the Senate.

These conventions aim to establish conditions under which two Central American countries can hope to advance to a state of settled peace and civilization. They provide for loans to be made them by private bankers of the United States, sufficient to cover all their outstanding obligations, the interest on these loans to be guaranteed out of the customs receipts of the two countries, the customhouses to be administered under the general oversight and the protection of the United States.

The arrangement is on the general line of that made seven years ago with Santo Domingo, which has brought about the happiest and most gratifying results. The Dominican Republic was in desperate straits in 1904; European Powers were on the point of descending on the island for long-delayed arrears of interest on the country's gigantic debt. The Mon-roe Doctrine was menaced. The United States undertook an adjustment of the Dominican debt and assumed the administration of the custom-houses. The Secretary of State, Mr. Knox, in a speech delivered before the New York State Bar Association the other day, thus described the results:

The creditors now punctually receive their interest, and there is at present turned over to the Dominican Government for the purposes of defraying its current expenses an amount far in excess of what the total revenues of the Republic had previously been. Since the American management of the customs has existed it has been found possible to reduce the import tariff by approximately one half, notwithstanding which the import duties have increased from one million eight hundred thousand dollars in 1904 to over three million three hundred thousand in 1911, while the total foreign trade of the Republic has grown from about six millions to over seventeen millions of dollars in the same period, and the annual harvest of revolutions is no longer gathered and military expenses which formerly depleted the treasury have been reduced to a minimum.

What has been done in the Dominican Republic can be done in Guatemala and Honduras, that cock-pit of Central Amer-Left to themselves, these counica. tries will never be able to extricate themselves mesh of from the national bankruptcy and the confirmed habit of constant civil strife. They have in-They have invited the aid of their great neighbor to the extent of extending a powerful arm over their custom-houses - the explanation of all revolutions, the key to all peace, prosperity, and progress. To extend that help would cost us nothing — it would, on the contrary, relieve us of the expense and worry of watching constant revolutions - and would very greatly promote civilization in this hemisphere.

THE PROPER PUBLICATION OF PENSIONERS

T IS inconceivable upon what patriotic ground any Congressman or Senator can vote against Senator Bryan's bill directing the Commissioner of Pensions to publish in his next annual report the names and residences of every pensioner on the rolls, together with his term of military service and the act of Congress under which he draws his pension. The publication of the roster will go a long way toward cleaning it up - toward expunging from it the names of frauds and scoundrels who never wore the uniform or who dishonored it by desertion, of undeserving relatives and fake widows.

Senator Bryan's bill looks in the right direction. Yet it is not as effective a measure as it might be made by amendment. It contemplates the publication of the roll by states. Now there are 85,000 pensioners in Pennsylvania; 85,-000 in Ohio; 75,000 in New York; 60,000 in Illinois; 55,000 in Indiana, and so forth. Nobody is going to hunt over

a list of many thousand names in order to find a few which he knows. The names should be grouped under their post office addresses; for only so can the attention of communities be secured; on any other arrangement the publication is hardly worth while. Let the roster be made public in such a way that citizens everywhere may have a chance to learn who in their own neighborhoods are drawing Government money. Citizens are entitled to that knowledge. Pensioners are en-titled to have their neighbors know of the honor and distinction they enjoy. There is nothing disgraceful in being a pensioner. The list is always referred to as a roll of honor — and it would be one, if it could be cleansed by the erasure of the names of those who have won places on it by fraud and retain them, thanks to the secrecy with which the Government surrounds pension matters.

If Senator Bryan is in earnest, he will amend his bill. There ought to be enough honest men in Congress to pass it in a really effective form.

IS BUSINESS GOING AHEAD?

ARLY in the new year, more cheerful signs appeared in many branches of trade. In the steel trade particularly orders came in at a tremendous rate, but of course at prices far below the prices to which the steel people have been accustomed in recent years. In other words, while the volume of new business booked was very satisfactory, and the prospects were therefore cheerful from the standpoint of labor, the business was taken on a basis that does not promise by any means a bumper year in the profits of the steel manufacturers.

In a measure, this has been true all along the line. The great machinery trade, the textile trade, and nearly all the metal working trades eased off prices in some cases to a point that promises smaller dividends to stockholders and occasionally smaller wages to the employees. Two or three strikes have been fought to a finish, and in nearly all trades there is a tendency to stiffen against the demands of labor in order to keep the relatively small margin of profit intact.

When it comes down to a final analysis it is guite apparent that the tide has not yet fully turned. A more or less artificial cheerfulness is the correct attitude in Wall Street and in the great branches of trade that are most closely allied with the Wall Street market. But the scattered industries of the country are still running on rather scanty orders and at reduced prices for their products. The attempt to create enthusiasm by fictitious activity at the great market centres is thoroughly well understood, not only by the student of finance and trade but by the rank and file of merchants and manufacturers themselves

While, therefore, superficial appearances seem to indicate a possible sudden revival of business from the blows which it has suffered in the last twelve months, the real facts in the case point to continued dullness, somewhat curtailed demand, and a good deal of lethargy in the manufacturing branches of commerce. This diagnosis was borne out by the money conditions in financial centres. Many hundreds of millions of dollars that are normally occupied in manufacturing and moving the products of commerce are lying idle in the banks, or seeking employment in temporary loans at very low rates of interest. Thus, the American banks lent enormous sums of money in the fall of 1911 in Europe and were perfectly willing to renew these loans in January at almost any rate that could be obtained. In New York, at the turn of the month, loans were made for six months on good security at 31 per cent.; the markets were full of money and this more than any other one cause kept the security market going and helped to create an appearance of great buoyancy. and reviving confidence, whereas in reality it was a sign of lethargy in the real commercial pursuits of the country.

It would appear that 1912 is no exception to the ordinary rule of Presidential years. Perhaps, however, the situation has its cheerful aspects. It may be that a year of dullness will do more than anything else could do to heal the scars left over from the catastrophe of 1907. Every one knows that the panic of 1907 did not run its course and that the evils which occasioned it were only partly remedied by the collapse and by the relatively short period that followed that collapse up to date. Another year of uncertainty, hesitation, and doubt, while it may be painful as it goes, may be a most salutary and beneficent dispensation of providence.

At any rate, it will give us time to digest the Aldrich banking and currency reform, the great Trust question, possibly the tariff question, and the growing uneasiness of the people in a political and commercial sense. If business were running at full speed, any one of these problems might cause a great commercial catastrophe; but if we are moving forward slowly and in an orderly progression all of them may be adjusted without great danger or great loss.

ABOUT "PEOPLEIZING" INDUSTRY

THE holding of corporation-stock by the employees of corporations is an excellent plan for many reasons, and, under wise management, brings good results of many kinds. But there is no warrant for the continued repetition of the fallacy that it makes such corporations "national institutions," or "puts their management into the hands of the people," or "peopleizes" them.

The truth is — and it is vicious to conceal it or to smear it over with sentimental misrepresentation — that practically all successful corporations are controlled by little groups of men, however many small, scattered stockholders there may be. Even when the managing group do not own a majority of the stock, they can keep the control, particularly if they are successful, but often even if they are not successful, in their management. When the elections in their management. of officers and directors in big corporations are held, the small stockholders' votes are practically all cast, if cast at all, by proxies made out in the names of the officers or directors then in charge. Should a small stockholder desire a new deal, he would encounter great natural difficulties, to say nothing of artificial difficulties which could be easily put in his way. In the case of very large corporations, such as the Pennsylvania Railroad and the Steel Corporation, the mere copying of the names and addresses of the shareholders would be a prohibitory trouble and expense.

The controlling influence in the large corporations is necessarily self-perpetuating, and is likely to be the more easily selfperpetuating in proportion to the increase of the number of stockholders.

To induce wage-earners to buy stock, then, with the idea that they are likely to have any influence on the control of a corporation, or to work up a maudlin false notion about the "democracy of industry" as represented by big corporations is, when stripped of fine phrases, a mere falsehood. It belongs with the tender concern for widows and orphans which big rogues affected till it wore out.

Yet there are most excellent good reasons why the employees of any honest and successful corporation should own stock in it; and the smaller the corporation, as a rule, the better are these reasons. Such an arrangement makes a more homogeneous and friendly and efficient and considerate working family. It brings managers and employees closer together in interest and in sympathy. And in small corporations, small stockholders can have, and often do have, much influence on the management, even though they lack influential voting power. These good reasons make the loose talk of our "capitalistic philanthropists" the more disgusting.

BAFFLING KINDS OF IGNORANCE

HERE are certain sorts of ignorance against which society seems to make little headway, do what it will. For instance, the promoters of fraudulent investment schemes whom the Government convicted last year by their use of the mails, swindled people in the United States out of 77 millions of dollars. Hardly one of these schemes could stand even the superficial examination of any man of the least experience or good judg-They were transparent frauds. ment. And these swindlers that were caught and convicted are only a small proportion of their tribe. The sums of money, therefore, that simple people permit themselves to be swindled out of must be enormous big enough to establish and maintain many schools for teaching common sense if schools could really do such a thing.

The question that this vast gullibility raises, is - what is lacking in our schools, our churches, our magazines, our newspapers, and all other agencies of instruc-tion? They seem to have no effect, in this particular way at least, in lifting the popular intelligence. Or what is the matter with the people? Or has a large part of the population always been so simple and credulous and we are just now finding this fact out? Whatever the truth be, it is a sad revelation that in our democracy there are persons who by thrift or by inheritance have come into the possession of money, and are so silly as to invite rogues to take it by correspondence - persons enough of this sort to enrich these clever circularwriters with hundreds and hundreds of millions of dollars.

And the loss of the dollars is not the saddest part of it. Heaven knows, that's bad enough. But the credulity which this experience shows is worse. This fundamental ignorance — in spite of the work of schools, of churches, of periodicals, and travel and all the rest — such fundamental ignorance explains how it is that Doctor Cook gets audiences for his lecture about his Polar experiences. It explains how it is that there are people willing to believe that Lord Bacon rewrote the St. James version and gave style to the Bible. It explains why any medical or religious absurdity so easily finds dupes and followers.

What is the remedy for a lack of common sense about money, about health or medicine, and about religion? That's a But it is a very serious hard question. For many-doubtless most-of one. the dupes of quacks and promoters and religious impostors and lunatics show common sense about most other practical affairs of life. If you could discover the whole truth, you would probably find among your own friends and neighbors and kinspeople the victims of some of these No grade of life is exempt falsehoods. from them.

The trouble probably strikes deep into our family life. The usual American family has neglected to train its children in what a lawyer would call the sifting of evidence

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nese subjects. Surely there has been xided neglect of frank instruction t health and medicine and the body about the use of money. The almost nal weakness — certainly the very ral weakness — of American character intelligence in these respects must some general cause and explanation.

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is ignorance and credulity shows itt a time when men of all-round soundof judgment have taken a long step ard, and when positive knowledge is asing at a rate never before known. nherited set of opinions or a ready-: set of theories no longer satisfies any ligent man. The mood of inquiry of experiment has succeeded the mood ssive faith; and opinions thus formed iot only more satisfying to men who them, but they are also for that reason nore stubbornly held. It is a time, when deed has succeeded doctrine most every part of life, a time when neasure one another by achievement, aps as men never did before. For reasons, survivals of such primitive ties of mind and faith seem all the inexplicable.

E RAILROADS' TOLL OF LIFE

FEW years ago the Southern Railway killed its president, Samuel Spencer. The other day the is Central killed its ex-president. ng the year ending June 30, 1911, rican railroads killed 356 passengers say nothing of employees and victims rade crossings. As to the latter, an of their number may be deduced from nvestigation made by the National ways Protection Society: It was 1 that during seven months for which es-were secured, 68 persons were killed 67 persons seriously injured — in the s of New York, New Jersey, and Concut alone! The Society estimates in the United States one thousand ons were killed and twice that number ed last year at grade crossings. In and not one was killed or injured at grade crossing, either last year, or year before, or for many years — for

the sufficient reason that there are no grade crossings in England.

The fact is, we have had little consciousness of the value of human life — of the economic value of a living man, to say nothing of value of other sorts.

HOW TO PREVENT HUMAN WASTE

NSKILLED labor is a poor thing - as poor as it is common; it is the mother of poverty and of inefficiency; and the extent of it is a fair measure of the shortcoming of our whole system of training. It is an interesting plan, therefore, that the state of Wisconsin has made looking toward the compulsory teaching of skill at something. The legislature has passed a law requiring the industrial training of apprentices and minors between the ages of fourteen and sixteen, to be carried on in "continuation" schools supported partly by local taxation and partly by state-aid from a State Board of Industrial Education. In every town of 5,000 inhabitants or more, there must be, and in every smaller town, there may be, a local board of industrial education composed of the superintendent of schools, and four members appointed by the school board, two employers and two skilled laborers. Their duty is to "maintain industrial, commercial, continuation, and evening schools." The towns must, upon petition of twenty-five people qualified to attend them, establish such schools.

The course of study "must include English, citizenship, sanitation, hygiene, and the use of safety devices, and such other branches as the state superintendent and the state board of industrial 'education shall approve."

'Every employer of minors from fourteen and sixteen must allow five hours of the 48 allowed for labor in one week, for instruction, and this instruction must be carried on for at least six months in the year. The employer must allow this reduction in working hours without decrease of wages.

Under this law no apprentice under eighteen may be indentured for less than two years and the total number of hours of work may not exceed fifty-five a week. At least five hours of this time must be allowed by the employer for instruction in the local industrial school. Lacking such a school, instruction may be given in any manner approved by the local or state boards of industrial education. Moreover, the indenture must contain an agreement on the part of the employer to teach the whole trade as it is carried on in the shop and must specify the amount of time to be spent at each process and each machine.

Employers favor the law, and some manufacturers took the trouble to visit the legislature to insist on it. When the plan shall have been worked out, utterly unskilled labor will be unknown in Wisconsin.

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What a tragedy any person's life may become who is not definitely trained to do some particular thing whereby a living may be got! A large part of the vast waste of human material becomes waste for the lack of this. It may be a mechanical trade, it may be a profession, it may be farming or finance or salesmanship, baseball or politics, telegraphing or laundrying - a poor trade or a good trade; but a man or a woman who does not know how to do something that is useful enough to command work and pay is, or is likely to become, a part of the mere floating débris of life. This has been a hard lesson for us to learn. It has been so easy to live by one's wits in our rich new land that we have been slow to realize that the pioneer period of our civilization has passed.

In some of the mechanical trades, moreover, the unions so limit the number of apprentices that skilled workmen are scarce. Society as a whole must take up the task of such training; and Wisconsin leads the way in this as in many other useful things. It is giving "education" a new and proper meaning.

A WORLD-WIDE MENACE TO SOCIAL ORDER

THE increased cost of living, which troubles everybody in the United States, troubles as well the people of most of the other countries of the world. It is not a national condition: it is international. England, France, Belgiun Holland, Germany, Switzerland, Austria Russia, India, and Japan are among land from which come complaints as serious a those heard here. This rise in prices is phenomenon of tremendous importance It means under-nourishment, enfeeble children, shorter lives; it means social an industrial changes of far-reaching impor and it ought not to be permitted t go on without an effort to learn its caus or causes and, if possible, do away wit them.

A study of the problem, to be wort while, must be a study of it in all lands, no in one country alone; for it is clear that no explanation can be found in a study of conditions in a single country. The cin cumstances of life in India, for example are too unlike those in the United State to permit the same internal explanatio to account for parallel and simultaneou increases in prices. Only a world-wide international inquiry can hope to expos its reason. It is clear, too, that 'such a inquiry should be official, in order to reac the sources of information.

An International Commission to inquir into the increased cost of living is th proposal of an eminent economist, Prof Irving Fisher, of Yale University. He ha laid his plan before leading statesmen commercial bodies, and financiers of th world, and it has met with the approbation of an impressive list of them. In th Senate of the United States a bill has been introduced authorizing the President to take steps to bring such a commission into existence; and it is expected to pass.

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A number of committees and commis sions of national or local character hav already been at work upon the problem with various results, but with this resul in particular — to show that only wide investigation can get at the roots of th matter. A score or more of possible ex planations have been advanced, such a the increased production of gold; the ex pansion of credit and the increased use o the check as a substitute for money; th trusts; the increase of the middleman' charges, through modern traveling an

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advertising; the practice of cold storage; the shortening of the hours of labor; the adulteration of goods; the improved quality of goods; the progressive exhaustion of natural resources; the increasing burden of military armaments. In view of these manifold explanations, it is, as Professor Fisher says, as absurd for any particular locality or state to grapple with the problem on the mere basis of its own experience as it would be for the villagers on the Bay of Fundy to attempt to arrive at the cause of their seventy-foot tide by exploring the bay. Its causes lie far beyond their vision or control.

The whole world is coming to realize that the divergence now going on between income and its purchasing power is one of the most portentous facts of modern history, a fact which, if a remedy be not found for it, may easily mean social revolutions in many countries.

A REVOLVING ORATION ON PENSIONS

N TUESDAY, December 12, 1911, during the debate in the House of Representatives on the Sherwood pension bill, the Honorable William Sulzer of New York delivered an impressive argument in favor of this measure which would add 75 millions of dollars annually to the country's pension burden of 160 millions a year. Without making any invidious comparisons, let it be said that Mr. Sulzer's speech was at least as informing, as enlightening, as logical, as any heard in favor of General Sherwood's bill. Here it is, reprinted in full as a noble example of the kind of speech delivered in Congress (or, at least, printed in the *Record*) almost every day when a bill to increase pensions is up. It is worth reading:

Mr. Chairman, I shall vote for Gen. Sherwood's bill. I want to do justice to the soldiers who saved the Union. I want to reward them while they live. Nobody can ever say that during the years I have been a Member of this House I ever voted against a just bill in the interests of the soldiers and sailors who saved the Union. This is a rich country; this is the land of liberty; this is the grand Republic; and it is all so, to a large extent, on account of what the gallant men who marched from the North did in the great struggle for the Union.

There is no gift in the Republic too great for the men who saved the Republic. We should be grateful to the brave soldiers who fought that great war to a successful end. I can not bring my ideas regarding this bill down to the level of mere dollars and cents. I place my vote for it on higher ground. I want this bill to pass for patriotism — the noblest sentiment that animates the soul of man.

Let me say again what I have often said before, that I am now, ever have been, and always expect to be the friend of the men who saved our country in the greatest hour of its peril. We owe them a debt we can never pay. They are entitled to our everlasting gratitude, and gratitude is the fairest flower that sheds its perfume in the human heart. Let us be grateful lest we forget. My sympathy will always be with the heroic sailors and soldiers of the Union who went to the front in the greatest crisis in all our marvelous history.

Mr. Sulzer is a Democrat; he belongs to the party of retrenchment and economy. Yet "the old soldier" looms large in the Tenth New York District. On Tuesday, January 10, 1911, just eleven months before his Sherwood pension bill speech, Mr. Sulzer made an impressive argument in favor of the Sulloway pension bill — a measure constructed on an entirely different principle, but effecting the same end of increasing the pension expenditure 'by a number of millions annually. On this occasion Mr. Sulzer thoughtfully said:

Mr. Speaker, let me say again what I have often said before, that I am now, ever have been, and always expect to be the friend of the men who saved our country in the greatest hour of its peril. We owe them a debt we can never pay. They are entitled to our everlasting gratitude, and gratitude is the fairest flower that sheds its perfume in the human heart. Let us be grateful lest we forget. My sympathy will always be with the heroic men who went to the front in the greatest crisis in all our marvelous history.

l want to do justice to the soldiers who saved the Union, and I want to reward them while they live. Nobody here can ever say, and nobody outside of these halls will ever be able to say, that during the 16 years I have been a Member of this House I ever voted against a just bill in the interests of the soldiers and sailors who saved the Union. This is a rich country; this is the land of liberty; this is the grand Republic; and it is all so, to a large extent, on account of what the gallant men who marched from the North did in the great struggle for the Union.

There is no gift in the Republic too great for the men who saved the Republic. We should be grateful to the brave soldiers who fought that great war to a successful end. I can not bring my ideas in favor of this bill down to the level of mere dollars and cents. I place my vote on higher ground. I want this bill to pass for patriotism — the noblest sentiment that animates the soul of man.

One of the beauties of Mr. Sulzer's argument is that it is applicable to any old pension increase bill. There was another such measure up at the first session of the Sixty-first Congress, and on the last day of the session, June 25, 1910, Mr. Sulzer, having carefully studied the measure, laid before his colleagues the following thoughtful argument:

Mr. Chairman, in the closing hours of this session of Congress, let me again say a few words for justice to the soldiers and sailors of the Union, the bravest men on land or sea that ever faced a foe, those heroes who saved the Republic during the darkest hour in all our history. They need no eulogy. If you seek their monument, look around.

I say there is no gift in the Republic too good to give to the men who saved the Republic. Gratitude, Mr. Chairman, is the fairest flower that sheds its perfume in the human heart. Most of those heroes have been gathered to their fathers, and those that remain will soon cross the Great Divide to join their comrades on the eternal camping-ground. This is a rich country, this is the land of liberty, this is the grand Republic. I cannot bring my ideas of justice and gratitude down to the low level of mere dollars. I place my views on higher grounds. I speak for patriotism, the noblest sentiment that animates the soul of man.

It is a good speech, typical of the best Congressional thought on the pension question, a model of big-pension logic. Every session of Congress deserves to hear it at least twice.

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There was another speech delivered the other day in Congress which is in strong contrast to Mr. Sulzer's. It was made by William Hughes, of New Jersey, in announcing that he would vote again the Sherwood bill. Mr. Hughes said:

I know that the effect of my vote in n district may be disastrous to me. And yet have conscientiously reached the conclusi that \$50,000,000 a year is too much to ask t country to pay for the privilege of retaini me in Congress.

A CHRISTIAN AND ASIATIC CLAS

RIPOLI is a Mohammedan stat it has been raided by a Christia army. Persia, a Mohammeda state, is torn between the rivalries of tw Christian powers.

There are perhaps a thousand million of people to whom this is the most serio fact in their lives. There is a solidarity sentiment among Asiatics no less stron than among Christian Caucasians. lf 1 dread a yellow peril, they are racially co scious of a white danger. When Japane soldiers won battles against the Russian bonfires were lighted on the plains of Indi and in the mountains of Afghanistan. Th triumph of one yellow nation over Western foe has been followed by th awakening of another yellow nation -China. And the funds for the Chines Revolution were raised largely in India Malaysia, and Japan. There is a home geneity among the peoples of Asia.

What will follow the Chinese Revolution Can it be ignored for a single moment that the modernization of Asia's biggest natio may be the signal for movements of n volution, independence, and republicanisis throughout that continent? Even now the news of what has happened in th Celestial Kingdom has crossed the desert and the Himalayas and is eagerly discusse in every palace, hut, and tent from th Yellow to the Red Sea.

It is no time for Christian nations to b grabbing Mohammedan land. The nativ press of Asia — it should surprise no on to know that Asia now has a native pres — Indian, Malayan, Cingalese, Japanese Arabic — is ablaze with indignation ove events in Tripoli and Persia. It would b most unfortunate if what Islam and Budd hism can regard as a Christian attac should solidify the East against the West But it is possible.

PAYING FOR THINGS YOU DON'T WANT

BOUT ten years ago a woman in Connecticut received a legacy of \$15,000. She had been poor all her life, and she had the terror common to people who do not handle money lest some one get ahead of her and take the \$15,000 She had a speaking away from her. acquaintance with the president of the savings bank, and she went to him for He was the ordinary president advice. of an ordinary savings bank in a small The limit of his knowledge about town. investments was the Connecticut savings bank law, and even within the limits of this law he was conservative. Acting on his advice she invested her fund as follows:

\$5,000 New York Central 31 per cent. bonds,

The total investment was \$14,920 of principal and the total income was \$535. The average rate of income which she has been receiving since on her investment is about 3.6 per cent.

When this investment was proposed to her she objected to the low rate, and said that she wanted to put some of the money into a 5 per cent. mortgage. Her adviser's reply was that it was better to have high grade standard bonds, first because they were absolutely safe and second because they could be sold readily at any time. This second consideration was emphasized very strongly.

When this woman brought her case to the Financial Editor of the *World's Work* she was told at once that her bonds were much too good for her. In the ten year period she had not made a single change in the investment. The element of marketability, for which she had paid such a high price, had been of absolutely no value to her. She had not seen a quotation on her bonds for more than five years and did not know what they were worth.

An investment like this, for a person of relatively small means living upon income, is ridiculous in normal times. It is all very well for a savings bank, which pays from 3 to 4 per cent. interest to its depositors, to buy securities of this class and to insist upon marketability; but it is silly for a person who is going to live on income and who has no intention whatever of trading in bonds, to pay more than 100 for securities which yield 4 per cent. or less, a year.

Of course, this woman's case is an extreme illustration. It happened that her investment was made at a time when prices of high grade bonds were extraor-They have not seen the dinarily high. same prices from that time to this, and there are many critics who are of the opinion that none of the bonds which this women bought will ever be quoted at those high prices again. Nevertheless, there are still a great many thousands of people who buy securities that are a great deal too high-grade for ordinary investment, and who do not realize that in such buying they are simply wasting money.

A business man, putting away money which he may want at any moment, or accumulating a surplus for some particular purpose, can well afford to take the low rate of interest in order to get quick marketability and large borrowing power on his funds. Even in this field, however, the wise business man knows perfectly well that he can get $4\frac{1}{2}$ per cent. just about as surely as he can get $3\frac{1}{2}$ per cent. Moreover, he studies prices carefully, and he declines to buy gilt edge securities at a time when the savings banks, trustees, and custodians of other people's money are bidding these bonds up to high prices.

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Bonds of this class are useful, first for their marketability and second as a means of avoiding responsibility. If a man is acting as trustee or is advising somebody how to invest his money, he naturally recommends the very high grade issues. By doing so he evades all responsibility. The law makes bonds of this class legal investments for trustees and savings banks. If, for instance, the man who advised this Connecticut woman to buy the high grade bonds referred to, were now upbraided for his advice on account of the drop in prices, he might answer truthfully:

"These are bonds that the law has stipulated as being the best corporation bonds there are. My advice was backed up by the law of my state and many other states. If the price has declined and loss of income and principal has resulted, I should not be blamed. If I had recommended something that I felt to be good and urged my opinion strongly on this investment and then loss had resulted I should have been responsible; but I am not now responsible."

It was upon this theory of evading responsibility that the old-fashioned bond house and banking house was founded. There are still, in New York, Philadelphia, and Boston particularly, dozens of banking houses that will not take the responsibility of advising investments in any but standard issues of bonds and stocks. If losses ensue, the house disclaims responsibility except in an indirect way.

The modern banking house has been created and has grown up largely because, with the increase in the cost of living, the public demanded a larger revenue from its investments than the old-fashioned bankers could afford. The demand for "5 per cent. and safety" crowded the oldfashioned banking house back into a The houses that studied the corner. needs of the people and that were willing to assume a very much larger responsibility than comes with the selling of gilt-edge bonds and stocks, are to-day the best known and the largest banking houses in the United States. Practically the clientele of the old fashioned houses consists to-day of only two classes of individuals — old men and women who do not know that the times have changed, and wealthy people who are content with very low yield on their money.

Suppose, for the sake of argument, that the Connecticut woman who is the illustration for this story now had \$15,000 to invest. How would a conservative modern banking house suggest that she use this money? Let us take it for granted in the first place that the banking house has no fish of its own to fry, and has no interest to serve except that of its clients. The investment might be worked out something like this:

ENCOME
\$3,000 good, substantial railroad bonds to yield 41 per cent
3,000 high grade mortgage at 4½ per cent. (or
more)
utility bonds at about 105
public utility or industrial 5 per cent. investments at about 95
Total income \$720
The income is at the rate of 48 per

cent. Quite enough of the fund is freely marketable for all practical purposes of an investor. Safety in the first three items requires only ordinary business judgment. In the last item it requires good judgment and an honest banking house.

In a fund invested in this way, the investor gets what he pays for and pays for what he gets. He is not buying the ability to dump the whole investment overboard at a moment's notice, because he does not want such ability and would not use it if he had it. He is not paying for certain elements in his bonds which make them legal for savings banks in New York, for he is not a savings bank in New York and has no use for this privilege. Neither is he paying a high price for a chance to make profits, for he is investing for income and safety and not with the idea of making money out of his principal.

He wants security, a substantial income, and a reasonable degree of marketability. He gets just those elements. Some of his fund could be sold immediately — all of it within a reasonable time.

Perhaps the most striking illustration of paying for what you do not want and

cannot use is the purchase of Government bonds by an individual. If you go into the market to buy a \$1000 U. S. Government 3 per cent. bond, you will pay a little more than \$1000 for it and you will get \$30 a year. The bonds are not selling at that price simply because they are perfectly safe, but because a National Bank can use them as security for Government deposits in the bank and for the security of its own notes to be issued against the bond at \$1000 a bond.

The individual, on the contrary, is not a National Bank. He cannot issue notes against the bond he owns. He cannot get the Government to deposit any of its money with him merely because he owns the bond. These two privileges are paid for by everybody who buys the bonds, whether he can use the privilege or not. Purely as an investment, each \$1000 2 per cent. bond is worth perhaps \$750, but no more. The investor who pays \$1000 for it is paying \$250 for something that he does not want and cannot use. Yet there are thousands of people throughout the country who cannot afford the luxury of a 2 per cent. investment but will make it a habit to own nothing but Government bonds. I know of one trustee, handling a fund of about \$20,000 for two orphans, who traded out of Government 2's into Government 3's last summer, but who would not dare to take the responsibility of trying to get 4 per cent. - C. M. K.

THE MISFIT CHILD

THE WORK OF THE VISITING-TEACHER AMONG DIFFICULT CHILDREN — HER SUCCESS AS A LINK BETWEEN THE HOME AND THE SCHOOL

BY

MARY FLEXNER

O YOU believe that every child has a vulnerable spot?" I was asked when speaking of the five visiting teachers maintained by the Public Education Association and working in connection with eight public schools of New York City. I answered in the affirmative. Upon that belief rests our raison d'être.

It is the mainspring of our action, the motive power that animates us day by day. And it will be seen as I proceed that Achilles'sheel is not limited to the children; there are "grown-ups" that possess it, too, if one has only the wit to lay it bare. It is the task of the visiting-teacher to find, therefore, a point of contact with child, parent, teacher, and principal. Once found this forms the basis of action, the ultimate outcome of which is a child normal and

happy in its home and school relations. The work broadly considered is two-fold in character. It is at once educational and social; but its scope is limited, for it concerns itself only with the difficult child. Within this field variety abounds; for each child is dealt with as an individual and not merely as a case of irregular attendance, poor scholarship, incorrigibility, immorality, or poverty with its attendant evils of household cares and child-labor.

The visiting teacher acts as the link between the child's school and his home. She interprets one to the other. She is the sympathetic observer, the helpful To fulfill this function, friend of both. she visits not once or twice, but frequently, both the home and the class-room, conferring with parent, teacher, and principal. From all three she asks full cooperation. The child is the problem to be solved. To achieve the result desired, it is necessary that all available forces be united. Everything that exists for the purpose of making the lot of child or man more harmonious relief societies, day-nurseries, settlements,

hospitals, fresh air funds, gymnasiums, scholarship funds, trade, cooking, art, folk-dancing classes, public libraries - is invoked, once the facts of the individual child are known. It is the visiting-teacher that acts as diagnostician. In her intimate capacity of friend to the erring child, she sees what he needs at home and abroad, and she endeavors, by all known means, to make good the deficiencies that she finds. She does not stop at suggesting that an over-burdened mother, the only wage-earner in the family, take her baby to a day-nursery, thereby gaining freedom for herself to go out washing and freedom for her twelve-year old daughter to go regularly to school; but she goes herself to the nearest day-nursery, enlists and secures its coöperation, and then returning to the home, helps the mother to plan the day so as to include this new feature.

This story she carries to the teacher, whereupon a new relation is established between the latter and Concetta, Italian by birth, once thought merely dull, listless, and uninterested. To her she becomes an individual, heavily handicapped to be sure, and on that account deserving of every attention she has it in her power to bestow. She watches her at her work and perceives that her eyes are not normal. An examination proves that she needs glasses. These follow. A little later, she reports that the child's color is bad; she seems ill; she wonders what her diet consists of. An inquiry is made. Coffee and bread make up her breakfast and luncheon. The injurious quality of the former is explained to the mother and the child; the charity organization is asked to supplement the mother's small earnings with food. Daily visits are made to the class-room to note Concetta's progress, and frequent visits are paid at the home to see that the suggestions made are carried out. It is clear from this, then, that the visiting-teacher's duty does not end with setting the wheels of reform in motion. A successful outcome means for her "eternal vigilance."

This sort of friendly visiting engenders a feeling of mutual trust. It is often slow of growth, but when it comes the reward is great. John's teacher found him stupid, unmanageable, always leading his neigh-

It was impossible to do anybors astray. thing with him for he was so frequently absent and so rarely on time when he came. At this picture of her eight-year-old son, the mother, an Irish woman of more than average intelligence, recoiled, aghast. He had made a good record at the school previously attended; he was a good boy at home; there was no reason for his not attending regularly, and only now and then was he sent on errands, the cause, probably, of his tardiness. This she would stop. To me the little lad seemed timid, shrinking. He spoke with a babyish lisp and confessed himself afraid of his teacher. I conferred with the principal, emphasizing my own impression of the child. She was sympathetic and our conference ended with her saying, "Go to his teacher and tell her to mother the boy." This I did, not so much in words as by making her gradually see the child as I saw him; little by little she veered. He grew less afraid and instead of stopping between the two syllables of the word "stocking," when asked to spell it — his old offense he achieved in one breath the whole word. Invariably, as I entered the class-room, I was greeted with an encouraging word. "See how well John writes his name," or "His number work is good; he is really trying." The only drawback was that the irregularity persisted. There was evidently some cause in the home that had not yet come to light, despite the numerous visits made. These I continued, carrying to the mother when I called, the reports of John's improvement; suddenly one day the whole hideous story of a drinking, unemployed husband and a starving family a state of affairs they had endured for more than two months — was revealed to me. An appeal was made to the Charity Organization and together we worked out a plan for rehabilitating the family. The husband was sent to a colony for inebriates, the three younger children were placed in a day-nursery, and the family was moved so as to be near enough to the nursery for the mother to leave the children on her way to her daily work. The effect upon John was instantaneous. He was prompt and regular in the performance of his school duties.

This instance is typical; it illustrates at once the problem and the point of view from which the Public Education Association attempts its solution. This composite democracy of ours is in its make-up various beyond any other nation of which history tells us. Its salvation reduces itself in the long run to the individual salvation of its constituent units; on the personal fate of all the little Edwards and Nicolos and Rosinas, depends the civic outcome of the American experiment. Each of these little enigmas has got to be solved early. Who is to solve them? Assuredly not single-handed the teacher who faces some forty or fifty of them in a group. Her task is in any event a prodigious one; and those who know her most intimately can testify to the devotion and intelligence which she brings to it. But consider — these diverse human units represent a conglomeration of Italian, Greek, Irish, German, Russian, Hungarian, etc. To conquer them as human units the teacher must contend with notions, incapacities, capabilities of parents and children lately come from all the corners of The difficulties that she enthe world. counters in the child are the reflex and outcome of the poverty, ignorance, indifference, or sickness in the home. The visiting-teacher enlarges her reach, increases her knowledge, adds to the resources applicable to the solution of the school's problem.

There was Michael, for example. He came from Southern Italy. He had had a checkered school career. When we met he was in a special class. He took little pleasure in his work, and his teacher, alert and quick to take suggestions, found it impossible to arouse him. To him the only joy that life contained was selling newspapers. His mother and father had pleaded with him to give this up. He was obdurate. It was foolish to argue. It was clear that he needed something that neither his home nor his school offered. Little by little it developed that he liked to use his hands; that he liked to draw, even to paint; that he had once made his mother a box for knives and forks. With these facts as a clue, I asked his teacher to try to arrange his time so as to give him more

This she did, and in time, when drawing. the palette and brushes for the older children were given out, Michael was given a set too. Arrangements were also made at the carpentry class at a school nearby to take Michael after school hours. He attended once a week unfailingly. In his class-room he was no longer so apathetic. He had been stirred out of his lethargy. Here, finally, was something that he could do. Confidence grew; the mind once roused responded to other stimuli. Reading, writing, and arithmetic appeared to him in a new light. He took pride in trying to satisfy their demands. The next autumn he was promoted to a regular class and then the cooperation of a gymnasium director was secured and Michael was allowed to attend the gymnasium every Tuesday evening. The next promotion time carried him to another school, but the cordial relation established with the home continued. The mother set a high standard of scholarship and conduct for her son. and whenever he seemed to her to fall below, she sent for me and asked me to go to see his teacher and to continue my interest. She always apologized for calling upon me, adding, "I no understan' teacher, she no understan' me; too much to do; too much children."

With Frank the situation was even more complex. By birth a Russian, slow, mischievous and with a leaning toward what did not rightfully belong to him, he was not an easy boy for a teacher of thirty-five children to control. He was a pathetic little figure, cowardly, untruthful, stunted in mind and body; and a strange little thief too, sharing generously with his playmates everything that he took. The direction that he was taking was unmistakable. He was headed for the Juvenile Court. It was just at this point that our paths My duty was plain. It was to crossed. prevent, if possible, a recurrence of what had happened and to save him and his family, who gave me a free rein, the humiliation of his being branded as a delinquent. There was scarcely a day for weeks at a time that Frank and I did not visit with each other. It came about naturally - in his class-room, going to the dispensary, where it was discovered that his adenoids

and tonsils must be removed, and calling upon a doctor who was working with the Juvenile Court children. I saw him frequently in his home, where we finally planned a summer outing. In a period of several months he was guilty of no glaring irregularity of conduct, his worst offense, according to the school's report, consisting in his talking to and nudging his companions on the stairs. Later an effort will be made to place him in an ungraded class and there, as one of fifteen, with an elastic curriculum, he may find himself sufficiently interested to direct his energies to good purpose.

Such influences as children of Frank's type exercise on other pupils must, of course, be checked. No organization can risk the many for the one, and so the child that for one reason or another fails to fit into the system, is singled out and fortunately becomes the recipient of individual thought and care.

Tessie had been put in Frank's category. She was suspected of being a delinquent. Her goings and her comings were carefully scrutinized. No one seemed to trust her. She was a strong, well developed girl, overflowing with spirit and beautiful to look upon, of Sicilian stock. There was an older brother, whom she adored and who seemed to lord it over her. The mother and father were away from home all the day. Tessie and her teacher were in conflict constantly, and during her first term she was frequently sent from the class-room. The father was visited in the factory and was besought to come to school to see the principal. He came occasionally, but usually he sent the older brother, whose accounts of her strengthened the impression of Tessie that the school held. She must be "put away," he insisted. All this came to me by degrees. Meantime Tessie and I were becoming acquainted. I suggested that she join the library by way of varying the monotony of household duties, and she eagerly agreed and together we went there. The librarian became interested in her and told me later that she had excellent taste in books. Her first choice had been Ruskin's "King of the Golden River." The second term brought with it promotion and a new teacher, with

whom she was at peace. Still the suspi-cion hung around her and I wanted, if I could, to make the school believe in her as I did. And so I determined to look into the brother's school life. It meant searching the schools of the neighborhood, for he had falsely represented himself to the principal both in grade and school. His teacher corroborated me in my opinion that the fault lay with him and not with This story I carried to the school Tessie. and to Tessie's father, both of whom had been imposed upon. To this the father commented simply: "My boy, he tell lies, eh? I send him no more. I come." But there was no occasion. Tessie's conduct was exemplary. The cloud had been lifted from her.

Upon Sophie's shoulders rested a heavy burden. She had been born in Italy and was the oldest of eight children. She herself was barely fourteen. Her father was a bootblack and to his earnings the family contributed theirs, for all, from the fouryears-old sister up, helped make violets. From Sophie came the greatest number and when, in consequence, she fell below the school standard, something had to be done. The child was a fit applicant for a scholarship, for, in addition to working illegally, she was physically incapable of carrying the double load. She received \$3 a week from the Henry Street Settlement Scholarship Fund on condition that she give up flower making and attend to her school duties. She was also urged to substitute milk for tea and to seek the sunshine.

It was several months since Elizabeth had left school. The knowledge came to me by chance. The father, an intelligent Irishman, was incapacitated through tuberculosis and the Charity Organization Society was helping. So Elizabeth, as soon as she was fourteen, felt that she must assume her share of the responsibility of the younger children. A long period of idleness followed and when I finally found her, she was working in a so-called novelty factory, putting candy in boxes. For this she received \$2 a week. An attempt, at least, I must make to find for her something better than this, and so I called at the home and plead the cause of vocational training. The father was interested and consented

to Elizabeth's leaving her work and returning to school — a trade school — provided I could secure a scholarship for her. This I was able to arrange through the Students, Aid Committee of the Manhattan Trade School for Girls.

In this way we endeavor to prolong the child's school life to his sixteenth year, and in so doing, we not only diminish the army of child workers, but we also lessen somewhat its haphazard character. The factors that determine our choice of an industrial school are the child's taste and capacity as well as the family's needs.

As we have seen, it often happens that school indications point to one conclusion, while those found in the home make necessary an entire reconstruction of the teacher's impression. It is idle to expect to arrive at all the facts by merely quizzing the child at school. To the questions that are put come the inevitable "Yes'm" or "No'm," in addition to whatever else seems to be the answer expected, and so one is in the end just where one started. Instead of having the facts, one has one's original impression confirmed. The situation calls for a fresh pair of eyes, an open mind.

In the instances cited, the "point of contact" with the school and the home was promptly discovered, but this is not invariably the rule. Sometimes to do so has meant the work of months. The mother or the father, or both, as the case may be, have been unwilling to recognize the school's claims and they have had to be pressed again and again. An amusing example of this is the mother who finally yielded to the pressure exerted by the visiting-teacher and sent her boy regularly to school, giving as her reason "that the teacher nagged her so." Another, not in the least amusing, is Bertha, of Italian origin, aged twelve, the oldest of a large family, the household drudge and also the manufacturer, in her leisure moments, of willow plumes. The remnants of time left over after doing the family washing, scrubbing the floors, cooking the meals, washing the dishes, minding the babies, and making willow plumes, she devoted to coming to school. She was an object of pity to all the neighbors. Repeated

appeals were made to the mother. To each she made a different excuse. Often she pleaded Bertha's ill-health, pointing to the bed on which she lay. Investigation showed that she had thrown herself into bed, fully dressed, when the knock at the door came to disturb her at her The father was hunted up in his chores. place of business and his help was asked. For a time Bertha attended with fair Then came a relapse. regularity. The visit that followed made the mother understand once and for all what the compulsory education law demanded, what the penalty for its violation was, and further, forced home to her the truth, that she was at her last ditch. At a previous visit she had been instructed in the provisions of the child-labor law. At the same time I interested Bertha herself in a folk-dancing class that I was starting for the children of the school, whose days like hers contained so little of joy. From that moment on a change set in. Her teacher greeted me with a smile when I came into the class room to inquire for her, and to the dancing class she came unfailingly. It was there that I discovered that she. too, could smile.

Perhaps then it is not too much to claim for the visiting-teacher that her work is both constructive and preventive. The adjustments that she brings about in the home make feasible adjustments in the school. In the home these efforts may remove the obstacles to study; in the school they may result in awakening an interest on the part of the child, and the facts that the visiting-teacher has gathered enable principal and teacher to act with full knowledge of conditions. Not only the so-called "incorrigible" child profits from the new relation that springs up; the conscientious plodder, in fact the entire class reaps the benefit as well.

Important as this feature of the work is, it would not be fair to the cause as a whole to direct attention to this alone. There are other sides to it, the aim of which is to harmonize the elements of the child's life at home and at school so that conflict is at least lessened, if not entirely avoided. This we do when we take from the child the necessity of becoming a wage earner after

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school hours by providing him with a scholarship, in amount the equivalent of his previously hard won earnings. We achieve a similar result when we find for him a quiet place for study, such as a study-room in a neighboring school or settlement or a public library readingroom, and when we urge the parents to help the child to arrange his day so that this quiet time is not crowded out. We have this also in mind when we stimulate the child in his play; reminding him of and sometimes even escorting him to the storytelling hour at a public library, forming clubs just for playing games or classes for dancing, cooking, or housekeeping, and gaining admission for him, where there are settlements, into their carpentry and gymnasium classes. We try to take thought for the child on all his sides, and, through lightening his burdens and supplementing his activities, to insure to him the normal development that he is entitled to

Such procedure successfully executed is obviously preventive in character. By taking hold in time of the irregularity, provided it be remediable, and tracing it back to its source, altering or removing the cause where possible, the chances are that what is wrong will be set right. It is a short step from repeated causeless ab-

sences to real truancy, from the latter to some sort of delinquency, from this to the Juvenile Court and thence to a reform school. Wherever we can, we act as a check upon such a course. We hope to curtail the necessity of reform, by antici-pating some of its measures. Why wait, for instance, until a child is in the grasp of the law and has been "put away," ' to use his own language, before attempting to see if he will respond to some sort of manual or farm work? Why not give the child not erring, but with so many encouragements to err, at least an equal chance with the one already wayward? Not until he reached the school in the Detention Home connected with the Chicago Juvenile Court did one boy of fourteen or thereabouts learn that he had a real gift for modeling, and then his one ambition in life was to make money enough to take him to the Art Institute. Our experience furnishes many a repetition of this incident. Hence we make connection, wherever they exist, with carpentry, trade, and art classes, and thus we hope to take the square peg from the round hole and to find for it its appropriate setting. Economic waste as well as spiritual waste threatens. Assuredly prudence and sympathy alike recommend timely action adjusted to individual conditions.

CLEANING UP A STATE

HOW DR. OSCAR DOWLING AND HIS HEALTH TRAIN MADE LOUISIANA SANITARY — A SERIOUS MAN WHO CHOSE A SPECTACULAR METHOD — SOME OF THE HUMORS OF SANITARY REFORM

BY

HENRY OYEN

N AUGUST, 1910, when Dr. Oscar Dowling became president of the Louisiana State Board of Health, Louisiana was dirty, and didn't care. The every-day citizen didn't care how, where, or under what condition he secured his food supplies, and the average town didn't care if it dumped its sewage into the bayou that supplied its water. To-day the citizens of this state are rapidly becoming enthusiasts on the subject of pure food. The towns are as jealous of the purity of their water supply as a Louisiana Tiger of his war record. In less than two years the people have been awakened from the insanitary slumber of decades and have become imbued with a spirit that promises to lift them

from near the tail of the procession straight to a place among the leaders in sanitary civilization.

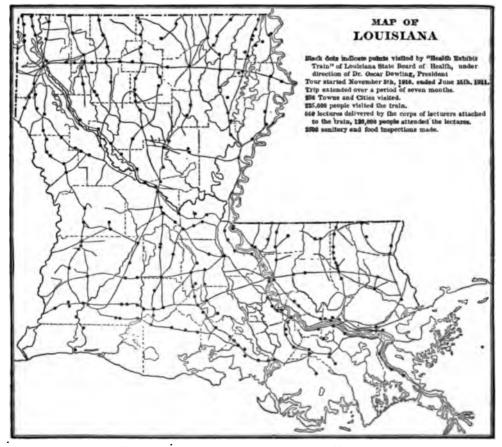
Dr. Dowling is the force that is responsible. Since his induction into office he has waged a campaign unique in the history of state officials in this country.

"What's the matter with Louisiana?" "Dirt," was Dr. Dowling's verdict. And in two years he has forced a whole commonwealth literally to give itself a thorough washing.

To stand up before a state — especially one's own state — and tell it, not in carefully emasculated terms but in the short, ugly words, that it is a dirty state and that its dirt is due wholly to dirty people, comes near to being an ultimate test of courage. But to do it in such a way that, though it shocked and awakened the state as it seldom had been shocked or awakened before, it did not "make it mad," that surely must be considered a feat of genius — especially in proud, easy-going Louisiana.

Dr. Dowling said to his people: "We are all right, but we have got a bad reputation. Other states think of Louisiana as the home of swamps, and malaria, and mosquitoes, and fever, and general unhealthiness. We deserve this. It isn't true, but we deserve it. It's all our own fault. Our bad reputation is due not to climate, not to swamps, not to our geographical location, but to — dirt. Plain dirt. Dirt caused by dirtiness. Dirtiness accumulated through decades of carelessness. Dirt caused by dirty people. That's all that's the matter with us: we're a dirty crowd."

It didn't make much of an impression at first.



THE PATH OF THE HEALTH EXHIBIT TRAIN WHICH WAS GIVEN TO DR. DOWLING BY THE RAILROADS, AND IN WHICH HE AND HIS STAFF LIVED FOR SEVEN MONTHS

"Of course "Dirt?" said Louisiana. there's some dirt. Always has been. Always will be. Folks are used to it. Everybody's got to eat a peck of dirt before he dies.

"No." said Dowling. "Cut the peck in half and you won't die half so soon and you'll live twice as much while you're living."

This was a new idea. It was a shock. Before the state had recovered, Dr. Dowling had his coat off and was up to his eyes

To the People of Winnfield:

This is to notify you that I will discontinue my market after April 30th until I can meet the requirements of the State Board of Health, which will be only a short time.

I desire to thank my friends and customers for their past patronage and hope in the near future to be able to serve you again.



A MISIBLE RESULT OF THE AREA ENCY OF OR DOWLIND'S MALTAN NATIONS

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and he knew that Louisiana, instead of preaching about its pleasant climate and fertile soil, must first of all wake up and have a sensational house-cleaning before it could hope to join the procession of progressive, prosperous states. He came to office with one firm conviction above all others: it was the duty of the health board's president to see that this housecleaning was brought about.

The conditions that were to be faced were appalling. Louisiana was deep in the jungle of insanitation. There was little regulation of food or water supplies, or of physical conditions. Milk was produced by mangy, sickly herds in dairies where cleanliness never had been thought of. It was conveyed and sold to the consumer in a way that made purity impossible. Cattle were slaughtered under conditions that will not bear mention, and the meat was sold in markets where screens and scrubbing brushes were unthought of. Storekeepers kept their stocks of food with absolutely no thought of its condition. In a few stores in Louisiana flies and insects did not swarm in and out and over the exposed food supplies without hindrance. But they were so few as to be conspicuous. In small towns the water supply was contaminated in terrible fashion. One third of the state has good water --- supplied from artesian wells - but the remaining two thirds seemed to regard Children pure water as a minor matter. went to school in unimproved buildings. The common drinking cup, the public roller towel, habit-forming medicines, dirty streets, bad drainage, everything that breeds disease or communicates it, flourished in practially uncontrolled fashier

To make the task of cleaning up more difficult the easy-zoing Louisiana natives, loled by the enviable combination of compate magnificas cranze blossoms, and an inter a land that care forgot. never had the get of seeing anything harmful in tress conditions never had stopped to connect them with a high death rate, much signifies and a bad reputation. of this that then so ever since they could remember dess to they were deplor-

able. But the roses bloomed riotously in the front yard. The state was being kept back because of such things? Perhaps. But one got along fairly well in spite of it. A high death rate? Oh, well, people had got sick and died since the beginning of time.

These conditions and this spirit were not the exceptions but the rule.

Dowling knew that to alter this, to bring the state out of the jungle of insanitation to the light of civilization, ordinary methods would not suffice. A ing it three cars and by falling over themselves to take care of the train. Two of the cars were devoted to specimens, specimens calculated to shock the soundest sleeper, and dairy exhibits; the third was the living quarters of the health force. "This car," said Dowling, "is to be our

"This car," said Dowling, "is to be our home until Louisiana has been washed."

It was. The health special left New Orleans November 5, 1910, a little more than two months after Dr. Dowling had come into office. Its tour ended June 5, 1911, seven months later. In this time



THE HEALTH EXHIBIT TRAIN

WHICH, IN SEVEN MONTHS, TRAVELLED 7000 MILES ON THE EIGHT TRUNK LINES WITHIN THE STATE AND VISITED EVERY TOWN IN LOUISIANA OF MORE THAN 250 INHABITANTS

campaign of bulletins, publicity, and speeches wouldn't do it. A severe and shocking awakening must be effected. The gospel of health and cleanliness must be carried forth to the people and hammered home in a way that they could not forget.

The result was the Health Exhibit Train of the Louisiana State Board of Health, the celebrated "gospel of health on wheels."

"The people will not come to us to be shocked and awakened," said Dr. Dowling. "We will go to the people."

He talked the railroads into giving him two cars to carry cleanliness over unwashed Louisiana. The railroads laughed, humored him, and wound him up by makit had covered 7,000 miles on the eight trunk lines within the state; had stopped in 256 cities and towns - every town in the state of more than 250 inhabitants; 660 lectures had been delivered to 120,000 people, 2,500 sanitary inspections had been made, and more than 225,000 visitors had passed through the cars and had health talked to them in a manner they would not forget. Every schoolhouse, jail, asylum, almshouse, practically every public institution in the state was visited and inspected. Most of the stores, restau-rants, barber shops, hotels, butcher shops, slaughter houses, drug stores, dairies every sort of business that might affect public health - went under the same inspection. Back yards, ponds, bayous,

THE WORLD'S WORK



"CLEAN UP, THE DOCTORS ARE COMING" THE CRY THAT SOUNDED ALL OVER LOUISIANA AFTER DR. DOWLING'S HEALTH TRAIN HAD VISITED A FEW TOWNS

streets, barnyards, every odd corner where disease might lurk and breed and threaten a community, likewise. Where these things were found as they should be, compatible with good health — which was very, very seldom — Dowling said so. When they were found otherwise, which was very, very frequently, the doctor also said so. Markets, stores, restaurants, jails, almshouses were ordered closed or cleaned up, patent medicines were destroyed, tubercular beef burned. The doctor and his train and force of assistants went like a storm of cleanliness from one point in the state to the other, peering into dark corners, condemning, praising, teaching; and when it was over and the special was back in the yards in New Orleans, Louisiana was tingling from a new sensation: it had been washed.

One town after another went through the same mill that Dr. Dowling had planned. Upon the arrival of the train at a town, the time of which had been advertised to the local municipal, health, and school authorities, every member of the force hastened at once to fulfil his allotted duties. Dowling hurried to inspect the town's water and food supply, its public buildings, and sanitary conditions. He went everywhere. Sometimes he took a handcar and pumped his way down a narrow track, sometimes a motor car bore him into the country, sometimes a buggy, sometimes he walked. While he was thus occupied, the two



" CLEAN UP OR SHUT UP " AN ORDER THAT CLOSED OR CLEANSED HUNDREDS OF DIRTY SOURCES OF THE PUBLIC FOOD SUPPLY

physicians attached to the train were lecturing at the railroad stations and at public halls, and an instructor of School and Home Hygiene for the state — a woman — was talking to the children and women. In the evening a moving picture show, with films demonstrating the connection between dirt, flies, and disease, was given; and at the evening meetings Dr. Dowling told the assembled citizens how he had found things in their town.

"Thank God, our air and sunshine were reasonably good," said a Thibodeaux paper after the doctor's visit to that town. "Otherwise we wouldn't have a sanitary leg to stand on."

It was one shocked community after another — with rare exceptions — until the tour ended, and with the shock came the desired awakening. After putting in the day looking over a town, Dowling would stand up in the evening and say: "To-day I inspected your town. John



DR. OSCAR DOWLING WHO STARTLED LOUISIANA FROM APATHY INTO A UNIVERSAL CAMPAIGN FOR SANITATION AND CLEANLINESS



CONVERTS TO THE GOSPEL OF HEALTH CHILDREN VISITING THE SANITATION EXHIBIT ON THE SPECIAL TRAIN

Jones's dairy is bad, Bill Smith's butcher shop is vile, Tom Johnson's restaurant is rotten. Your jail is impossible and your schoolhouse unfit to house children. I wouldn't care to shoulder the responsibility if an epidemic should break out here, which it is likely to do, if conditions remain as they are."

The Lake Charles *Press* said, after the tour had been in progress a few weeks, "Dr. Dowling has visited twenty parishes and inspected fifty-two towns, each of which he classified as 'bad,' 'worse,' or 'the limit,' as the case might be."

There were few towns that did not find some such classification. The Donaldsonville *Chief*, after the train's visit, said: "Donaldsonville got hers from the doctor. Dr. Dowling didn't quite denounce Donaldsonville as a desert of dirt. For the few oases, dear doc, many thanks. Well, the schoolhouse was clean, anyway."

As the tour progressed and the news of Dowling's denunciations became known, local papers began to carry such warnings:

"The Health Train is coming on April 6th. This will give us plenty of time to clean up."

THE WORLD'S WORK



TALKING HEALTH

IN THAT INIMITABLE WAY OF HIS, BY WHICH THE DOCTOR AT THE SAME TIME DAMNS AND DELIGHTS

At one town the doctor upon his arrival said to the mayor: "Don't you want to clean up your town?"

"Why, doctor," was the reply, "we've been cleaning for a week."

The dirty condition of a public building was pointed out to its old time caretaker.

"Dr. Dowling, suh," said he, "your ideas on cleanliness, suh, differ from mine."

A baker in a small town was found at



WAYS OF COVERING GROUND HE WENT EVERYWHERE - IN ALL KINDS OF VEHI-CLES, AND SOMETIMES HE TOOK A HAND CAR AND PUSHED HIS WAY DOWN THE TRACK

his dough with his hands and undershirt in hardly presentable condition.

"Hadn't you better wash up and change shirts?" suggested the doctor. "Yessuh," said the man, proudly. "To-

night's the night."

Few men could have waged such a campaign against such conditions without incurring the enmity of the towns assailed. But Dowling damned them in a way to win their friendship.



AT ODD MOMENTS THE DOCTOR'S ASSISTANTS TAKING ADVANTAGE OF HIS ABSENCE ON AN INSPECTION TOUR TO CATCH UP ON RECORDS AND REPORTS

"Misery loves company. All the other dirty towns in the state will find satisfaction that the president of the state board of health roasted Baton Rouge as severely as he did any of us.'

This was the spirit that began to manifest itself after the sting of the first shock had worn away.

The larger and older towns, the homes of Louisiana's aristocracy, were handled in the same brisk, ungloved fashion as the little mill towns up in the lumbering parishes. There was inevitable resentment here. But the new idea already had been accepted by the whole state. When a town grew indignant the other towns paused long enough in their labors of citizen was constrained to cry out. "Dr. Dowling, for God's sake, hush! I drink milk."

In another parish, one of the health force, upon being offered a drink of milk said: "Sir, l wouldn't drink anything but alcohol in this parish."

At Alexandria many school children at

"The doctors are coming," they ex-plained, "and we want to get cleaned up."

An old colored mammy in a crowd awaiting the train broke out to her daughter; "Honey, you go home right quick and clean up that mess in yoh kitchen. Don't let them doctors think you ain't clean as yoh neighbors."



A HOME-MADE SCHOOL FOUNTAIN A CRUDE BUT EFFECTIVE WAY OF ABOLISHING PUBLIC DRINKING CUPS

house cleaning to laugh at it, and presently the indignant one was turning to with pick, shovel, broom, and brush along with the rest.

Shreveport is Dr. Dowling's home town. He gave up a practice of \$15,000 a year there when he accepted his present office at \$5,000. Shreveport chortled as other towns writhed under the doctor's findings. Shreveport felt safe; the doctor wouldn't say anything harsh about his own town.

But he did. Shreveport went over the coals the same as the rest.

At a banquet given by the Shreveport Chamber of Commerce for the purpose of hearing the doctor tell them the things they didn't want to know, one tortured

In one small town a woman conducted a country hotel. After Dr. Dowling's report on the place was read, the woman's little son threw his arms around his mother's neck and cried: "He says it will pass, mother, he says it will pass.

One hotel keeper, on being reprimanded for keeping a hog-pen just outside of his kitchen window, said: "Why doctor, those hogs have been there five months and none of them ain't been sick yet.'

A barber said to an inspector: "Ain't l a free citizen? Can't l be just about as dirty as I damn please?"

A butcher proudly displayed his tools. Just cleaned 'em up, doctor.'

Dowling promptly scraped half a pound of filth off one saw.

THE WORLD'S WORK



TELLING ALL CLASSES THE STORY OF DIRT FIVE HUNDRED NEGROES WERE REACHED AT THIS COUNTRY CHURCH

"Well, I didn't clean 'em that way," explained the man.

In one place the doctor remonstrated with a dairyman for currying his horse at the door of his milk room.

"Oh, that's all right, doctor," said he. "We get all that out when we strain the milk."

It was uphill fighting against such ignorance, but Dowling would not be denied.

"Clean up or shut up," he told dirty merchants and dairymen. One man, at least, shut up his business. The rest cleaned up.

In Madison Parish he condemned the almshouse as a relic of the dark ages unfit to house cattle in.

"I would rather have my life crushed out by slow torture," said he, "than have to stay in your almshouse. You remodel it and have it cleaned up or I'll have it torn down."

His orders were obeyed.

At one town he found the jail impossible.

"You clean that place up or you'll have to turn your prisoners loose. You can't keep such a filthy, disease-breeding place in this state."

The jail was cleaned up.

"There's no way of stopping that man," said an Alexandria citizen. "He's just bound to have his way."

He began to have his way after he had made it clear that he would have it in spite of good-natured opposition and carelessness. When this lesson had been firmly hammered home by a few choice examples, the towns began to fall in with the doctor's line of thinking.

In one town the mayor stepped forth and said: "This town was once the pride of the surrounding country and noted for its cleanliness, but we've been in debt. Give us a few weeks and we'll show you that we know what a really clean town is."

Another place, Oakdale, had itself incorporated in order to acquire the authority to regulate conditions.



IN TOWN TO SEE "THE BIG SHOW" THE FAME OF THE HEALTH TRAIN SPREAD TO THE REMOTEST RURAL DISTRICTS AND MADE IT A RIVAL OF THE CIRCUS IN POPULAR INTEREST

"First thing we know," said a country editor, "we'll all be ashamed to be caught dirty."

Dowling had thoroughly awakened the state that had been dirty and didn't care.

The Health Exhibit Train was only one — though the most important — of Dr. Dowling's efforts to bring good health to Louisiana. The abolition of public drinking cups and the public towel; the appointment of traveling salesmen as deputy health inspectors; the furnishing of anti-diphtheretic serum to the indigent; make use of the board in the manner desired. Every day reports come to its offices in New Orleans concerning conditions in various towns, and inquiries concerning matters of health and sanitation.

In New Orleans, the Progressive Union stimulates the awakening by displaying on the curtains of moving picture shows such legends as:

"Do you know what the sanitary code is? Look it up. Maybe you are violating the law."

The health board expects that its work



A SUNDAY HEALTH SERMON UNDER THE MAGNOLIAS DR. DOWLING TRYING TO PERSUADE THE LOUISIANIANS THAT THERE IS A RELATION BETWEEN DIRT AND THE DEATH RATE

the regulation of barber shops, hotels, and restaurants; the registration and scoring of dairies; the regulation and control of fish and game, and the regulation of all food supplies; the screening of stores and markets; and the enthusiastic battles against the fly—all are achievements toward the same end.

By its new system of registering and scoring dairies, for instance, the State Board of Health makes it possible for every citizen who writes to it for the information to know under just what conditions the milk sold to his family is produced. Every citizen of the state is a potential health inspector. Every report of violations of the sanitary code is investigated by the board, and the transgressor warned and corrected. The citizens are beginning to among the school children will bear the most valuable fruit. It is hard to start the adult native of an easy-going region along entirely different lines of thought and activity from those in which he has pleasantly lived, and lived as he wanted to all his life. But by putting the study of health into the public schools the next generations will be inclined toward a different point of view. Every month the board of health sends a bulletin to every school child in the state. These are placed in the hands of the school superintendents for direct distribution to the children. Teachers are constantly instructed in school and home hygiene, and they in turn communicate the knowledge to the children and their mothers. In Donaldsonville the first health parade

THE WORLD'S WORK



A VISTA OF INSANITATION SUCH AS DR. DOWLING FOUND IN MANY PLACES AND WHICH HE CAUSED TO BE DESTROYED

that ever marched in the South was made by the children of the public schools.

It is a mistake to think of the man who is responsible for this as a story-telling "mixer," or as a man whose serious critical sense has been at all blunted by the development of his "mixing" talent. Dr. Dowling is first of all a grave, seriousminded physician. He romps with children, but he is very serious when talking about health. He has a genius for plunging to the centre of any problem, for taking hold of it and doing the essential thing without any waste effort. But he does not plunge until careful thought has showed him the way. He knew, as few knew, the serious need of awakening Louisiana to conditions in the state, and he knew the value of the spectacular. That is why he went at it as he did, not because his character loves the sensational. But his campaign was characteristic: he saw that the spectacular was the thing to do, and he did it.

He is a marvel in accomplishment. During the seven months that he was traveling on the health special, he averaged two talks a day, made his daily inspections, wrote his reports, and attended to his regular routine work as president of the State Health Board without hitch or confusion. At his office in New Orleans he



ADVERTISING AN EVENING LECTURE IN WHICH DR. DOWLING, BY MEANS OF MOVING PICTURES, LEFT NOTHING TO BE IMAGINED ABOUT THE CONNECTION OF FLIES, FILTH AND DISEASE, AND IN WHICH HE TOLD THE CITIZENS HOW HE HAD FOUND THINGS IN THEIR TOWN

performs feats at which the less strenuous natives gasp.

"Cicero," someone asked the doctor's office tender, "what time did the doctor get down this morning?"

"Dat Ah can't say, suh," said Cicero, "Ah didn't git down till foh thuhty mahself."

He has new ideas of how a state office should be run. He found it necessary to red-hot speeches. He picks up children and rides them on his shoulder, then goes forth and damns their fathers for keeping dirty stores that may make children ill. He is one of the happiest men and one of the busiest. But he is serious about it all. His manner shows the kind of fight he has enlisted in. It is not a merry campaign of publicity. It is a stern, serious fight for civilization.



THE MAN WHO HAS HIS WAY

AND WHO HAS SUCCEEDED, AFTER 2500 SANITARY INSPECTIONS, IN GAINING THE REGULATION OF BARBER SHOPS AND RESTAURANTS, THE REGULATION AND CONTROL OF FISH AND GAME, THE PRO-TECTION OF ALL FOOD SUPPLIES, THE SCREENING OF STORES AND MARKETS, BESIDES MANY OTHER ASTONISHING IMPROVEMENTS

discharge a food inspector, and the man's friends and several of the papers howled. "I can't help it," said Dowling. "I

"I can't help it," said Dowling. "I am responsible for the efficiency of this office the same as if I was managing a business. I have got to have men who work for the interests of the public. Your man would not."

He is a big man physically, and nobody has yet seen him tired. He tramps all day in the rain, inspecting dairies, and comes home ready to make a couple of There was once a boy in a small country school whose general standing in the community was hampered by the unsavory reputation attached to him because of his dirtiness. One day a newly arrived teacher caught him, held him, and gave him a good scrubbing.

him a good scrubbing. "Huh!" said the other boys. "He was just as clean as any of us, 'cepting for the dirt."

Dr. Oscar Dowling is the new teacher who has arrived in Louisiana.



WOODROW WILSON-A BIOGRAPHY CONCLUDING ARTICLE

THE PRESIDENCY LOOMS UP

HOW A GENTLE GOVERNOR PERSUADED A CORPORATION ROUGH-RIDDEN STATE TO A PROGRAMME OF RADICAL LEGISLATION AND HOW THE FAME OF HIS ACHIEVE-MENT WENT THROUGH THE LAND - THE ASTONISHING METHODS OF JER-SEY'S EXECUTIVE: WILL THEY CARRY HIM TO THE WHITE HOUSE

BY

WILLIAM BAYARD HALE

platform HE upon Governor Wilson had been elected had promised four principal things - which probably not a man in the convention that adopted it expected to see realized: the direct primary, a corrupt practices election law, a public service commission with power to fix rates, and an employers' liability and working-men's compensation law. The Governor's too radical reform that I urge upon you, but inaugural address - a remarkable document, vibrant with the spirit and the

which consciousness of a new age, new alike in politics and in the very elements of social and industrial life - made it clear that he regarded the platform promises as binding. He spoke of them, and of a dozen kindred steps of enlightened re-form, with the blithe confidence of a captain who gives the word of advance to an assured and easy victory:

> merely the tasks that are evident and pressing, the things we have knowledge and guidance

enough to do; and to do with confidence and energy. I merely point out the present business of progress and serviceable government, the next stage on the journey of duty. The path is as inviting as it is plain. Shall we hesitate to tread it? I look forward with genuine pleasure to the prospect of being your comrade upon it.

The new Governor of New Jersey had little respect for the doctrine of "the three coördinate branches," as it had been pedantically exaggerated in practice. His study of the English parliamentary system completely waste a term of office, unable to do anything but play politics! It ought to be impossible to have an executive administration trying to carry on the government without the backing of a legislature of the same political complexion. It ought to be impossible to have a legislature in which the executive administration cannot suggest legislation.

It is not necessary here to go further into Mr. Wilson's ideas of responsible government (he believes that the American plan is capable of natural improvement),



IO,000 CALIFORNIANS GREET GOVERNOR WILSON AT THE GREEK THEATRE AT BERKELEY. PRESIDENT BENJAMIN IDE WHEELER IS MAKING THE PRESENTATION SPEECH FOR GOVERNOR WILSON WHO IS SEATED AT THE RIGHT

had long ago directed his attention to the advantages of having the executive closely associated in counsel with the legislature. His investigation of the American congressional system had confirmed him in the opinion that the attempt to maintain in pedantic precision the classic theory of separation tended to divide and destroy responsibility, render official leadership impossible, and make a muddle where ought to be a clear-headed, decisive government. How often an executive of one party and a legislature of another except to remark that he attributes the up-growth of the boss system, with its *extra*-legal, *extra*-official leaders, largely to the absence of constitutional provision for *official* leaders, and to add that he had determined to be, as Governor, an official leader — the chief of his party in the state, the party put into power by an overwhelming vote of the people — the leader, therefore, responsible not only for administering the routine business of the Governor's office, but for seeing that the policies endorsed in the party platform on



AT THE TEXAS STATE FAIR WITH GOVERNOR COLQUITT (MIDDLE) AND SENATOR CULBERSON (RIGHT), AND HIS ASSISTANT SECRETARY, WALTER MEASDAY

which he had been elected were embodied in legislation. During the campaign he had explicitly requested that no man vote for him who did not want him to be the party leader. He had warned the electorate of the state that if elected he meant to be an "unconstitutional Governor," as the Constitution was mistakenly interpreted to forbid his taking part in legislation. And the electorate had given him a majority of fifty thousand.

It was not idly, therefore, that the Governor's inaugural bugle-call summoning the legislators to enter upon the path of progress, ended with the jubilant note of pleasure at the prospect of being their "comrade" upon it.

What was the situation that confronted this hopeful Governor?

His party had a majority on joint ballot of the legislature; but the senate, without whose concurrence no bill could become law, stood Republican 12 to 9. Democrats were in a majority of 42 to 18 in the assembly, but many of the party's representatives were connected with the old organization and resentful of the college president's advent into politics. The Governor's triumph in seating Mr. Martine in the United States Senate over ex-Senator Smith's candidacy had not ended the war between him and the old organization. It had given him prestige, it had heartened the friends of good gov-

ernment; but it had even more savagely embittered the old leaders and engendered sullenness among their still faithful fol-lowers. "We gave him the Senatorship," they said among themselves, "but that is the end; we've done enough; if he asks for more, he'll find out who is running the state of New Jersey." The state of New Jersey had been "run" for years by the allied corporation interests. They might put up with the loss of a Senator, but legislation that proposed to fasten a workingmen's compensation liability upon them; put them, their books, and the rates they charged, under the control of the people; and that, above all, proposed to destroy the boss system, through which they held their domination of the State House — such things simply could not and should not be. If anywhere in the Union, the beautiful theories of representative government met the ugly realities of actual politics, they met them in the corporation-ruled state of New Jersey. What mattered the wishes of a majority of fifty thousand voters to a legislature,



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two thirds of whose members were under obligations to one or the other of the organizations they were asked to destroy?

The way in which a situation so discouraging was forced to yield the surprising results it did yield is full of promise to men of hope.

Governor Wilson relied from the start on the merits of the bills, on public sentiment in favor of them, and on his power Those who did not come, he sent for, on one pretext or another, and the matter of the bills naturally came up. He told them that he had no patronage to dispose of, no promises to make, and no warnings to issue, but that he should like to have them consider the bills on their merits, and let him know where they stood. Heretofore Republican governors had

Heretofore Republican governors had consulted Republican members, and Democratic governors had consulted Democratic members. Wilson consulted



GOVERNOR WILSON'S WELCOME IN NEW MEXICO TALKING FAMILIARLY WITH THE CROWD AT THE SANTE FE STATION IN ALBUQUERQUE ON HIS TOUR OF THE WESTERN STATES

to force the open discussion of them. He would not permit them to be done for in secret conferences; there should be public debate; he would make his own arguments for the bills so that all the state should hear him, and he would compel the opponents to give the reasons of their opposition publicly. The doors of his office stood always open, and he encouraged senators and assemblymen to make it a 'abit to come to see him and talk things over — familiarly, but never secretly. members of both parties. He talked to them all alike of the good of the commonwealth; to Democrats he added arguments based on the platform promises. He made it clear that he considered himself chosen party leader, but he gave no orders — he would not be a boss; though he might be much bold to enjoin, yet he rather besought, with argument, with appeals to patriotism, state pride and party loyalty, with the simple, cheerful assumption that they were all agreed on essentials (hard they found it to deny that smiling assumption!), and need discuss only incidental details. The nearest that he ever came to a threat was in the suggestion to a few stubborn opponents that they debate the question with him in public in their own districts. From time to time, the Governor issued public stateOn the opening of the legislature, January 10, 1911, it was with difficulty that sponsors could be found to introduce the Governor's bills. Few believed that a single one of them could be forced through before the end of the session. "Very well, then, we shall have to have a special session to do it," was Governor



UNITED STATES SENATOR JAMES E. MARTINE WHOSE ELECTION WAS FORCED BY GOVERNOR WILSON BECAUSE THE PEOPLE HAD CHOSEN HIM AT THE PRIMARY

ments regarding his measures; in one he expressed the fear that he might have to name the men who were preparing to be faithless to the platform promises and to betray the people. He never had to do this; when it came to a vote, as we shall see, there was nobody to name worth naming. Wilson's undismayed reply. "However, let us hope that won't be necessary."

First in order came up the Primary Elections Bill, to which an assemblyman from Monmouth County had allowed his name to be given: the Geran Bill.

This revolutionary piece of legislation



THE WORLD'S WORK



AN INTIMATE VIEW OF GOVERNOR WILSON

contemplated the turning over of both, or all, political organizations to the people. Nominating conventions, so easily manipulated by bosses, were done away with. All candidates for office from that of constable to President were to be nominated directly by ballot of the people; all party officers, committeemen, delegates to national conventions, and the like, were to be so elected by popular ballot, and the primary elections at which all this was to be done were to be conducted by the state under strict laws, the election officers being chosen from citizens who had passed special civil service examinations. The respective party platforms were to be written by the party's candidates for the legislature meeting together with the state committee - the men who, if elected, were themselves to carry out the platform promises.

To those who understand the significance of the great movement for the resumption by the people of the direct powers of government, it would have been sufficiently astonishing that a governor of a state like New Jersey should have thought it worth while to make to his legislature such an audacious proposal as the direct primary, with popular selection of United States Senators, popular nomination of Presidential candidates, and popular choice of party officers. This meant the killing of the bosses; it meant the extinction of corporation-controlled organizations; it meant everything that New Jersey had never had and that the professional politicians and the big business interests could never permit it to have.

No wonder there was a battle royal!

James R. Nugent was in active direction of the opposition. Ex-Senator Smith's relation, he urged the "ingrate" argument — Wilson knew no honor and would knife the men who assisted him; state chairman, he was officially in command of the party organization, and could promise and threaten with the prestige of fifteen long years of almost unopposed party



ON DUTY AS GOVERNOR REVIEWING THE NATIONAL GUARD OF NEW JERSEY

supremacy against this new Governor's bare month of troubled experience.

Nugent easily arranged a coalition with the Republicans. Their organization was equally threatened, and far greater than the fall of the minority party bosses would be that of the Republican "Board of Guardians" who had for years "bossed" the majority party in the state. If the Republican majority still in control of the senate stood pat, the Geran bill would fail there; but Nugent wanted more: he wanted the Democratic lower chamber to repudiate the Governor's plan. He was so confident that this could be managed that he arranged for a conference on the bill as a preliminary test.

It was a fatal error.

The Governor heard of the conference, and genially suggested that he be invited. It was unprecedented for a Governor to attend a legislative caucus, but it would have been awkward to have declined to invite him if he wanted to come. So he went.

The gathering was in the Supreme Court room, on the second floor of the State House. One assemblyman, Martin, challenged the Governor's intervention; he had no constitutional right to interfere in legislation; had it not been written by them of old time that the executive and legislative branches must be kept sacredly apart? The Governor replied by drawing from his pocket the Legislative Manual and reading a clause of the constitution which directed the Governor of New lersey to communicate with the legislature at such times as he might deem necessary, and to recommend such measures as he might deem expedient. He was there, he continued, in pursuance of a constitutional duty, to recommend a measure of that character.

In noble fashion did he recommend it. That conference lasted four and a half hours; for three hours of it Mr. Wilson was on his feet, first expounding the bill, clause by clause; answering all queries and replying to all objections out of a knowledge not only of the experience of other states but of the practical workings of politics, that greatly surprised his audience. One by one he met and silenced all critics. Then,

looking about upon them, he began what will always remain one of the notable speeches of his career, a speech which no man who was present will ever forget. They were Democrats, and he spoke to them as such. This, he told them, was no attempt to destroy the party; it was a plan to revitalize it and arm it for the war to which the swelling voice of a people called it in an hour of palpitant expectancy. With an onrush of words white-hot with speed and suppressed emotion, he displayed before them the higher view of political duty, and expanded the ground of his hope for the future of the Democratic party as a servant of the people.

One repeats only what the attendants at this remarkable meeting unite in testifying when he says that they came down stairs not knowing whether more amazed by the force of logic that had fairly won them over, or moved by the inspiring appeal to which they had listened. The conference, called to refuse the Geran Bill, voted to make it a party measure.

A Republican caucus was proposed, to insure party unanimity against the bill, but so many Republican members refused in advance to be bound, that the plan was abandoned. The opposition had hoped that the senate committee on elections would refuse to report the bill out, but to this Senator Bradley, Republican, chairman of the committee, declined to be a party. Senator Bradley had for several sessions been chairman of the joint committee on appropriations, and though the Democrats now controlled this committee, Governor Wilson had asked that Mr. Bradley, because of his long experience, be retained in its chairmanship. Doubtless this had nothing to do with Mr. Bradley's refusal to bury the Geran Bill. Doubtless the straightforward Governor had had no thought of But the circumstance is reciprocity. interesting.

The senate elections committee did hold a public hearing, arranged by the opposition. It was a melancholy affair, from their standpoint; the speakers who were to demolish the bill never came, while a battery of able, and by now enthusiastic, cannoneers riddled the pretensions of the enemy. It is a pity that the scathing sarcasm drawled from the scornful lips of Joseph Noonan, whose native Irish wit has not been spoiled by his Oxford education, was not stenographically reported. Traditions of its effectiveness still hang about that senate chamber.

Among the expected lights who failed to come and scintillate for the senate committee and the public was Mr. John William Griggs, McKinley's Attorney-General, and Governor of the state during the palmiest days of unrebuked misrule. Mr. Griggs's part in the world to-day is to bewail, with a heart of infinite sorrow, the tendency of a lawless generation to depart from the ancient land-marks of established order recommended by the prescription of immemorial usage, and certified by the sanction of many years of Republican prosperity. Governor Wilson informed the senators that if Mr. Griggs appeared, he would come himself and make a few remarks suggested by the former Attorney-General's speech. lt would have been a great debate had it ever come off. The Governor waited in his office, but Mr. Griggs never came. The total of the opposition was represented by James Smith, Jr's. private secretary, who, after some desultory vaporings, sent word to his chief that open opposition to the Geran bill was futile.

So now was secret opposition. Nugent still hung about Trenton. One day he went into the Governor's office, at the Governor's request, to "talk things over."

Nugent very quickly lost his temper.

"I know you think you've got the votes," he exclaimed. "I don't know how you got them."

"What do you mean?" queried the Governor sharply.

"It's the talk of the State House that you got them by patronage."

"Good afternoon! Mr. Nugent," said Governor Wilson, pointing to the door.

"You're no gentleman," shouted the discomfited boss.

"You're no judge," replied Mr. Wilson, his finger continuing to indicate the exit.

Let us finish with a disagreeable subject of some slight interest in a picture of Jersey politics. Nugent crept away. Six months later, he came again into the prominence of his kind. Still state chairman, he was giving a dinner to a small but convivial party at "Scotty's," a restaurant at Avon, on the Jersey coast. A party of officers of the New Jersey National Guard, then in camp at Sea Girt, near by, was seated at an adjoining table.

Nugent sent wine to the officers' table and asked them to join his own party in a toast. The diners at both tables arose. "I give you," cried Nugent, "the Governor of the State of New Jersey" — all glasses were raised; Nugent finished — "a liar and an ingrate!"

The diners stood a moment stupefied. "Do I drink alone?" shouted the host.

He did drink alone. The glasses were set down untouched; some of the officers indignantly threw out their wine on the floor. Then all dispersed, and Nugent was left alone.

The following day a majority of the members of the state committee signed a call for a meeting to elect a new chairman. The meeting was held a few days later at the Coleman House, Asbury Park. A little strong-arm work was indulged in, in Nugent's behalf, by a gang headed by Charlie Bell, a wine tout, but the Newark man was duly deposed, and a successor elected in the person of Edward W. Grosscup, a member of the organization who had come to be a supporter and an admirer of the Governor.

The Geran bill came to its passage in the assembly and went through with one third more votes than it needed. The Republican senate accepted and passed it without a struggle.

The whole legislative programme followed. To-day, Jersey has the most advanced and best working primary election law in the Union. It has a corrupt practices law of the severest kind. Betting on elections is forbidden. Treating by candidates is forbidden. All campaign expenses must be published; corporations may not contribute; the maximum amount allowed to be spent by candidates for any office is fixed by law.

New Jersey to-day has a public utilities

commission with power to appraise property, fix rates, forbid discriminations, regulate finances, control all sales, mortgages, and leases in the case of all railroads, steam and electric, in the case of express companies, of canal, subway, pipe line, gas, electric light, heat, power, water, oil, sewer, telegraph, telephone companies, systems, plants, or equipments for public This commission's orders as to use. rates go into effect immediately or, if they are cuts, at the end of twenty days' notice. To-day, New Jersey has an employers' liability law which gives an injured employee immediate automatic compensation paid by the employer. The working man, may, however, sue for damages, if he prefers to take his chances before a The state has to-day a provision iury. for the adoption by such cities and towns as may desire it, of the commission form of government on the Des Moines plan, with the initiative and referendum and recall. Under this law, Trenton, the capital, and eight other Jersey cities and towns are trying scientific municipal government. Governor Wilson has spoken in many places in advocacy of the plan.

To this extraordinary record of progressive legislation must be added an intelligent statute regulating the cold storage of food; legislation establishing the indeterminate sentence in place of the old discredited fixed sentence; and the complete reorganization of the public school system.

It is worthy of special remark that the achievement of these surprising results over and against its original opposition left the legislature, nevertheless, in a very friendly attitude of mind toward the Governor. He earned their respect, and he won, to boot, the hearty good-will of most of the legislators. At first an atmosphere of diffidence hung over the executive anterooms; visitors were not sure how they would be treated. But they soon found it a delight to visit the Governor's office, and began to think up excuses for a look The spare gray man with the long jaw in. had a mighty taking way about him; there was always a ready smile and often a lively story, and you seldom failed to go away with a glow around your heart.

The senators found him out in due course of the session one night at a little dinner given him and them by the Adjutant-General, Mr. Sadler, at the Country Club. There were some darkey music-makers on hand, and presently the high tenor voice that had led two college glee-clubs was carolling in darkey dialect, and before long (it was in the confidential privacy of a group of sympathetic senators) the rather lengthy legs and other members of a Governor were engaged in a duet cakewalk with one of the older senators. Nobody knows how many votes for progressive legislation were won that night.

A very practical understanding of human nature was, from the beginning, displayed in the gubernatorial dealings with legislators — perhaps not a little of it due to the keen political sagacity of the Governor's secretary, Joseph P. Tumulty, one of the bright young men of the state, experienced beyond his years in the ways, moods, and foibles of politicians in general and legislators in particular. But Mr. Wilson is himself the most human of men. He is very positive, he can be very indignant, he takes the high ground for himself; but he is not vindictive, and he knows how to make allowances.

No retaliation was ever visited upon adversaries of the Governor. Assemblyman Martin, of Hudson County, for instance, was prominent in the fight against Martine; and he was a leader in opposition to the Geran Elections Bill, his opposition being doubtless sincerely based on his belief that it would destroy the party organization. Martin was much interested in a bridge bill affecting Hoboken and the north end of his county. As the time drew near for action upon the bridge bill, he grew very uneasy and was observed to be much in the vicinage of the Governor's room, inquiring of all and sundry who were communication with the Executive in whether they thought he would let it go through. It was difficult to persuade a man used to the customs of the old days that there was a new kind of politician in the Governor's chair, a politician who dealt with proposed legislation on its merits and not in the harboring of vinnor the remembrance of dictiveness

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promised reward. Mr. Martin's bridge bill was a just and desirable measure, and he got it. When the fight for reform in the educational department came on, Martin was in the front rank in support of the Governor's proposals.

Ex-Senator Smith, the notorious James, Jr., now Mr. Wilson's bitter enemy, owns a great deal of real estate in Newark. His relative and chief lieutenant, James R. Nugent, controls the city so absolutely that a laborer can't get a job on the street without his consent. However, there are some things which a New Jersey city council has to ask the legislature for permission to do. This session, there was to come up at Trenton a bill allowing the Newark common council in its discretion to widen certain streets. The improvement would enhance the value of realty owned by Smith. It would have been the easiest thing in the world for a vindictive Governor to have vetoed the bill, on the ground that it was a job, and to have won applause for his act, while striking a telling blow at Smith and Nugent. But, considering the case on its merits, Governor Wilson could conclude only that it authorized a real improvement, irrespective of its effect on the Smith property. He signed the bill.

"Mr. Smith and the Governor do not always see precisely eye to eye," was his remark, as he laid down the pen, "but that circumstance constitutes no reason why Mr. Smith should be deprived of any of his rights as a citizen."

There was one case, however, in which Mr. Wilson violated, unblushingly, his declaration that he had no rewards for who supported nor punishthose ment for those who opposed his meas-ures. Assemblyman Allan B. Walsh, of Mercer County, was a mechanic employed by the Roebling Company. This corporation, which paid Walsh something like three dollars a day for his labor in its shops, naturally felt that this sum included what service he could render in his capacity as a legislator. When the election of United States Senator came up, he was instructed to vote for Smith. He went to the Governor and told him how the case stood with him. "I quite

understand," said the Governor, "and I don't want to advise you what to do. I am not the man to ask you to imperil your family's living. Whatever you conclude to do, I shan't hold it against you."

Something in the common sense and human kindliness of Wilson's attitude so touched Walsh, not heretofore known as a hero, that he went to the caucus and voted for Martine. His work was cut till he When the could make only \$10 a week. battle was joined on the Wilson legis-lative programme, his employers warned him to vote against it. He voted for it Walsh, you see, had a man in him . and was discharged. The Governor heard of that — and those who happened to be in the State House that day heard language flow in a vigor drawn from resources not commonly tapped by Presbyterian elders. Walsh was a poor man with a family, whose livelihood had been taken away from him because he voted according to his conscience. "Something must be done for Walsh; we can't see him suffer like this," said Mr. Wilson. He was reminded of his declaration that he would "No matter neither punish nor reward. what I said!" he exclaimed. "This is a good time to be inconsistent. We'll find a place for Walsh."

So it is a true charge that the present clerk of the Mercer County tax board (though indeed he is a competent man) owes his position to the fact that he voted for Wilson measures in the legislature.

Mr. Wilson's appointments were for the most part wise and happy - some of them remarkably so. One of the best, in its results, was that of Samuel Kalish to the Supreme Court bench. Kalish is a Jew, and he happened to be Nugent's personal counsel, but neither of these circumstances closed the Governor's eves to the fact that he was able, honorable, vigorous, and peculiarly fitted for such work as lay before the New Jersey Supreme It is Justice Kalish, now sitting Court. in the Atlantic County Circuit, who is cleaning up Atlantic City; it was he who, finding justice made a joke of in Atlantic County by juries picked by the corrupt sheriff, turned to the early common law and appointed "elisors" to select jury-men.

A grand jury thus obtained indicted the sheriff, and the work of bringing the big resort under subjection to law goes thrivingly on. Justice Swayze, who was prominently mentioned for a place on the United States Supreme bench, has resorted to Justice Kalish's "elisors" in dealing with corrupt political conditions in Hudson County.

New Jersey elects its Assembly anew each year. In the autumn of 1911 Governor Wilson went before the people to ask for the return of men pledged to sustain the accomplished legislation and to support what further progressive measures should come up. For the first time, a primary was held under the Geran law. The Smith-Nugent influence was frantically exerted everywhere to nominate anti-Wilson men. It failed, failed utterly, everywhere except in Essex County — the home of the ex-Senator and his lieutenant. For the first time a Geran law convention was held. The Wilson men controlled it. A sound platform was adopted. In Essex, the Smith-Nugent machine won the primary, nominating a ticket expressly chosen in antagonism to the Governor.

In the campaign that followed, Governor Wilson visited every county in the state except Essex. He cancelled his engagements for that county, refusing to ask support for the Smith ticket.

The result of the election has been twisted by opponents of Mr. Wilson into a defeat for him. It was, in fact, a signal victory — a striking endorsement. In all the state outside of Essex, in the counties, that is, where he asked support for Democratic candidates for the Assembly, their majorities aggregated 857 votes more than they did the previous year, when the state was ablaze with the excitement of a gubernatorial campaign. In Essex, which he refused to visit, in Essex, where the Democratic candidates were pledged anti-Wilson men, the Democratic vote fell off 12,000 and the Republicans won.

It is clear enough, certainly, whether this is repudiation or endorsement. What happened was simply this: Smith and Nugent, who, like minority party bosses generally, expect to receive help occasionally from the opposite party and more frequently to give it, turned a very common trick. They nominated the weakest possible ticket and then left it to the fate they expected it to meet. They gave the legislature back to the Republicans, for the sake of being able to raise the cry that the state had repudiated Wilson. Few are deceived by such a play.

The Assembly is Republican again, it is true — made so by Smith's treachery but among the Republicans are enough progressive men to sustain what has been done and probably to support new measures of public good. In a statement issued immediately after the election, Governor Wilson called upon them, in the name of the pledges of their own platform, to coöperate in "reforms planned in the interest of the whole state which we are sworn to .serve." Backed by the enthusiastic approval of the people of New Jersey freshly evidenced at the last election, Governor Wilson will undoubtedly have his way with the Legislature this year, as he had last.

In the spring of 1911 it became evident that a sentiment looking toward Mr. Wilson's nomination for the Presidency was abroad in the nation. The suggestion had been made long ago - several years ago — but it had had no more than faint interest till the Governor's masterful grapple with the difficulties of practical politics at the New Jersey capital had focused country-wide attention upon him, and led to the general discovery of his grasp of political problems, the vigor and originality of his thought, and his devotion to the cause of government by the people. In all parts of the Union, from its populous Eastern cities to remote corners of the West, people seemed suddenly to become aware that there was a man named Wilson who looked more like a great man than any who had been seen of late days. Letters began coming into Trenton and Princeton until they could no longer be read, not to speak of being answered; newspaper clippings by the bushel basket.

The time soon came when invitations to speak in cities clamorous to see and

hear grew so insistent that it would have been vain pride longer to disregard them. A few friends took it upon themselves to arrange an itinerary among some of the cities that wanted to see New Jersey's Governor, and he put himself in their hands to the extent of agreeing to get on a train with the itinerary in his pocket and fare forth toward the nearest point at least.

Before he returned he had traveled 8,000 miles, made twenty-five speeches, addressed thousands of people, and been acclaimed in eight states as the next President. Stopping to rest over-night at Washington, as he neared home, the hotel to which he went was besieged by Senators and Representatives come to make, or renew, acquaintance with the man about whom the whole country was talking.

That was the beginning of it. On his Western journey, Mr. Wilson had replied to all questions by saying that the Presidency was too big a thing for any man to set about to capture, as it was too big for any man to refuse. Now, however, there set in a spontaneous movement which over-night made him a candidate, willynilly, and which within a few weeks had put his name apparently ahead of all others in popular favor — for the movement was distinctly a movement rather of citizens than of politicians, rather of the people than of party leaders. To answer the constant demands of the newspapers for information, a press bureau was established, its modest expenses met by the chipping-in of personal friends, many of them Princetonians. The state committee of his party — which had thrown off the old domination and was now a group of freed and enthusiastic men — announced New Jersey's Governor as her choice for the Presidency and opened headquarters in Trenton to promote his nomination.

Early in January, Governor Wilson was present as a guest at the Jackson Day banquet, attended by all the members of the Democratic National Committee and the most prominent men of the party from all over the country, gathered in Washington; and there made an address so commanding in power that he fairly swept the 800 off their feet with the vision of duty and opportunity which beckoned the party of the people in this hour of national crisis.

From that day Mr. Wilson's life has been lived in the full light of publicity. The press has given a daily record of his acts and words — and has brought to an end the work of this biography, whose purpose it has been to trace the course of not widely known events which, in ways unusual in our political history, has singularly equipped Woodrow Wilson for a chief part in the political life of the nation.

CHAIRMAN UNDERWOOD

THE KNOWLEDGE AND PUBLIC SERVICE THAT HAVE MADE HIM THE LEADER OF THE HOUSE WITHOUT ORATORY, WAR RECORD, OR ANY OTHER SPECTACULAR APPEAL

BY

WILLIS J. ABBOTT

HE galleries of the House of Representatives were packed and the floor crowded on the afternoon of May 8, 1911. Everybody knew that it was going to be a Democratic field day, the first of the Sixty-second Congress, the first indeed since 1897 when the Democrats retired from control of the House. On this day Representative Oscar W. Underwood was to bring up for passage the Farmers Free List bill and the Democratic majority would press it to enactment regardless of opposition. The "steam-roller," which under the masterful guidance of Cannon, Payne, Dalzell, and Mann had for so many years been employed to crush protesting Democrats into the dust, had passed into

new hands, and the people crowded in to see it operate under the new captaincy.

The battle began. From the Republican side Representatives Mann, Payne, and Cannon volleyed and thundered. In the chair sat Alexander, of Missouri, for the House was in Committee-of-the-Whole, and Speaker Clark was on the floor though he took no part in the debate. The "steam-roller" was in perfect order.

The hand in control was firm and determined. If occasional outcry was heard from the victims, Underwood was swift to show that the action was in complete accord with precedents laid down by Speakers Reed and Cannon. Nevertheless Mr. Underwood and his associates on the Ways and Means Committee decry the use of the term "steam-roller" as applied to their excellent team-work. They point out, and truthfully, that their leader has not once tried to shut off debate, but has time and again deferred to the wishes on that subject of the minority leader, Mr. Mann. Be that as it may, when the galleries were emptied at adjournment, people went home with the conviction that the House Democrats had found a new and forceful leader.

This impression had grown with fuller knowledge of Underwood. After that fighting day in the House, there came the first really critical moment for the Democratic majority in that body. The passage of the Free-List bill was a struggle between the Democrats and the Republicans. The Wool Schedule was a more serious matter. Its mere presentation involved a bitter contest between factions in the Democratic party.

Men of the highest sincerity, and of national reputation for their careful study of the tariff took radically different sides. Night after night the majority members of the Committee on Ways and Means, made up of the most powerful Democrats in Congress, met to discuss the question of free wool or a reduced tariff on wool. Out of that long debate, mainly behind closed doors, came the wool schedule as adopted in the Democratic caucus and finally carried through the House with the loss of but one Democratic vote, and with the favor of twenty-four Republicans. This was no small achievement. It was no light endeavor to calm down in committee meeting and in caucus the voices of those who were convinced that to abandon the principle of free wool would be party perfidy. The task was not made lighter by a sudden and unexpected onslaught by Mr. Bryan upon those who put the need for revenue above devotion to the free wool fetish.

Mr. Bryan charged that Mr. Underwood was a protectionist at heart, holding back the bill for the reduction of duties on iron and steel because his personal fortune was invested in an iron mill. When the Democratic leader rose in his seat the Democratic side broke into such a fury of applause as no Congress for a decade past has witnessed. Men clambered on chairs, banged the tops of their desks, and cheered to the limit of lungs well trained in the hurricane school of political oratory. Scarcely could the Alabamian get time to speak. The clatter of the Speaker's gavel was futile - indeed shrewd observers noted that Champ Clark, Mr. Bryan's close friend and reported political heir, made but little effort to check the outburst. What Mr. Underwood said is not of the least importance now. Sufficient that it was a complete contradiction of all the Bryan charges and a flat defiance of the long powerful Nebraskan. Some men remembered the scene in the same Chamber about a quarter of a century ago when the then young and little known Bryan, after his speech on the Wilson bill, was carried about the hall on the shoulders of cheering Democrats who proclaimed him the coming champion. Now comes a Southern Democrat, one far from possessing the quality of great eloquence, and wins a like ovation for his defiance of the former hero. Most significant of all was that not one voice was raised in defense of the Nebraskan. The wheel of time had made its complete revolution.

In speaking of the preparation of the Democratic tariff bills, Mr. Underwood said:

"Ever since the extra session began we have had our experts at work. The 'experts' are mainly men with a natural liking for tariff statistics. One was for years a statistician for the Reform Club of New York and another served in the Treasury Department. When the Wool Schedule was completed we called in an expert, holding office under the present administration in the Treasury. The question hinged upon the amount of revenue that would be produced by our reduced duties for, as you know, a reduction of duty does not necessarily imply a reduction in revenue. Our experts and the Treasury expert agreed within a few hundred thousand dollars, an almost negligible sum in the total of the revenue involved."

"Do you endorse, altogether, the principle of revision by schedule?" I asked Mr. Underwood. "That is to say, if instead of working in an extra session necessarily limited, or a regular session on the eve of a Presidential election, you had a long session with no election distraction, would you stick to this method regardless of everything?"

Well, it is clear to me that the most coherent, equable, and symmetrical revision of the tariff is a general revision in which each schedule shall be considered with reference to the effect that changes in it may have upon the market for articles in other schedules. But we can't always adopt ideal methods of attaining an end. History shows that all the scandal attending earlier tariff bills and nine tenths of their unpopularity proceeded from the methods of log-rolling adopted by those producers or manufacturers who thought their interests in jeopardy. For local reasons a certain number of Congressmen are inclined to defend steel against any threatened cut, others feel their political futures tied up in wool, or cotton goods, or lumber. No one faction could control the action of the committee or of the House, but combinations of factions to prevent reduction in the schedule affecting each have always been formidable when a downward revision was sought. The socialist maxim 'Each for All, and All for Each' is well enough when the 'all' signifies all the people, all the consumers. In tariffmaking, however, it usually signifies only all the beneficiaries of the protective system."

This is a very quiet statement of a condition which has made the tariff perhaps the chief instrument of privilege. The plan adopted under Mr. Underwood's leadership at least made possible a tariff bill not based upon the swapping of particular privileges by different interests at the public expense.

The advantage of the individual schedule method," continued Mr. Underwood, "is that we get team-work on the part of the committee and concentration on one specific topic without encountering this organized opposition. We don't want to do injustice to any industry, but we don't propose to let our action on wool, for example, be hindered because of a combination between wool men and lumbermen. Our first study is to reduce taxation and to provide enough revenue for the needs of the Government. The aid or the injury to special interests is to be considered only incidentally. Our duty is to the consumer. The woman in Chicago buying woolen goods valued abroad at \$10 under the Payne schedule pays \$10.20 in duties if the goods are imported; or, if she buys domestic goods the amount of the duty is added to the home cost. The \$10.20 goes to the manufacturer, not to the Government. I have estimated that the Payne-Aldrich tariff gives the manufacturers \$100,000,000 while a paltry \$15,000,000 goes to the Treasury. Under the bill we passed, the bounty to the manufacturers — for that is all it is — would have been reduced more than one half, the other half saved to the buyer, and the revenue to the Treasury largely increased.

"This is the first step toward breaking the backbone of protection in this country, and that is the purpose of all Democratic legislation. Of course there will always be incidental protection, but as the wool schedule has been prepared without other thought than reducing the burden of taxation upon the people, so will the other schedules be prepared."

"Why," I asked Mr. Underwood, "do men scheme, plan, and log-roll to get places on the committee that mean for them double work, with no concrete personal advantage? Indeed, this committee, being

intrusted with the task of cutting off privileges and of reducing bounties, is likely to get more kicks than halfpence for its pains."

The answer was characteristic of a man who forgets hard study in the joy of the knowledge gained. "Why, the work of our committee," he said, "touches the business life of the nation at every point. Besides," with the characteristic Underwood smile, "you forget the popular reward. When there is to be a tariff bill framed, men on the majority side of the committee have national prominence, and that is the mainspring of political advancement."

Such money as Mr. Underwood has, is invested in an independent steel and iron plant at his home in Birmingham, Ala. Yet that interest has not affected his course in Congress an iota. Indeed, one of the dramatic moments in his career was when he made this statement on the floor of the House:

"1 am in receipt of telegrams from my district to-day stating that the United States Steel Corporation have stopped work on some of the great plants in my district, have turned 3,000 men out of employment, and have given as their reason that 1 was supporting the Democratic tariff bills that are before the House. 1 regret that this great trust should punish the constituency that 1 represent because of the position 1 take here, but I can say this to you: I stand to-day where 1 stood two years ago, for an honest revision of the tariff schedules."

The tariff has been his specialty and revision downward his fixed purpose. Yet he represents a district which is protectionist by nature and but for his personality would send a Republican to Congress. In reaching the chairmanship of the Ways and Means Committee, therefore, he has but come into his own. Among radicals in the country l have noted a certain inclination to distrust him because he comes from an iron and steel district. There is a tendency to class him with Senator Bailey as a protectionist in Democratic clothing. John Sharp Williams, when leader of the House, at first yielded somewhat to this sentiment and took him off the Ways and Means Committee only to put him back again some months later. Underwood took the deposition and the restoration with the silent serenity characteristic of him. Some years earlier his first term in Congress had been terminated by a decision against him of a contested election. He took the reverse uncomplainingly, went home, and was immediately reëlected without the possibility of denial of his seat. He has been ever since — eight terms in all — working away quietly at whatever came to his hand, usually the tariff, and every year commanding more and more of the respect of his fellows.

In the regular session, too, he unsuccessfully opposed the indefensible Sherwood pension bill, for he does not lead the majority by following it.

It is sixteen years since he first came to Congress. Before that he had been active in Alabama politics, and in the first state convention that he attended he was a member of the committee on resolutions. It is characteristic of him to aim high wherever he may be, but his ambition is tempered with sound common sense. Nearly a year ago, when it was suggested to him that there was a strong probability that Alabama would direct her delegates to the next Democratic National Convention to present his name for President, he smiled. "Of course the compliment would be kindly," he said, "but 1 have no illusions as to that." His position seems to be the same to-day. Were the nomination offered him, like every other man in American history, he would probably take it. But he has no "headquarters" working for it.

In his long Congressional service he has impressed himself on the work of his party, but very little on its play. He takes Congressional duties seriously. He does smile occasionally, and he has the habit, peculiar to sincere men, of laughing with his eyes as well as with his lips. But. although he enjoys a good story with his associates, his name is seldom attached to the vivacious anecdotes that make the cloak-rooms attractive to Representatives when somebody on the floor is droning through a speech for the benefit of the voters at home.

There really isn't anything funny about being the Chairman of the Ways and Means Committee. The task of that committee is to raise some \$335,000,000 by customs duties, without unsettling business conditions, or causing a political upheaval. The Payne-Aldrich combination succeeded well enough in raising revenue, but incidentally it raised the political revolt that gave control of the House to the Democrats and put Mr. Underwood in Mr. Payne's seat at the head of the Ways and Means table. It is the study of the Chairman to reduce taxation without reducing revenue, to make protection an incident rather than the prime purpose of the revenue bill, and to do it all so much to the public satisfaction that a Democratic President and a Democratic Senate may be elected this year.

"WHAT I AM TRYING TO DO"

AN AUTHORIZED INTERVIEW WITH

HON. OSCAR W. UNDERWOOD (CEATEMAN OF THE COMMITTEE ON WAYS AND MEANS OF THE HOUSE OF REPRESENTATIVES)

BY

THOMAS F. LOGAN

R. OSCAR W. UNDER-WOOD, the leader of the House of Representatives, is a man with a purpose and a plan.

"It is impossible to change the whole world in a day," said he. "It is impossible to wipe out all the injustices and inequalities in a day. Every man must take the task that is nearest to him. Let every man do his own task well and order will reign where disorder now sits enthroned."

That is about as near as Mr. Underwood ever came to an epigram. He is not a man of pretty phrases, but he is a man of definite ideas. He never sacrifices sense to sound. His mind leads him inevitably to tariff and financial problems. His imagination is broad enough to encompass other problems of government, but he considers the adjustment of the tariff, according to the Democratic standard, his particular problem.

He believes in working, not talking. He realizes that one of the chief reasons why great reforms are not easily brought about is because of the indifference of millions of persons to governmental problems. He also believes that this indifference soon would be eradicated if party leaders defined the issues more clearly. Clearer definitions, in his mind, would wipe out many of the differences that are bred of misunderstandings.

"The line of work that I am most interested in is the line that comes before the Ways and Means Committee," he said. "I have always been interested in the economic questions involved in the levying of taxes and the equitable distribution of the burden of supporting the Federal Government.

"I recognize the fact that the Government, as long as it exists, must continue to tax the American people; that cannot be avoided. But I have thought for many years that the present system of taxation is not an equitable distribution of the burdens and I should like to formulate legislation that would more fairly and more equitably distribute those burdens."

"Do you believe," I asked Mr. Underwood, "that the inequalities of which you speak are due to artificial or to fundamental conditions? That is to say, do you believe they are due to the tariff or to other more natural causes?"

In the slow, deliberate manner that has become so familiar to the House of Representatives and has won for all his utterances a consideration that is given only to the man who speaks after, and not before thinking, he replied:

"I do not think that the revision of the tariff, or a revision of the laws relating to taxes — which, in their scope go far beyond the levying of taxes at the customs houses — will correct all the evils of the country. But I think there are evils that grow out of our method of levying taxes that can be more fairly and properly adjusted and that is as far as I am trying to go at present."

"There are other conditions in the country which need righting," was suggested.

Mr. Underwood swung his big, strong form around in his chair, and remained thoughtful for a moment.

"I know," he finally declared, "that no man in the world can work out all these reforms, but I think the task before me at the present time is that relating to the question of taxation, and if I can accomplish some good results along that line, I feel that I shall be doing my share."

"Do you believe that that will be the chief occupation of the present session of Congress?"

"I think it is the most important work that the Congress has in hand; and it certainly will be one of the chief results that will be accomplished, in my judgment."

"What do you think will be the effect that the lowering of the tariff will have on the masses of the people?"

"I think the lowering of the tariff along some lines will undoubtedly reduce the cost to the consumer. I think a readjustment along other lines will have a tendency to develop our foreign trade and supply new markets for our surplus products."

"In what way can such a result be brought about?"

He put the whole Democratic doctrine — the doctrine on which the party will go before the people in 1912 — in very few words. It is conceded that the two

great national parties will make their whole fight over the tariff in the next national campaign. In previous years, the question of a mere reduction of the tariff was allowed to obscure the exact issue between a tariff for revenue only and one based on the principle of protection. In coming out at the present session for a reduction that will meet the exact line of the difference in the cost of production at home and abroad, the Republicans have put the issue squarely up to the Democrats. It will be no longer possible for them to say they are in favor of a reduction of the tariff, they must say they are in favor of overthrowing the protective policy. And that is precisely what Mr. Underwood does say.

"In the first place," he explained, "trade must have two sides. No country in the history of the world has ever developed a great foreign trade by insisting on selling its goods to other people and demanding the entire payment in cash. That would bankrupt any nation that continued to trade on such a basis. The great commercial nations of the world have developed along lines of reciprocal trade. If we have so high a tariff wall that it prevents other nations from dealing with us to a reasonable extent, they will, of necessity, purchase their supplies not from us but from other nations who will deal with them on fairer terms.

That embodies Mr. Underwood's position on the tariff — that lower rates will open up new markets to the American manufacturer as well as lower the rates to American consumers. That is the policy on which he would go before the country should he be nominated for President, and it is the policy that the Democratic party will put forward at the present session of Congress under his leadership.

Mr. Underwood is a diplomatic leader. He tries to avoid any conflict with the rank and file of his party. He seems always to be bowing to their judgment, even when they are accepting his. He makes it seem that every chairman of a committee is the absolute master of the legislative work over which he has supervision. When asked what matters other than the tariff would be considered at the present session, he hesitated about saying just what might be accomplished.

"Among the other questions of great importance that are before this Congress, he said, finally, "are the trust problem, which is now before the Judiciary Committee of the House; the banking and currency issue, which is now before the Committee on Banking and Currency; the regulation of tolls of the Panama Canal, which is before the Committee on Interstate and Foreign Commerce; reorganization plans relating to the army and navy, now before the Military and Naval Committees; questions relating to the conservation of public lands, now being considered by the Committee on Public Lands, and a number of other questions that are of importance, which all these committees must work out and present to the House as soon as they can secure the information necessary for their solution, and prepare the legislation to submit to the House.

"It is impossible for me to say how soon these questions will come before the House as I am not on the committees having charge of them and have not had the time or opportunity to give them the careful consideration that will be given by the committees having jurisdiction over these subjects."

That is a sample of Mr. Underwood's tact. He never talks for the members of the House. He permits the chairmen of committees to do their own talking. He works with them, frequently, to keep them from making moves that might react on the whole party. Recently, for instance, when the Committee on Pensions decided to report a \$75,000,000 pension bill, Mr. Underwood labored with the chairman and the members to have them reconsider their action, though he failed to stay the tide. Fear of the old-soldier vote was stronger than he; and the fear won.

Mr. Underwood is now engaged in a struggle to prevent the passage of bills for public buildings and rivers and harbors, involving the expenditure of \$40,000,000; and he may succeed in halting the Democratic tendency toward extravagance. That is part of his work as leader; part of the work of which he does not care to speak, as his success as a leader depends on his ability to keep his leadership in the background, except with reference to the tariff.

"Can you say," Mr. Underwood was asked, "whether the tendency of the Democrats on general legislation will be radical or conservative?"

"Of course, l cannot answer that question directly, as the legislation proposed will come from many different committees and the men on the committees will formulate the legislation so as to present it to the House. So far as my own views are concerned, I believe that legislation must of necessity be progressive; that the world is moving forward along business, industrial, scientific and legislative lines; that if the legislation of the country does not keep pace with its industrial and business growth the time will soon come when the legislation will not respond to the needs of the country. But when we come to progressive legislation my own inclination has always been to proceed along conservative rather than radical lines. I believe in the axiom of David Crockett, that it is always wise to be sure you are right and then go ahead.'

It is significant that this axiom glued itself to Mr. Underwood's mind, because he is not given to quotations, no matter what the source. It is an indication of his general attitude toward all public questions. He never jumps at anything. He is never put in the position of denying interviews, because he rarely gives interviews. Whatever he says, whatever he does, is well considered.

"Herbert Spencer." remarked the interviewer, "once said that in thirty-one cases investigated by him, thirty laws, enacted by the parliament of England, brought about results directly opposite to the results intended. Do you think that this is true of the American Congress, or do you think that legislation usually achieves the results intended?"

"I think the percentage indicated by Mr. Spencer is entirely too large, but there is no doubt in the world that Congress sometimes passes a bill intended to accomplish one result which, when the courts have construed it, produces an entirely different effect."

"Do you think that that is true of the Sherman law?"

"I cannot say that that is yet the case. The courts have not yet decided finally what is the most important feature of the trust law so far as its enforcement is concerned. The question is now pending in the Chicago packers' case. It is for the courts to say now whether or not the criminal feature of the trust law can be enforced. It seems to me that we should delay reaching definite conclusions as to how this law should be further amended until the courts shall have marked their proper interpretation of it."

"Do you believe that an amendment is necessary?"

"I am not in favor of amending the Sherman law," replied Mr. Underwood, with some emphasis. "It has taken twenty years now for us to get an interpretation by the courts of what the statute means. After the decision by the Supreme Court as to the criminal feature of the law, supplemental legislation may be necessary; but I shall not be prepared to say *what* supplemental legislation may be necessary until I shall have ascertained first what interpretation the courts will finally put upon the law."

The interview turned then to the chances of the Democratic party in the next campaign, and Mr. Underwood was asked whether there was any reason why honest business should be scared by the prospect of a Democratic President.

"I see no reason in the world," he answered, "why honest business interests should be alarmed at the prospects of electing a Democratic President. There is certainly no intention on the part of any Democrat to injure any man who is conforming to the laws of the country. Of course, should the Democratic party be returned to power there will be a real and honest revision of the tariff laws downward, but 1 do not think that will injure legitimate business.

"There will be a revision of the law to

a revenue basis, so far as I am concerned, and if I have the writing of the statute. The law can be written in compliance with the Democratic platform, which calls for a tariff for revenue only, and of necessity it would be written on a basis of raising the revenue that the Government requires and of eliminating the protection of profits."

"Has not the Democratic party recently drifted from its professed standard of economy?"

"Well, I do not think that is so, except in the passing of the pension bill."

"What about the rivers and harbors and public buildings bills which are proposed by the Democratic committees?"

"They have not yet reported any rivers and harbors bill, nor have they reported a public buildings bill. The party cannot be charged with any position taken by committees until the Democrats of the House have ratified that position."

"What is it that the Democratic party can do in power that the Republican party cannot do?"

"I think," said the Democratic leader, deliberately, "that the past history of the Democratic party clearly demonstrates that we can give a more economical administration of the Government than the Republican party, an adminstration more beneficial to the people as a whole. There is no question that we can write laws that will raise the revenue to support the Government at lower rates and less burdensome rates than the Republican party can write them, because our principles enable us to do so.

"We stand for raising revenue for Government purposes only; the Republican party advocates levying taxes not only for Governmental purposes but to protect the profits of the manufacturer. Necessarily their taxes must be more burdensome to the consumer than those levied by the Democratic party because their theories require them to make the taxes more burdensome."

"Would you be able to raise as much revenue as the Republican party, with a tariff for revenue only — substituted for a protective tariff?"

"I do not think there is any doubt

that more revenue can be raised on the revenue basis than on the protective basis. I can illustrate this by the wool bill that we passed at the last session of Congress. The Payne bill for 1910 produced about \$41,000,000 of revenue; the bill that the Democrats of the House sent to the Senate last spring was estimated to produce about \$40,000,000 of revenue. This estimate was made by the experts of the committee and by an expert from the Treasury Department. The two bills produced substantially the same amount of revenue.

"The rate of duty on raw wool in the Payne bill, when reduced to an ad valorem basis, amounted to 44 per cent.; the rate under the Democratic bill was 20 per cent. The rate on manufactured wool under the Payne bill was 90 per cent.; the average rate on manufactured wool under the Democratic bill was $42\frac{1}{2}$ per cent. Of course, the result was obtained by an estimate of increased importation and the total importations as estimated under the Democratic bill would not have exceeded 6 per cent. of the American consumption on woolen goods and could not be regarded as very dangerous competition. The importations under the Payne bill would be about 3 per cent. of the American consumption."

In any interview with Mr. Underwood it is impossible to get away from the fact that he regards the tariff as the most important issue before the country to-day. Like McKinley, he has made the tariff his life's study. What McKinley was to protection, Mr. Underwood is to a tariff What McKinley was to for revenue only. He has the same gift for conciliation and compromise. He is in no sense a radical. He would rather take what he can get than to cry incessantly for the moon. He believes that the man who pursues the impossible, no matter how virtuous it may be, is of little service to humanity if he refuses to do the work that remains to be done for the country, while pursuing the vision in the distance.

Mr. Underwood is not in favor of the present Tariff Board. He made that fact very clear. In fact, he takes the position that no Tariff Board exists.

"You see," he said, "the Payne-Aldrich tariff bill provided for the appointment of experts to aid the President in regulating the tariff rates under the maximum and minimum provision. When those rates had been adjusted, the President decided to keep his experts at work. He merely decided to call the experts a Tariff Board and increase the number of members from three to five.

"Naturally I am not in favor of this The Constitution has given arrangement. to the House of Representatives the right to originate all tariff legislation. Under the present Tariff Board system, all reports are made first to the President. If Congress should wish to enact one schedule, it might have to wait months for the information from the Tariff Board, which, acting under instructions from the President, might be working on a schedule in which Congress had no interest.

"This is exactly why we have determined to proceed with the revision of the Steel and Chemical schedules in the House, putting the wool bill aside for a time. We feel that the country wants the wool material that has come from the Tariff Board to be given careful consideration. Were we to proceed with wool revision now, we should be obliged to re-enact our own bill because that is the only one on which we can really rely. The data from the Tariff Board may be correct and it may not be. The information sent to the House by the Board makes several volumes - 2,500 pages of printed statistics. It will take at least six weeks or two months to compare the information obtained by the President's experts with the information obtained by our own experts. In the meantime, we do not wish to be idle. We have, therefore, determined to proceed with the steel, chemical, and then probably the sugar schedule. After that, we will be ready with the wool bill, probably, and if there is any thing worthy in the material supplied by Mr. Taft's experts, we shall make use of it. It is because we wish to give the data every consideration that we are proceeding now with other schedules. "I believe that the present Congress

will lop off the Tariff Board experts. I am

strongly in favor of a real commission, however, one that will make its reports direct to Congress and be under the control of Congress. Then the House can direct the board, or commission, to investigate the matters that need investigation and on which Congress wishes to be informed. We won't be working at cross-purposes then."

Mr. Underwood believes in an improved system of public highways, deeper waterways, a parcels post system, and in all the conservatively progressive movements engaging the public interest to-day. He is unalterably opposed to the initiative, the referendum, and the recall. But none of these issues, whether he is for them or against them, will ever distract him from the work which he has set himself to do. He refuses to spread his substance over too great a surface.

Mr. Underwood was asked to outline briefly what he believed would be the platform of the Democratic party in the next campaign.

"I cannot define what will be the platform of the party," he said. "I do not believe that the politicians of the country make the issues; the issues come up from the people. Conditions, as a rule, produce the issues and the politicians fight them out. I think the great issue before the American people — the issue on which the next campaign will be determined is whether or not the country stands for a tariff that protects the profits of the manufacturer or whether it favors a tariff that is levied for revenue purposes only."

"What are you personally trying to do?" For several minutes, the Democratic leader reflected upon the question. His strong, even-featured face reflected his resolute purpose. When he answered it was with a careful weighing of his words.

"I do not think there is any doubt," he said, "that my best qualification as a public man will run along the lines of work that come before the Ways and Means Committee. I have more information and more knowledge of the subjects embraced in the general question of taxation than of any other subjects and my work has always been along those lines.

"If I could aid in writing on the statute books, laws that would equalize the burdens of taxation, make the wealth of the country carry its fair share of the taxes to support our Government, and lift from the backs of the masses of the people the inequitable load of taxes they are compelled to carry, due to the fact that our taxes are levied on consumption and not on wealth, I should accomplish a vast deal of good for the American people — a result worthy of the ambitions of any man who desires to accomplish results for the good of his country."

THE TESLA TURBINE

A MACHINE AS BIG AS A DERBY HAT THAT GENERATES IIO HORSEPOWER

BY

FRANK PARKER STOCKBRIDGE

E FOLLOWED Dr. Nikola Tesla through the Waterside Power Station of the New York Edison Company w passages lined with

--- along narrow passages lined with huge electric switches, the turning of any one of which would throw a whole section of Manhattan into darkness or a blaze of light. We stumbled in the shadows of whirring dynamos, skirted great Corliss engines that seemed to rise from the very bowels of the earth beneath us and détoured past thundering turbines. Before the largest turbine we paused for a moment.

"Here," said Dr. Tesla, pointing to the huge machine, "is a triumph of engineering skill. This turbo-dynamo, the largest ever made, developing 30,000 horsepower, was built from plans worked out on paper. It was never tested until it was erected here and it worked perfectly from the first turning on of steam. That is engineering. But that is not what we are here for."

We pressed on until we reached an open space where a mechanic in blue jeans was wiping the oil and grease from a machine so tiny in comparison with the gigantic turbine we had just inspected that it seemed like a toy. "Here it is," said the tall, thin man —

"Here it is," said the tall, thin man or rather he shouted, for the noise of a hundred thousand horsepower of moving machinery is not conducive to free vocal expression. "Better take off your coats," he continued, "for it is a cold night and it gets pretty hot in here."

We followed his advice and example and stripped down to shirt-sleeves.

Turn on the steam," said the inventor to the mechanic. The workman gave a valve a short turn. From inside the little machine, which seemed to be composed of two identical parts connected by a spiral spring, came a humming sound; the connecting spring began to revolve so rapidly that it looked like a solid bar of steel and the floor under our feet shook with rapid vibrations which died down. I glanced at a speed-gauge attached to what seemed to be the main shaft of the device and saw that it was registering 7,000 revolutions a minute. I looked up at the main steam gauge overhead and saw a pressure of ninety pounds to the square inch indicated.

Dr. Nikola Tesla, inventor of the alternating-current motor, and pioneer in research into high-tension electric currents generally, was demonstrating his latest invention — a steam turbine, different in principle from any heretofore in use and one which will take less room and less coal per horsepower than the best engines now running. "It's up to its normal speed now — about nine thousand revo-

lutions," said Dr. Tesla, and the tacho-"You meter bore out his statement. see, for testing purposes, l have these two turbines connected by this torsion spring. The steam is acting in opposite directions in the two machines. In one, the heat energy is converted into mechanical power. In the other, mechanical power is turned back into heat. One is working against the other, and by means of this beam of light we can tell how much the spring is twisted and consequently how much power we are developing. Every degree marked off on this scale indicates twenty-two horsepower." We looked at the scale. The beam of light stood at the division marked "10."

"Two hundred and twenty horsepower," said Dr. Tesla. "We can do better than that." He opened the steam valves a trifle more, giving more power to the motive end of the combination and more resistance to the "brake" end. The scale indicated 330 horsepower. "These casings are not constructed for much higher steam pressures, or I could show you something more wonderful than that. These engines could readily develop 1,000 horsepower," he said, as we watched the turbine running smoothly, steadily, almost noiselessly except for that single clear, musical note.

Standing nearby was another and smaller machine of the same type, connected through a gear-box with a dynamo. The engine itself would almost go into an ordinary hat-box. At a signal from Dr. Tesla the mechanic turned on the steam. Instantly, without the fraction of a second's apparent delay, the dynamo was under full speed, and from the end containing the motor rose the same clear note, indicating a well-balanced machine running freely at its normal speed.

"This little turbine has developed 110 horsepower under tests," said Dr. Tesla. It was about the size of a derby hat.

"Careful tests have shown that the single-stage turbine, running at 9,000 revolutions per minute, with a steam pressure of 125 pounds at the inlet, developing 200 brake horsepower, consumes

38 pounds of saturated steam per horsepower hour," said Dr. Tesla.

"But I can do better than that by compounding," he added. "The heat-drop under the conditions I named is only 130 British thermal units, and that is less than one third of the amount available under constant load, use about eleven pounds. I have undertaken a contract to produce one which will consume less than nine.

"The idea on which all steam engines — gas engines, too — have been built in the past was that there must be something solid and substantial for the steam to



DR. NIKOLA TESLA WHO, IN HIS SEARCH FOR AN ENGINE SUFFICIENTLY LIGHT AND POWERFUL TO OPERATE THE IDEAL FLYING MACHINE, HAS INVENTED A WONDERFUL LITTLE TURBINE MOTOR, FOR GENERAL USE, THAT IS AN EN-TIRELY NEW APPLICATION OF MECHANICAL PRINCIPLES

modern conditions of superheated steam and high vacuum. By compounding the turbines I shall get a steam consumption of not more than eight pounds per horsepower hour.

"The most efficient steam engines in America, big, slow-moving pumping engines working under ideal conditions and push against. The piston of a reciprocating engine and the blades and buckets of modern turbine engines are examples of what 1 mean. That idea has made them rather complicated devices, requiring careful fitting for efficient operation, great expense for repairs, and, especially in the case of turbines, great liability to damage. It has also made them bulky and heavy.

"What I have done is to discard entirely the idea that there must be a solid wall in front of the steam and to apply in a practical way, for the first time, two properties which every physicist knows to be common to all fluids (including steam and gas) but which have not been utilized. These are adhesion and viscosity.

"You know that water has a tendency to stick to a solid surface. That is the



THIS ABSURDLY SMALL ENGINE — TESLA'S SMALL-EST MODEL — DEVELOPS 110 HORSE POWER

property of adhesion which every fluid — gas, steam, water, or whatever it be possesses. You also know that a drop of water tends to retain its form, even against a considerable force, such as gravity. That is viscosity, the tendency to resist molecular separation, and all fluids have this property, too.

"It occurred to me that if I should take circular disks, mount them on a shaft through their centres, space them a little distance apart, and let some fluid under pressure, such as steam or gas, enter the interstices between the disks in a tangential direction, the fluid, as it moved, owing to these properties of adhesion and viscosity, would tend to drag the disks along and transmit its energy to them. It happened just as I had thought it would, and that is the principle of this turbine. It utilizes the very properties which cause all the loss of power in other turbines.

"Inside of the casings of those engines you saw-instead of buckets or blades or vanes on the edge of a wheel, there are simple disks of steel mounted on the shaft. In the two larger turbines these disks are eighteen inches in diameter and one thirty-second of an inch thick. There are twenty-three of them, spaced a little distance apart, the whole making up a total thickness of three and one half inches. The steam, entering at the periphery, follows a spiral path toward the centre, where openings are provided through which it exhausts. As the disks rotate and the speed increases, the path of the steam lengthens until it completes a number of turns before reaching the outlet - and it is working all the time. In the ordinary turbine the steam passes only around the periphery and the central portion of the wheel is useless. Moreover, every engineer knows that, when a fluid is used as a vehicle of energy, the highest possible economy can be obtained only when the changes in the direction and velocity of movement of the fluid are made as gradual and easy as possible. In previous forms of turbines more or less sudden changes of speed and direction are involved.

Later, in his laboratory in the Metropolitan Tower, discussing the commendations which eminent engineers, many of them with international reputations, have expressed concerning his turbine, Dr. Tesla summarized the points that make it a long step in advance in mechanical engineering.

"To say nothing of it being a new application of mechanical principles," he said, "it has many decided advantages. First of these is its simplicity. It is comparatively inexpensive to construct, be-

cause nothing but the bearings need be accurately fitted, and exact clearances are not essential. Then there is nothing in it to get out of order and the disks can easily be replaced by any competent mechanic. It can be reversed without complex or cumbersome apparatus — all that is needed is a two-way valve to let the steam in at one side or the other, as desired. Reversing an ordinary turbine is next to impossible.

"My machine occupies, as you saw

cation of it is as a pump, either for water or for air. The same disk arrangement is used, but the casing is so arranged, when built as a pump, that the fluid enters at the centre and is ejected at the periphery." He led the way into an adjoining room where a tiny turbine pump, with disks only three inches in diameter, operated by a one twelfth horsepower electric motor, was pumping 40 gallons of water a minute against a 9-foot head.

'How did you happen to turn your



TESTING THE SPEED, POWER, AND STEAM PRESSURE OF A TESLA TURBINE THE PICTURE SHOWS TWO ENGINES, EACH CAPABLE OF PRODUCING 330 HORSE-POWER, WORKING AGAINST ONE ANOTHER FOR TEST PURPOSES, THE TORSION SPRING CONNECTING THE TWO BEING USED TO INDICATE THE AMOUNT OF POWER DEVELOPED

little space — the 1 to horsepower turbine has disks only $9\frac{3}{4}$ inches in diameter and in consequence it weighs very little. The lightest engines now in use weigh $2\frac{1}{2}$ pounds to the horsepower, while these, in their crudest forms, weigh less than that, and I expect to be able to produce to horsepower to the pound. Using gas instead of steam it gives most gratifying results, doing away with the complicated valves and springs of the prevailing types of gas engines. Another interesting appliattention to mechanics instead of electricity?" I asked.

"I was a mechanical engineer before I ever took up electricity," replied Dr. Tesla. "I went into electric science years ago because I thought, in that direction, I was going to solve the problem I have been working on all my life — the production of an engine sufficiently light and powerful to operate the ideal flying machine. All my work in the wireless transmission of power, which has at-

THE WORLD'S WORK

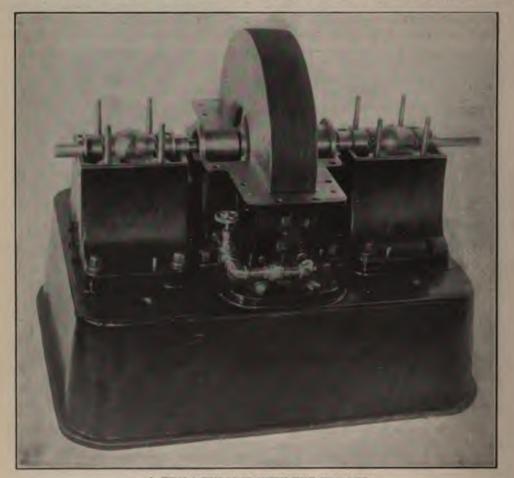
tracted more public attention than anything else I have ever done, was toward that end. I do not expect to build that ideal machine to-morrow, any more than I expect every steam engine in the world to be thrown into the scrap-heap because of this new application of mechanical principles, but such a flying machine will come some day, and meantime 1

"My age? What do you think it is?" he asked.

'If I didn't know better, I'd say around forty," I ventured. "Fifty, for a guess." "Fifty-four," was the answer.

"And you still expect to perfect your flying machine?" "Why not? I have half a century yet

to live, if no accident happens. One



A TESLA TURBINE WITH THE TOP OFF

SHOWING THE SERIES OF THIN DISKS BETWEEN WHICH THE STEAM PASSES AND WHICH, BY THE POWERS OF ADHESION AND VISCOSITY, THE STEAM DRAGS WITH IT IN ITS REVOLVING COURSE

have succeeded in developing something new in prime movers. I am young yet and have plenty of time ahead of me."

I remembered that it was twenty-seven years ago that he had come over from Lika with the principle of the rotating field for alternating current motors already worked out, and began some mental calculations, which Dr. Tesla noticed. of my grandfathers lived to be 118, the other past 100. One of my mother's grandfathers won a footrace at the age of 73. I hope it will not take me fifty years to perfect the flying machine, but if it does, I expect to be young enough at 104 to make a flight in it. The Tesla turbine will be on the market long before that, however."







"SAFETY FIRST" UNDERGROUND

THE NEW BUREAU OF MINES AND ITS LIFE SAVING CAMPAIGN IN THE COAL FIELDS — TESTING \$4,000,000 WORTH OF GOVERNMENT FUEL A YEAR. THE GREAT ANACONDA SMELTER STACK — A PROBLEM AND AN OPPORTUNITY

BY

ARTHUR W. PAGE

ARLY in the morning of December 9th, men outside the Cross Mountain Mine, at Briceville, Tenn., saw smoke pouring from the main entrance. This was all the intimation they had that an explosion had taken place. There were eighty-seven men inside at the time, and none came out. The fan which pumped air into the tunnels had been wrecked and they were filled with poisonous gases. The main entry stretched two miles and a half straight into the hillside, and from it on each side, at right angles, ran side entries about three quarters of a mile long, adjacent tunnels being connected here and there by cross cuts. There were fiftyfour of them altogether, alternating, leading out first on one side and then on the other.

Back in this labyrinth were the miners, and if any were alive they had probably barricaded themselves in a room to keep out the gas caused by the explosion. The main tunnel in places was filled with fallen roof and walls, dead mules, and men and cars, and there were all kinds of débris in the side entries. It was the task of the rescuers thoroughly to explore the seventyfive miles or so of gas infested passages in spite of these obstructions.

From Knoxville, Tenn., and from Pittsburg, the Bureau of Mines rushed rescue cars and apparatus. The Director of the Bureau himself came across from South Carolina where a telegram informing him of the disaster had caught him.

Thirty thousand miners have been killed in explosions and other accidents in the last ten years. To stop this waste of life — and incidentally of property was one of the main reasons for the creation of the Bureau of Mines. Its rescue work is one of its first undertakings. In the past, after explosions, volunteer rescuers without training or apparatus rushed into the wrecked mines to save their comrades. More often than not some of the rescuers perished.

At the great Cherry disaster two years ago a rescue party went down the shaft. When the cage was pulled up later, after the engineer had waited long for a signal, it contained eight dead bodies. At the Hanna mine, in Wyoming, when a rescue crew of forty men, including a State Mine Inspector and every mine official in the camp attempted to rescue about half that many entombed miners, all forty were killed.

At the Cross Mountain mine not a rescuer lost his life. Soon after the explosion, one of the men from the Bureau of Mines experiment station at Knoxville, arrived with an oxygen helmet. By Saturday night a rescue car with more

THE WORLD'S WORK



THE SIGN LEFT FOR THE RESCUERS BY THE FIVE SURVIVORS OF THE CROSS MOUNTAIN MINE DISASTER, EXPLAINING THAT THEY HAD GONE TO SIDE ENTRY NO. 16 LEFT

equipment had arrived, and by Sunday night another.

Attempts were made to restore ventilation by building a fire in the air shaft.

Later a ten foot fan was set up at an old opening. Wherever air could be forced along the passages the rescuers followed. Sunday with two gangs of fifty men each, working feverishly in two-hour shifts, they had been able to clear a way almost to the end of the main tunnel and to restore ventilation in it. But after thirty-six hours of continuous toil only eight bodies had been brought out and no one rescued. Up to this time the search for men in the side entries had been impossible. This began upon the arrival of Director J. A. Holmes of the Bureau of Mines. He took charge of the oxygen helmet squads and began the slow work of exploring the recesses where any survivors were most likely to be. Sixty hours after the explosion two miners found their way to the main tunnel and reported to the rescue parties that three of their comrades were still alive. The helmet men went after them and brought them out. These five men had barricaded themselves in one of the rooms,



AWAITING THE RESCUE WORK THE CROWD OUTSIDE THE CROSS MOUNTAIN MINE AT BRICEVILLE, TENN., WHERE 82 MINERS WERE KILLED BY AN EXPLOSION. THE RESCUE CAR OF THE BUREAU OF MINES IN THE FOREGROUND

"SAFETY FIRST" UNDERGROUND

keeping out the gases until the rescue crews had gone down near them.

Besides these five men, who would probably not have been saved without the help of the Government experts, eight other men nearly died of gas. While in the rescue party they succumbed to the deadly gases encountered, and but for the quick administration of oxygen would have died. All but one were miners who entered without oxygen hel-The exception was a member of mets. the helmeted crew, whose helmet was knocked off by falling slate. He immediately sank to the ground, but his companions got him out, although it delayed their work.

In the Cross Mountain Mine, the United States Mine Bureau was demonstrating, as it has at many previous disasters, the effectiveness of its methods and apparatus. The oxygen helmets, like a diver's outfit, allowed the men to penetrate gas infected places which would otherwise have been impassable. The



HANDLING POWDER UNDER AN OPEN LIGHT THE CARELESSNESS OF THE MINERS IN USING EXPLOSIVES IS ONE OF THE CAUSES OF THE MANY MINE ACCIDENTS

pulmotor, which pumps oxygen into asphyxiated lungs, revived those that had been partially overcome. The electric lights burned where no other lights



THE WORK OF THE HELMET MEN WHOSE EQUIPMENT FURNISHES THEM OXYGEN AND MAKES THEM IMMUNE TO THE DEADLY GASES WHICH FOLLOW A MINE EXPLOSION

THE WORLD'S WORK



HELMET MEN AT THE CHERRY MINE AFTER EIGHT UNEQUIPPED RESCUERS HAD LOST THEIR LIVES TRYING TO SAVE THOSE CAUGHT BY THE DISASTER

would stay lit, and the canaries, when the miners finally consented to use them, prevented asphyxiation by their timely warnings. Canary birds may seem queer aids in the dangers of mine rescue work. As a leader of one of the rescue gangs remarked



RESCUED FROM SUFFOCATION AFTER AN EXPLOSION IN A MINE

when a bird cage was offered to him: "Do you think that twelve strong men need a canary bird for protection?"

Often. After every mine explosion there is likely to be carbon monoxide in the air. It is the result of the incomplete burning of the dust or gas where there is little air. It has no odor. Its presence is not dis-cernible until it gets its victim. "All I knew was my knees gave way and I fell," was the account of one miner who was saved by his companions. But a canary bird is much more quickly affected by it than a man. As long as the canary is well, the rescuer need have no fear of the deadly and indiscernible gas, but when the canary becomes restless and finally drops off its perch it is time for those with oxygen helmets to put them on and for others to get out into the open air. There are canaries in the service of the Bureau of Mines which have saved several lives; for after being taken out quickly after succumbing, they have been revived and kept to go through the experience again.

The helmets, the canaries, the almost military methods of the work of the crews from the rescue car were convincing touches of the effectiveness of the year-old Bureau of Mines to the miners at Briceville. Everywhere in the coal fields it is becoming well known, for it has started the foundations of a new attitude in that industry.

Since its creation, in the summer of 1910, the Bureau has placed seven fully equipped cars — old Pullman cars rearranged — in the principal coal regions of the country, and has, besides, six rescue stations. It has the names of more than 7,000 miners on its list who have taken the first aid and mine rescue training, and there are nearly 1,000 helmets in the country. In the last two years, between thirty and forty coal companies have purchased full rescue equipment and have crews thoroughly trained in rescue work.

The Frick Coke Company has several stations, the Consolidated Coal Company of Maryland has one, and the Fairmount Coal Company also. There is another at the Marianna mine in Pennsylvania. Illinois has three rescue stations and three rescue cars. Ohio is now putting in

"SAFETY FIRST" UNDERGROUND

stations; and the Philadelphia and Reading, and the Delaware, Lackawanna and Western railroads, the Tennessee Coal and Iron Company, and the Colorado Fuel and Iron Company have equipped cars. And this is what the Bureau of Mines wishes chiefly — to persuade the railroads, the coal companies, and the miners of the efficacy of mine rescue work. It has no intention of establishing a great Federal rescue service. Its work is to find out rescue methods, demonstrate their effectiveness, and, by the force of example, get them adopted by the coal companies.

The explosion in the Cross Mountain



OPEN FOR INSPECTION AND ALSO FOR INSTRUCTION. MORE THAN 7,000 MINERS HAVE BEEN TAUGHT RESCUE AND FIRST AID WORK BY THE CREWS OF THE MINE RESCUE CARS

mine was a coal dust explosion. It was considered a safe mine as far as gas was concerned, but the Tennessee Department classified it as dry and dusty enough to be dangerous from dust explosions. Until within the last years, the general opinion both among the miners and the operators was that coal dust would not explode. Some admitted that it might augment a gas explosion, but that it would explode where there was no gas they did not believe. The Bureau of Mines on the other hand maintained that many of the



CANARY SAFEGUARDING A RESCUE PARTY THE BIRD IS QUICKLY SUSCEPTIBLE TO THE DEADLY AND IMPERCEPTIBLE CARBON MONOXIDE GAS. WHEN THE CANARY SUCCUMBS THE MEN KNOW THERE IS DANGER



FIRST AID TREATMENT BUT LITTLE PRACTISED AMONG COAL MINERS BEFORE THE RECENT CRUSADE FOR SAFETY. FIRST AID CREWS ARE NOW BEING FORMED IN ALL THE COAL DISTRICTS

THE WORLD'S WORK



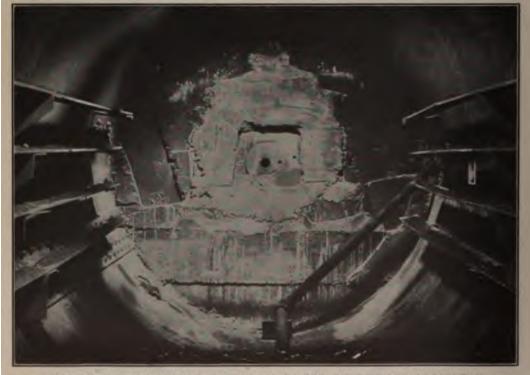
HOLES READY FOR THE EXPLOSIVE IN AN ANTHRACITE COAL MINE

worst accidents were the result of coal dust explosions, and this view is now beginning to be generally accepted.

The great Monongah disaster, in December, 1907, the worst that this country ever had, in which 356 men were killed, went far to bear out the Government experts' contention. It was a model mine, with every precaution taken against gas; yet the tremendous explosion took place just the same.

That coal dust will explode has been proved again and again at the Bureau's testing station at Pittsburg, where tests have been made with dust from all the soft coal fields. The dust is placed in a steel cylinder six feet in diameter and one hundred feet long. At one end the muzzle of a cannon is used to explode the "shots" in. The results have shown uniformly that the dust explodes with great violence. Yet a steel tube and a mine offer different conditions and there were still many doubters among those operators who were not sufficiently convinced to take precautions against coal dust. The experts made a conclusive test.

The Bureau leased a small piece of coal property twelve miles from Pittsburg, at Bruceton, Pa., and put in two 750-foot entries into the hillside. They were connected by cross cuts.



THE CANNON MOUTH FOR THE SHOTS IN THE EXPERIMENTAL GALLERY IN WHICH THE BUREAU OF MINES HAS DEMONSTRATED THE EXPLOSIBILITY OF COAL DUST. THE DUST CAN BE SEEN ON THE BOARDS AT THE SIDES OF THE GALLERY

"SAFETY FIRST" UNDERGROUND



THE PULMOTOR AT WORK BY WHICH MANY MEN WHO ARE BEYOND THE HELP OF ORDINARY METHODS OF RESUSCITATION ARE PUMPED FULL OF AIR AND SAVED

On October 30th, and 31st, a great mine safety demonstration was held by the Bureau of Mines at its station at Pittsburg. The President was there and thouands of operators, foremen, and owners; and thirty thousand miners to represent the number killed in the mines of the United States in the last ten years. On the afternoon of the first day a demonstration of a coal dust explosion was to be given at the experimental mine. About fifteen hundred mine owners and officers went out to see it. It had rained all day and the fields around the mine were ankle



INSIDE A MINE RESCUE CAR ONE OF THE SEVEN, EQUIPPED BY THE BUREAU OF MINES, WHICH ARE INTRODUCING INTO THE COAL FIELDS SUCH LIFE SAVING EQUIPMENT AS OXYGEN HELMETS, PULMOTORS, IMPROVED SAFETY LAMPS, AND WHICH ARE ALSO TEACHING THE USE OF CANARY BIRDS FOR DETECTING GAS

THE WORLD'S WORK

deep in mud. The weather little suited the spectators and still less the engineers of the bureau, for coal dust has to be dry to explode, and the mine entry was only 750 feet long.

The spectators went through the mine to see that there was no gas and to see how much coal dust there was — six hundred pounds scattered along the main and this time, much the same as before, nothing happened. Some of the spectators began to leave and skepticism poured forth on all sides. The engineers hurried into the mine. They found that the crowd in going through had accidentally stepped on and broken the electrical connections. These were repaired and the engineers came out to make a third attempt. Jets



PRESIDENT TAFT AND DR. J. A. HOLMES, DIRECTOR OF THE BUREAU OF MINES watching an explosion in the experimental gallery at pittsburg during the national mine safety demonstration which was attended by hundreds of mine owners, operators, superintendents, etc., and by 30,000 miners — the number that have been killed at work in the last ten years

entry at the rate of one pound to each linear foot. Then they came out and stood in the mud on the hillside above the mine, or sat on the fence to watch the explosion. The engineers pressed the button to set off the charge of black powder which was to simulate the ordinary blown out shot. Nothing happened. Many of the spectators were much amused and the engineers were much chagrined. Again the engineer in charge pressed the button of flame burst out of the two entrances of the mine and set fire to the tops of the surrounding trees. A partly loaded car followed and landed more than one hundred yards down the bank from the mine mouth, which was littered up with the brattices and heavy sand bags which had been 130 feet inside the entrance.

In a second, part of the spectators were involuntarily and rapidly increasing the distance between themselves and the

mine, and half the others were picking themselves out of the mud where they had been deposited by the collapse of the fence. The violence of a coal dust explosion had been proved beyond the wildest desires of the engineers and there was not a man present or running away who did not believe it.

The knowledge of this fact, proved in so dramatic a manner, is saving lives every month; for a mine which is properly sprinkled, or in which the air is humidified, or in which fine stone dust or fine ashes are properly distributed cannot have a dust explosion; and if a gas explosion occurs it will not be spread by the explosion of dust throughout the mine. A good example of this is reported by the Coal Age. There was a gas explosion in the Bottom Creek Mine at Vivian, W. Va., which killed five men. There were about 150 men in the mine at the time, and it is a mine in which explosive dust is prevalent. If the air had not been thoroughly humidified there is little doubt that the dust would have carried the explosion all over the mine and caused another severe catastrophe.

At the Mine Safety Demonstration at Pittsburg came about forty mine rescue and first-aid crews from every coal mining state in the Union to join in the demonstration and to receive prizes presented by the President. A few days after this great meeting, papers in all the coal mining districts began to print such extracts as the following:

FIRST AID RESCUE CORPS AT DALTON COAL MINES

NASHVILLE, Dec. 6 - A first-aid rescue corps has been organized by the Dayton Coal and Iron Company at its mines in East Tennessee. . . The Dayton Coal and Iron Company sent its superintendent as a delegate to the recent rescue experiment meeting at Pittsburg, which was also attended by Mr. Sylvester.

"Safety first" has become a common slogan in the coal field.

Intimately connected with the tests of the explosibility of coal dust are the tests of explosives made by the Bureau at Pittsburg. In the coal districts now there are two kinds of explosives — those that are on the permissible list of the Bureau of Mines and those that are not. On this list are nearly one hundred brands representing about twenty-five different companies. When the Bureau began its investigations it found out that black powder, for example, when there was a blown out shot either in gas or in coal dust, or in both, resulted in explosions.

When black powder ignites, its flame is more than three times as long as the



A COAL DUST EXPLOSION IN THE EXPERIMENTAL STEEL GALLERY AT PITTSBURG THOUGH MANY OF THE WORST DISASTERS, INCLUDING THE ONE AT MONONGAH WHERE 356 MEN WERE KILLED, HAVE BEEN DUE TO COAL DUST, ITS EXPLOSIBILITY WAS NOT APPRECIATED OR GUARDED AGAINST UNTIL THE GOVERNMENT'S DEMONSTRATIONS

THE WORLD'S WORK



THE MOUTH OF THE BUREAU'S MINE AT BRUCETON, PA., WHERE 1,500 PEOPLE WATCHED AN EXPERIMENTAL COAL DUST EXPLOSION SO VIOLENT THAT EVEN THE MOST SKEPTICAL WERE CONVINCED

flame of the permissible explosives and it has a duration three thousand or four thousand times as long as their flames. The longer the flame and the longer its duration, the more danger there is of its starting an explosion. The Bureau sent a letter to manufacturers of explosives asking whether or not they would like to have their products tested for safety in gaseous or dusty mines. This letter brought samples from about a dozen manufacturers to the Pittsburg experi-ment station. About half of these passed the tests, and a list of seventeen "per-missible" explosives was printed. The manufacturers found that having their products on this list helped their sales. The next list, printed six months later, had twenty-one explosives on it, and the fourth contained more than ninety. Every year severer tests are being made and some of the accepted explosives are dropped from the list.

There have been no laws passed requiring the use of "permissible" explosives, nor is it necessary that there



WATCHING THE THERMOMETER THROUGH A MAGNIFYING GLASS TO GET THE EXACT TEMPERATURE BY WHICH TO TELL THE NUMBER OF HEAT UNITS IN THE PIECE OF COAL IN THE CALORIMETER. MORE THAN \$4,000,000 WORTH OF COAL IS BOUGHT FOR THE GOVERNMENT EVERY YEAR IN ACCORDANCE WITH THE BUREAU'S TESTS

should be; for the operators voluntarily, or under orders from the State Mine Inspectors, have made the practice almost universal in dangerous mines. The two million pounds of short flame explosives used in 1908 had become twelve million pounds by 1910, which is more than is used in England although the English authorities there have the power to enforce the use of permitted explosives. State Mine Inspector Laing, of West

State Mine Inspector Laing, of West Virginia, some time ago declared that by using the explosives recommended by the Bureau of Mines, and by the wetting of the mines in his state, there had not been a company letter heads, from mine owners, officers of mining companies, superintendents, foremen, and the like, all the way down to scraps of paper covered with the bungling scrawls of the coal shooters asking for these pamphlets of information.

The Bureau's selected lists of miners and such requests as the following that come into the office daily, take up twentyfive to thirty thousand copies of each pamphlet:

HANNA, WYO., BOX 112.

KIND SIR: Just a few lines thanking you for the information and the circulars that I am re-



THE PRODUCT OF THE MINES THE MINERAL INDUSTRY DIRECTLY EMPLOYS MORE THAN 1,000,000 PEOPLE AT THE MINES AND TWICE THAT NUMBER IN HANDLING, TRANSPORTING, AND MANUFACTURING THE PRODUCTS

life lost from gas or coal dust explosions in seventeen months — which is the record for that state.

Without the power to compel anybody to do anything, the Bureau has laid the foundation of a complete change in the safety of coal mining by proving beyond all cavil or doubt that its remedies are real and workable. The hearty coöperation of State Mine Inspectors, the coal operators, and the miners have done the rest.

I looked through a hundred or two letters to the Bureau requesting its Miners' circulars. There were many on coal ceiving, that I think they are very useful for miners that are working in the mine. I have got lots of information out of the Miners' Circular No. 2, which I have read perfectly well, I shown others, I would be very thankful to hear all the information about the bureau of mines. I was very pleased with my certificate you sent me, but you made one mistake in my name. Thanking you,

I oblige, (Signed) MR. JOSEPH LUCAS, Hanna, Wyo., Box 112.

About seventy thousand more of these circulars get into a more general circulation, chiefly through Congressmen.

THE WORLD'S WORK



THE SMELTER FLUE AT ANACONDA A VIEW DURING CONSTRUCTION GIVING AN IDEA OF ITS 120-FT. WIDTH AND 20-FT. DEPTH The man who made the Bureau of Mines and who is at the head of it, Dr. J. A. Holmes, is as energetic a personality as you will find in the City of Washington, and about half the time you will not find him there. I happened to catch him at his office holding a conference with his engineers late in the afternoon of December 30, 1911. He was busy with them that evening and the next day, Sunday. About six o'clock Sunday he finished his labors. He took the midnight train for Pittsburg, because there were certain things that he could do there on New Year's Day and not lose any time in Washington. He came back on the midnight train on Monday night and was in his office early Tuesday morning. That is the Government gait in the Bureau of Mines.

In introducing the oxygen helmet and in studying the causes and effects of mine disasters, Dr. Holmes is not content to depend upon second-hand information. If he is within reach of a mine explosion he



THE GREAT ANACONDA STACK SPREADING FUMES OVER THE COUNTRYSIDE THROUGH THE FLUE LEADING UP TO THIS STACK EVERY DAY PASS GASES CONTAINING NEARLY 30 TONS OF ARSENIC, 2 TONS OF LEAD, 3 TONS OF ZINC, A TON AND A HALF OF BISMUTH, AND ENOUGH SULPHUR TO MAKE 50 TANK-CAR LOADS OF SULPHURIC ACID

will go. He reached one mine disaster in Alabama where there was not another man who had ever used a helmet. It is considered best to have the helmet men go in squads of eight, certainly no fewer than four. But in this case it was impossible to get four. He got one volunteer, explained the workings of the helmet to him and proceeded into the mine. Far back, in one of the side entries, they found four dead bodies. Dr. Holmes was bending over one of them to get a sample of his blood to find out whether the victim died from shock or asphyxiation when his safety lamp went out. Standing in a gas infested tunnel over the dead with a man bent on collecting blood samples was too much for the volunteer. He collapsed and begged to be carried out. He weighed 225 pounds, and it was a mile or more to

TESTS OF BLACK POWDER AND PERMISSIBLE EXPLOSIVES THE FLAME OF THE BLACK BLASTING POWDER HAD 2.54 TIMES THE HEIGHT AND 4500 TIMES THE DURA-TION OF THE MORE POWERFUL PERMISSIBLE EXPLO-

TION OF THE MORE POWERFUL PERMISSIBLE EXPLO-SIVE. THE GREATER THE FLAME AND THE LONGER IT LASTS THE MORE DANGER THERE IS OF IT CAUSING AN EXPLOSION

the mine entrance. It was nerves not gas that had affected him, but the Director could not be sure that it was not gas until they reached the open air and then much precious time had been lost. On such experiences are founded the rules of going into the mines only in squads of four or more, and these of trained men.

His belief in the canary bird is also founded on personal experience. He was in a mine after an explosion and after most of the gases had apparently escaped. He was carrying a canary as a warning against carbon monoxide and he had an oxygen helmet on his back. Studying conditions as he went along, he forgot the bird. After awhile, feeling a little shaky in the knees, he looked down and it was dead. How long it had been dead he did not know. He hastily put on a helmet, sat down to rest a little longer time would probably have been serious. But neither this nor the slate that fell on his head in the Cross Mountain Minedampend his enthusiasm for first hand information.

Working Sunday and New Year's Day in Washington and Pittsburgh, twelve hours of uninterrupted helmet work in the Cross Mountain Mine, and traveling by horse and boat to the Matanuska coal fields of Alaska are typical of J. A. Holmes. So also is the way in which he made the fuel testing exhibits at the St. Louis Fair. The Geological Survey exhibit needed power to run it, but when Dr. Holmes reached the Fair none had been provided. The Fair officials refused to furnish any and there was no time to get funds from the Government. Not at all abashed, he hurried around — which is his natural gait — and persuaded boiler manufacturers and coal operators that it would be to their advantage to have their products represented in the Government Experiment Station at the Fair. They were repaid for their expense, the Surveys' exhibit could go on, and the Government had spent nothing.

Physically, Dr. Holmes is nearly six feet; thin, strongly made, with a slight stoop. Some of his friends say that his thinness saved his life. Last summer in Alaska, he and a guide met a big brown bear far up above the timber line on one The guide fired and of the mountains. hit the bear in the leg. It came straight on to Dr. Holmes. He had no weapon. There was nowhere to run so he stood his ground. About ten feet from him the bear rose on his hind legs - and turned away. The mine director was not fat enough to kill, so the story goes. But thin or not, he is as hard a traveler in the open as he is a hard worker in Washington.

In the abondoned buildings of the old Pittsburg Arsenal, the Bureau is conducting fuel testing experiments; preaching that coal should be bought on the basis of the amount of heat units it contains and not as it is now on its general reputation. The great public is still ignorant of the letters B. T. U. (British Thermal Units). Probably most retail coal dealers are. In a small Illinois town the school board got hold of one of the bulletins of the Bureau of Mines. They

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called up the dealer who supplied the schools with fuel.

"How much ash is there in your coal?" "I don't know exactly," he said, "There's a plenty"

"There's a plenty." "How many B. T. U's does it contain?" was the next question.

"Not a d — B. T. U.," was his answer. "You've been getting this coal for years now and you know that there's nothing like that in it."

But many of the larger coal consumers have come to buy their coal upon specifications limiting the amount of ash and volatile matter and requiring a certain number of heat units per ton. The investigations of the Bureau of Mines are chiefly responsible for the growing practice in this country, and the Bureau is itself one of the largest purchasers, for one of its duties is to buy the Government coal. By specification it buys about \$4,000,000 worth a year. If its services save the Government 2.5 per cent., the saving pays for the fuel testing of the Bureau; because the appropriation for that purpose is \$100,000. The Bureau saved the Isthmian Canal Commission \$40,000 on one purchase. It also renders important aid to the Navy in its \$4,000,000 yearly purchase of coal, as it examines every mine from which the Navy gets coal for the ships.

Not so concrete but perhaps as valuable to the Government and in the long run to the general public, are the experiments with gas producers, with briquetting machines, and for the elimination of the smoke problem, etc.— experiments which have the rare distinction of provoking envious commendation in Germany. The *Technische Rundschau* of Berlin writes of one of the bulletins:

The work shows again what high value the United States Government places upon the accurate knowledge of its mineral resources and directions for utilizing them to the best advantage; in this respect it can serve as a model worthy of imitation by our German Government.

The Bureau of Mines is the only institution in this country with a comprehensive view of its fuel resources and a definite

programme for adapting our power needs to them. High grade coking coal is none too abundant nor is it widely distributed. It is especially scarce in the Mississippi Valley and in the Western States. The Pittsburg Experiment Station shows how other and cheaper coals may be used to make coke. There are large beds of lignite coal in this country that will not burn in an ordinary furnace and that pulverizes on exposure to the air. The Bureau shows how these low grade coals can be utilized in gas producers or in any type of furnace if made into briquettes. A large German machine was imported that molds these lignites into briquettes of good fuel. The Bureau has also been active in the campaign for the abatement of the smoke nuisance. Its investigations have shown clearly that the various kinds of coal can be burned without smoke in the proper type of furnace, or with some arrangement of mechanical stoker, draft, etc. The devices in eliminating the smoke improve the combustion of the fuel, making it more efficient. A hundred other possibilities of making us a more efficient nation are before this Bureau and for its work there is an ever growing public demand.

And this is only the coal and fuel side of the Bureau's work. Its chemical analyses and its opportunities in the metallurgical field have not been mentioned. A little idea of it all can be had by a glance at the controversy about the smelter fumes at Anaconda. The farmers of that region and the Government have sued the smelter because the solids and fumes from it have damaged the crops and the forests.

The flue leading from the smelter to the base of the stack is about 1,000 feet long, 120 feet wide, and 20 feet high. A billion and three quarters cubic feet of gas pass through it every day. In those fumes, being wasted at present, are nearly 30 tons of arsenic, 2 tons of antimony oxide, 2 tons of lead, 3 of zinc, and nearly half a ton of bismuth worth about \$1.50 a pound, and enough sulphur fumes to fill 50 tank-cars a day with sulphuric acid.

These are poured forth every day into the atmosphere and lost, because the methods for extracting them are too costly

or because there is not a profitable market for them, as is the case with the sulphuric and arsenic acid. At every smelter in the country the same thing is happening.

These wastes spell opportunity for the Bureau of Mines which appeals to its practical minded investigators.

This particular smelter situation is very acute at present; for in many places farmers and forest owners near the smelters have forced them to shut down because of the damage done by the fumes. In Shasta County, Cal., for example, three of the four smelters have ceased operations and the fourth is running only at half capacity.

Cement mills which scatter from twenty to forty tons of dust a day are facing the same problem. One of them, at Riverside, Cal., hearing of an electrical precipitation process by which a Professor in the University of California was taking care of the dust and other solids at one of the smelters, got him to outline a similar plan for a cement mill. Here seemed to be the beginning of a distinct advance in these two industries. The Bureau of Mines got the inventor of it, Prof. Frank Cottrell, as chief metallurgical chemist. He had formed a company around his patents and the company was making money. But money does not seem to be Professor Cottrell's main interest. The capital that had been put into the company was paid back, the other scientific men in it given rights to the patents in six Western states, and the patents themselves turned over to the Smithsonian Institution in Washington, to earn money with which to carry on further research, and perhaps to encourage other scientific discoverers to do likewise.

The scientific study of the wastes of a smelter flume has untold possibilities for usefulness to the country. And it is but an example. These are the modern dreams of which great results come.

The rich corporations engaged in the mineral industries can afford to carry on investigations and to send men all over the world to seek out the information that leads to efficiency. But the smaller mineral workers cannot do so. To raise the standard of the whole industry some central, efficient, and, above all, disinterested organization is necessary. For this reason the establishment of the Bureau of Mines was pushed with such vigor by the American Mining Congress. All the influence of this body was also directed toward having Dr. Holmes made director of the Bureau, for his work in the Geological Survey had convinced the Congress that he was the man to make the Bureau live up to its opportunities.

When Dr. Holmes persuaded the boilermakers and the coal operators into furnishing him with materials for his testing plant at St. Louis, there was practically no use made of the gas engine in this country, and 250 horsepower was the capacity of the largest gas engine made in the United States. He had one there, however, operating on gas from a gas producer. The United States Steel Corporation alone now has engines of more than 250,000 horsepower, which use the waste gases of the blast furnaces as fucl. These two things are not direct cause and effect. One is merely the initial move in a campaign in economic efficiency of which the other is a large and notable example.

Moreover, this is not all the saving at the blast furnaces. The slag that was formerly carted to the dump pile, is now being made into cement. There are plants now in operation or under construction that will use 1,300,000 tons of slag each year in making cement. The mills making this cement are run by gas engines fed on the waste gas of the blast furnaces. One waste product that formerly polluted the air is now converting another waste product into a useful commodity.

Similarly, within the last two years, contracts have been made for more than \$5,000,000 worth by-product coke ovens, to supersede the beehive coke ovens that have been wasting more than \$40,000,000 yearly in by-products.

The two great purposes for which the Bureau of Mines was created were to lessen the loss of life in mining — the campaign to do this is well under way and to lessen the waste of mineral resources. This is the great constructive task on which the Bureau has begun.

A BUSINESS MAN" INSIDE OF THE

BY

JOSEPH FELS

WITH

AN INTRODUCTORY SKETCH

BY

ARTHUR H. GLEASON

HEN Joseph Fels, at a public dinner in Chicago, said something about being a robber,

those who heard him believed he was referring to sharp busi-But in his business life ness tricks. he is a poor illustration of his contention that business is robbery. His record is fairly clean of the ecstatic advertising, the injurious and deceptive tricks of salesmanship, the falsity of the final product, the underpayment and neglect of employees.

He wishes equality of opportunity for all men. His method of effecting this is the "single tax" on land values. He is devoting his fortune, through the Fels Fund Commission (whose membership includes other than single taxers) to bring this to pass swiftly. A keen Ameri-can business man, full of Yankee shrewdness, a Jew, and therefore a man of vision - that is the combination of qualities in Mr. Fels which explains most of his acts. Without that much for a key he will excitable, impulsive, erratic. seem He makes a swift dart to the heart of things. He can sum up the causes and meaning of the South African War in a few sentences which are penetrative and adequate. He has the genius of the American business man for cutting through surfaces and side issues and dealing with realities. He is the sort of man who is best illustrated by anecdotes.

His invasion of London was as simple, direct, and naïve as the forthright actions of the Homeric men who saw what they wished and took it. He looked around the streets a bit, and found the office he wished, the right situation and right size. "I'll take it," he said to the owner.

"But that is not customary. To whom will you refer me? To your solicitor?' "I haven't any."

"But friends of yours in London?"

"I came yesterday, haven't got ac-quainted with anybody yet. Here's the rental money for the first six months. Take it or leave it."

"But won't to-morrow be more satisfactory for coming to a settlement?'

"That's one day too late. I want the office to-day, now."

He got his office.

Five minutes later he stepped around the corner to a stenographic agency.

"I wish to engage the services of a young woman for my office work."

"Excellent. We will supply you with one."

"I wish her now."

"Good. We will see to it."

"Let her come right along with me." She came.

With Mr. Fels and the girl, came a boy bearing a typewriter case and a box for the girl to sit on. There was no office furniture.

"How much a week are you receiving?" Mr. Fels asked her.

"Twelve shillings a week," she answered, "but the firm said I was worth fourteen shillings.⁴

"Can't afford it," said Fels. "I can't afford to have any one here who isn't worth a pound."

At the end of the first week she came to Mr. Fels and asked.

"Did I earn my pound?" "No," he said, "but you will."

Later she did.

Mr. Fels doesn't waste money. He makes it shrewdly and then spends it to get results. Yet he is saving, with an anxious care. With a friend he was riding west along Oxford Street to an engagement two blocks beyond Oxford Circus. The friend pulled out fourpence for the fare and held, out the handful to the omnibus conductor. Mr. Fels lifted twopence from the extended palm and dropped them in his pocket.

"It's only a penny apiece to the Circus," "We'll walk the rest of the way." he said. They did.

The next day, at the solicitation of the same friend, on his way north to Scotland, he stopped off half way up the island and deposited \$2,500 in the hat of a needy psychological professor who was per-fecting a new system of instruction.

His mind plays out over a large area. Much of his activity is sheer fun to him. He had to find out what fats were best, of what benzine consisted, the economic use of by-products. Closely akin to this intellectual search is his fondness for inventions. Almost any man with a new device for getting the best of nature can gain a hearing. He trots his machine and his theory down to the soap office and sets the thing in motion. At this point, life is a vaudeville show to Mr. Fels, full of fresh turns and infinitely surprising "numbers."

Then deeper and more real than this holiday abandon lies another trait. He has a knack at divining the creative impulse in other men of various sorts. He is deeply interested in a young violinist who with instant strides took a first place in European reputation. To a penniless artist who can really paint, whose work is spoken of with enthusiasm by one of the best hanging committees in the United States, he is giving a yearly subsidy till his pictures begin to sell. This sum installs him and his wife on a farm and there he can work out his technique. Knowing little of painting or music, Mr. Fels was yet quick to reach the conclusion that a man who was ready to starve for

"Why not his idea had a sound idea. keep him from starving and give his idea a chance?" would be the line of reasoning in his mind. Another of the directions in which he is liberating creative impulse is that of a young man with an excellent scheme for athletic instruction in universities. For five years he makes it possible for the man to spread his ideas. He is donating to the State of Oregon, for working toward a progressive tax on land value, part of \$25,000 a year for five years. He built and supported the first school clinic in London, and now the metropolis has taken the hint, and instituted several such clinics. He loves. to start a movement, to liberate energy, then let it gather its own momentum from the community. Several times already he has been discussed in the House of Commons.

He prefers a christening to a funeral, and would rather endow a cooperative farm for men in the prime of their strength than a burial lot for paupers, though he would not leave the latter unburied. He thinks he disbelieves in alleviation, and once wrote a letter to a Philadelphia sanatorium for consumptives in which he said: "Mr. Fels contributes no money to charity. He knows that what the poor need most is not alms, but a change in social conditions which will make almsgiving unnecessary. You certainly must know that the conditions under which the poor live and work inevitably breed both consumption and poverty. You must know that a system which places a premium on the withholding of valuable land from use must bring about the overcrowding of millions into disease-breeding tenements. You know this, and yet imagine that, when you announce your readiness to care for fifty victims of this outrageous system, your duty is done."

This is much the sort of letter that Ruskin once wrote in his impatience at partial justice.

Joseph Fels is by nature modest and unassuming. He likes a quiet hotel on a shabby street, he likes to travel second and third-class in England. He rides by 'bus in London, instead of in hansoms. He talks to strangers, goes to see obscure men instead of waiting to be looked up. He goes through life with the freedom of a tramp, or a visionary. He has battered, shoved, and manipulated his way without growing cynical and hard.

But you end with the impression that you have spent time with a good man. There is something clear and simple to his nature. That swift-darting figure, with the impulsive, almost irritable manner, and the kindly eyes, living in a

tion, seems truer and sweeter and stronger than most of the men you meet. Here is the story of Joseph Fels's life

whirl, talking, gesticulating, creating mo-

as it looks to bim at the age of fifty-seven years. Note all through his talk the artful propaganda, as he describes the growth of a village, or jobbing a city lot. His own name for what he is telling here is "The Inside of a Business Man."

MR. FELS'S OWN STORY

In Chicago they reported me as saying I was a robber. Well, in a way that is true. I am a robber, and so is every other business man. I am a robber first because I have taken advantage of the tariff, 'going and coming, and second because I have taken advantage of the increase in land values, the unearned increment. And now I am down on every custom house, and want to knock the bottom out of land value speculation.

About 1870, when I was a lad fourteen years of age, I started in as an office boy in the toilet soap trade in Baltimore; then came the big business crash known as the Fiske and Gould panic. Business reverses made it necessary for me to get to work in earnest and 1 became office boy again, this time for the firm of Foster & Sellman, merchandise brokers. This was about the first real labor that I had ever done. It was perhaps the most valuable single year of my life, as it trained me in concentrating brain forces. I came to the work as a boy and left it a fairly good salesman. By the advice of my dear friend Sellman, who has long since passed away, I was able to see pretty clearly the effect of privilege and monopoly in dealing with sugar and the other materials which have since then become very much of a monopoly. I was too young at the time to take it all in but 1 got some of it. My father and 1 then joined a small soap manufacturer and I went out as local traveler. Later we both came to an old Philadelphia soap man as travelers for the firm, with the understanding that when a certain sum of money had been

made by our help, the principal, an aged Englishman, would retire. This all came about.

Up to this point of the business development, we were protected by a fairly stiff custom charge against the entry of foreign soap. We then quadrupled the business within a few years. As the trade increased, the proportion of the protection increased, because, of course, the more soap that we made, the more money was made out of the protected monopoly. The next move was to get hold of the invention for combining naphtha or benzine with a soap for all ordinary household purposes. For many years we were favored by the free entry of raw material and a heavy duty on the finished product.

We were also protected, when we began to grow large, by freight arrangements which perhaps smaller firms would not have been able to obtain; such arrangements, for instance, as that by boat to Baltimore with a ten cent rate when the ordinary rate was twelve cents. Under this same rebating system, could be included the free railroad and steamer passes to members and travelers of the firm. This system was wrong in that the transportation companies were able to differ-entiate between large and small firms. And by the same process it was wrong for a firm to accept such rebating even though it was entirely legal. We simply did as all the other firms did at that time. To the extent that such favoritism is legal to-day I should have no hesitation in accepting and taking advantage of it. It is simply an illustration of the fact that

equality of opportunity was not then much thought of. That rebating system does not exist any more so far as we are concerned, nor does it seem to exist throughout the country in general. There is practically no competition among transporting companies so there is no need for them to fight among themselves. They simply divide up the rates as exigencies dictate.

Since 1894 the public knows more or less about our goings on. During that time we have been helped by heavy duties on soap from other countries and hampered by duties on raw material. A peculiar example is that of American borax. In Liverpool it was being sold at £14 less 5 per cent. per ton, that is, say, \$70. The identical material was being sold at that time in the United States by the same company that pro-duced it, at \$140 per ton. I shipped this borax across to Philadelphia from Liverpool, paid 5 cents duty for it to come into the port and only discovered it was American borax when the goods were used. Using this particular borax in soap which we exported to Great Britain we recovered the five cents duty from the custom house as the soap went through on its return trip to Liverpool. Perhaps we even caused the Government to lose say 10 per cent. in refunding duty on the original product, because it would cost about that much to run that particular rebating department.

Before the duty was put on, when the borax was free, it sold at two cents a pound. With the duty on, it sold at seven cents a pound and huge quantities were dumped into Europe at the time when I made this particular purchase, at a price less than two pence a pound. This all was proved by our firm's ability to take advantage of the dumping and purchase it on the other side in the way I have This particular borax, then, described. mined in the West and shipped from the West to an Atlantic seaport, was transshipped to Liverpool, shipped back from Liverpool to Philadelphia, put into soap, and shipped back to London.

There was still another odd thing about that particular lot of borax; we later found out that what we had bought as American borax was actually from South America but was stamped American borax, because the American borax company seemed to control the whole chute. This was very much in the same way as oil from wells in Asia is stamped "Standard Oil" by the Standard Oil Company.

Under the present system the manufacturer is being robbed just as well as the workman because of the limitation of industry by monopoly and special privilege.

You ask why the employer doesn't give back all profits in the shape of wages to the workman, after deducting the value of his own directive services. Why don't l, for instance, take no profit from my business instead of seeking to overthrow the present economic system? There are two reasons. First, under the present conditions a man simply can't calculate what his brain is worth nor what part of the product his knowledge, experience, and capital amount to. It's all more or less guess work, just as the valuation for taxation purposes of city lots under the present system is guess work. The second reason is that a man may do bis best to be just and yet the present conditions prevent bim from being just because be can't tell where he will be a year from date. The investor is bound in self-defence to hold his surplus as an insurance against the future of the business, which is the future of the capital invested and the laborers em-The employer cannot be expected ployed. to do more under the present conditions than to pay a considerable percentage above the current rate for labor, though that percentage may be a material increase over the average wage, dictated by his own goodness of heart.

What would be the inducement to him to be in business at all if a surplus did not come to him? Under equality of opportunity there would be no inducement for a man to go into business unless full scope were offered for his enterprise. What the present employer is justified in keeping out of his profits under present conditions, is that amount which will be sufficient to insure the business and then to help, if he so chooses, in wiping out causes of economic injustice that make the few the masters and the many the wage-slaves.

Where a man has a monopoly in an article and is making profit, he can pay large wages. Our wages on the average are, I believe, the highest of those in any soap factory in existence. We pay those high wages because in the first place our people are helping us to make money, and in the second place because high wages lead to efficiency. In our factory we have no piece work, everything being paid for by the week, because piece work is a slave-driving operation.

It pays the boss to give high wages because of the better quality of work which he receives in return. High wages remove that haunting feeling of anxiety with which the underpaid employee faces each week. Absence of anxiety means a higher grade of work. To-day the matter of wages is according to the conscience of the employer. It rests with him and it shouldn't rest with him. It is impossible for labor unions to do more than to hamper industry by pushing for higher wages under the present system.

Every new street forced through a city, every slum destroyed, every park and open space created, every hospital erected, every school put up increases land values and makes the grip of the landlord that much tighter around the neck of industry and labor. Some day we shall see the business and human need of exempting everything created by labor, whether house or potatoes, a set of harness or a sky-scraper, from all taxation of whatever character, and we shall place all taxes upon land values. In this way we shall provide a bottomless reservoir of publicly created wealth from which to draw public revenues, and give employment to an increased number of workmen who will get increased wages by virtue of the increased supply and demand. As more working people would be employed, wages would thereupon go up to the economic value of a man's work. In my own shop, the carpenters receive fifty cents an hour, I believe. Under a proper system of land values taxation, let us suppose there would be three times the present demand for carpenters. Then our carpenters

wouldn't work for a man at fifty cents an hour; they wouldn't work for me or anyone else if by working for themselves they could make a dollar.

The taking by private individuals of land values, which belong by right to the whole people, encourages holding land out of use. Both capital and labor are hampered. Six hundred thousand persons, 10 per cent. of London's population, are living on an average of three in a room, and yet there are ten thousand acres of unused land within the metropolis of London. I believe that 25 per cent. of the superficial area of Philadelphia has never been built on nor the land ever put to practical use since farmers plowed the fields.

In relation to the site of our factory, the present wrongful system of land holding did not operate as much as it might in other cases, because our factory is on its present site by mere chance. We found a little business and we took over the property. Since then we have added what extra land we needed at an ever increasing cost.

Under equal opportunities the man would have the chance to get exactly what his labor, industry, and brains create. This is only a process of creating ten jobs for nine men instead of our present condition of nine jobs for ten men. There is no limit to the possibility of production nor is there any limit to the wants of the people. If all the land in the United States, whether in cities, towns or the country, were forced by a communityowned tax to its best use, every man who wanted to work would have work. This country would be able to supply enough for the whole European population in addition to its own. If this were the case in respect to our own business, for instance, there would probably be ten times the quantity of materials for soap-making turned out. Several times the amount of soap now used would be required, for even the people of this country are not too clean.

I have done a little land purchasing in my time. Not many years ago I bought 12 acres of land on the then outskirts of Philadelphia. I paid \$33,750 for this piece of property. Last year a real

estate broker reported to me an offer from one of his clients of \$100,000 for the land. In other words, I became the possessor of \$66,000 for not doing anything with my property. I had a similar experience in taking a

I had a similar experience in taking a vacant farm of 700 acres in Essex, 50 miles from London, three and a half miles from a railroad station. Within five years we there created a little agricultural village sheltering a population of 300 persons. The industry of these people, joined to my capital, has increased the value of land within a radius of three miles of the village of Mayland from 50 to 100 per cent.

I bought another farm in England. Oddly enough it was also in Essex, but this one was one and a half miles from a junction railway station, 24 miles from London. I bought this farm of 525 acres at \$34 an acre, and I purchased it with the purpose of offering it at cost to some of the public authorities as a colony for the unemployed. I was to give the public authority free use for three years to experiment. They didn't accept my al-leged benevolence, and so I have held on to the land until the junction station has become a town and we began to blossom into building value. I am afraid now to offer it at \$75 an acre for fear a large number of enterprising Englishmen would take me on. This value has come to pass by quietly holding on. Mr. Gardner, the excellent farmer in charge, won't carry my farm away when he chucks up his job. I visited this property four times in five years. I think I will stick to this rate of frequency as it seems to add a considerable per cent. in increased value. I can't find any other reason than that the people who have been foolish enough to increase the size of the village of Wickford have brought increased value to all the adjacent land.

These little experiences of mine, added to various experiments of the dukes, lords, and the monopoly-mongers of England, are squeezing the life-blood out of the common people. That this is the case is clearly proved by the fact that the land clauses of the recent budget actually became law, and now the whole of the land of England is being valued. There is going to be a land value tax put in operation under the finance act. When the people of England once get a proper taste of this kind of blood nothing is going to prevent them from quietly increasing the tax on land values, until we leisurely gentlemen are prevented from taking the unearned increment which belongs to them.

This is the principal reason why their royal highnesses and eminences, the dukes, the landlords, and the land speculators, are kicking up such a wholesome row in The more they kick the Great Britain. more quickly will the tax on land values be increased, because kicking is good propaganda. Those who are not anxious to take what doesn't belong to them nor what they have not earned, will go on increasing in numbers and strengthening their demands from year to year, so that ultimately the population whose presence gives value to land will own that value up to twenty shillings on the pound in Great Britain and a hundred cents on the dollar here.

Under present conditions the men who control the basic source of supplies are able to dictate their own will. Suppose my business controlled the supply of fats in the United States. We could run up the price of soap to the point at which it could be imported from other countries with the duty added. We could then go to Washington and complain of the foreign fellows, and of the foreign stuff, made by foreign labor, and we could get our misguided Congress to whack on another 30 per cent. of duty. This is being done in various directions. As our only competition is among ourselves, we are forced to use cheaper and often inferior materials. As there is neither free production nor free exchange we are hampered at every point. So you find that the suit of clothes, made by a good custom tailor in London, from goods made in England, can be purchased for \$20. The same garment here cannot be bought from the same kind of tailor at less than \$40. The difference in the cost of labor between the two countries put on the garment may be about three dollars. Where does the rest of the difference come in?

WHAT I SAW AT NANKING

JAMES B. WEBSTER (OF THE AMERICAN RED CROSS SOCIETY.)

HEN I first reached the top of Tien Bao Chen, overlooking Nanking, shortly after it had been captured by the Revolutionists, the dead and wounded were

lying about pretty thick. Half-way down the slope toward the city I saw a man who was evidently too badly injured to walk. I knew at once that he must be an Imperialist soldier. I went in search of the doctor, and we returned in a few minutes to consider the wisdom of going in such close range of the rifles along the city wall. We got there just in time to see two soldiers with savage sword thrusts putting the poor chap beyond the need of our assistance.

Such acts of cruelty, however, are not confined to the Revolutionists. Several days before, while the Imperialist troops were still out in the country, and skirmishes between the two parties were frequent, one of the most popular of the Revolutionist staff officers was captured by the enemy. They cut off his ears, his nose, and his tongue, carved out his heart and then compelled some of the country people to take his body back to the Revolutionist camp. The soldiers were wild with grief and anger, and swore they would kill every man in Chang Hsuin's regiment if they ever got into the city. In view of such precedents, the outcome of the following instance surprised me. I was told that some soldiers had just brought up to the hill-top an Imperialist whom they had found hiding down below among the rocks. I found them standing on the fortification holding a temporary investigation of his case. None of the officers in command were present. One man held the poor trembling wretch by his queue and grasped his naked sword with his right hand, ready to put the court's decision into execution. I went

over and said to them that the treatment their men had received at the hands of Chang Hsuin's soldiers was no excuse for their being equally barbarous, and I told them how the foreign countries would look at such treatment of a prisoner without arms. By that time one of the officers had come up, and he assured me that they would not kill the man, but the soldier with the sword proceeded to saw off his victim's queue with his dull sword. The Revolutionists then gave the prisoner food and clothing and fixed a shelter for him and called me later that evening to dress a slight gash in his foot. Two days later, I returned and found that they were still caring for him and, at their request, I put on a new dressing.

The wounded men are restless while in the hospital and are eager to get out and rejoin their comrades at the front. They are fighting for a worthy cause, and are out to win.

The soldiers on both sides showed that they have courage, and after I had spent several days among them in camp, in their trenches, and on the scene of battle, I was convinced of their earnestness of purpose, of their good behavior, and ability, especially so in the case of the Revolutionist troops, These men are fighting for a republic and not a few will lose that notion only when they lose their heads under the knife, or lay down their lives on the field of battle. Their faces light up with interest when they find that the visitor is an American and they ply him with eager questions about our government. The name of Washington is most often on their lips and the government of the United States is their ideal. How little the writers of our Declaration of Independence and those who fought to maintain it dreamed that in so short a time their example would be the light and hope of distant and unknown China!

BY

WHY I AM FOR ROOSEVELT

BY

EX-GOVERNOR JOHN FRANKLIN FORT

(OF NEW JERSEY)

(Among the Republican governors who favor Mr. Roosevelt's nomination are Aldrich of Nebraska, Glasscock of West Virginia, Osborn of Michigan, Hadley of Missouri, Stubbs of Kansas, and Vessey of South Dakota.)

OU ask me to give a "statement of reasons why Mr. Roosevelt should be nominated."

The first reason arises out of the political conditions of the time. Both the great parties are divided into factions which are as strongly opposed to each other as the parties themselves are to one another. Socialism only, which made great strides in the last election, is The only man who can get pracunited. tically all the support of all factions in the Republican party is Mr. Roosevelt. He is sufficiently progressive to stand for the things which make for progress, and is sufficiently conservative to conserve existing interests which are right while advancing in popular governmental policies. He believes in conservation in the sense that Dr. Hibben, the new president of Princeton, defined it, namely: "progress without the loss of essential values.

No other man can mould the thought of our public life as he. There is no one else whom the people follow so gladly and in whom they believe so intensely. They believe he is sincerely their friend and that he wishes the government to be conducted solely on lines which will give to all an equal chance in the hard struggle for existence. They know that no man who asks a fish will be given a stone if he can They believe that he first athelp it. tempted to check conditions to which, rightly or wrongly, the masses of our people are opposed. They believe that he stood, as President, for industrial honesty; for the elimination of watered stock and worthless securities; for the principle that only that which has value should be sold; for the same treatment for the man who works for his daily bread and gets

his wages by the sweat of his brow as for the man who capitalizes the output which that labor produces; for honest corporate management; for just laws for the factory operative, the railway employee, the mine worker, the lumber-jack and the mill-hand; that he thinks as much of them and their interests as he does of their employers; in a word, favors the "square deal" for every one.

Others may be as capable of doing this as Mr. Roosevelt, but the people do not believe it, certainly do not know it. They have tried him, and these are times when the average man feels that he does not want to take any chances. These are days when there is a feeling abroad that every man does not have an equal chance. It may not be true, but it is believed, and the people do not care to experiment. They want to be sure that the President of this nation is a man in whose justice and fairness of purpose they have an abiding faith, that whatever arises, every man will be treated equally, get just what is coming to him — no more and no less.

These things relate to our domestic conditions. Our foreign policy needs him. He knows the nations of this earth and their rulers as no other man does. He is democratic to the core. He is in sympathy with all peoples striving for Republican government. He will stand for American ideals, for the spread of our commerce, for restoring our flag on the seas as of old, so that Americans will not be humiliated by not seeing it on more than a half dozen craft of any kind, at any point, in the fifteen thousand miles of ocean highway between the Strait of Gibraltar and the Golden Gate. He would put it in South America or in the Orient, or have it fly in the ports of the world. country in nearly fifty posts. The largest detachment at any one place was less than 2500 men. The General Staff was working over a consolidation plan to save expense, to get the troops together in tactical units, and to give the officers and men more opportunities to become soldiers and to burden them with fewer ground superintendent and post janitor duties. Some one in the War Department had been working on plans toward this reform ever since Mr. Root was Secretary of War — prob-ably before that — but very little consolidation had been accomplished. The reasons why it has not, will appear as this article goes on.

The Committee on Expenditures in the War Department of the House of Representatives now comes on the scene. Mr. Tawney had failed of reëlection. The It was pledged House was Democratic. to a policy of economy. It set its machinery to work in various ways to see whether or not it could carry out its pledges. The Expenditure Committee was part of that In previous sessions this machinery. committee had been practically defunct. Sometimes it did not even meet. But the young Democrats who were assigned to it in the 62d Congress took their duties seriously from the beginning whether anyone else there did or not. They had not gone very far in their hearings before they began to get testimony about the excessive cost of maintaining the many small posts scattered over a wide area. The subject kept coming up until finally the chairman, Mr. Harvey Helm, of Kentucky, asked Major B. F. Cheatham, in charge of the construction and repair of posts:

"Could there be any possible way of expending more money or incurring greater cost than by the present method?"

The Major answered:

"None, unless the number of posts was increased. That is the only way that 1 can see."

The Committee brought out in the testimony taken before it a great mass of evidence corroborating Secretary Stimson's statement of the situation.

"The mobile army itself is distributed among 49 army posts in 24 states and territories. Thirty-one of these posts have a capacity for less than a regiment each; only 6 have a capacity for more than a regiment; and only one has a capacity for a brigade. The average number of organizations to each of the 49 posts is only 9 companies, giving an average strength in men for each post of only 650.

"Nearly all of these posts have been located in their present situations for reasons which are either now totally obsolete or which were from the beginning purely local. . . Comparatively few of them are in positions suited to meet the strategic needs of national action or defence.

"In short, we have scattered our army over the country as if it were merely groups of local constabulary instead of a national organization. The result is an army which is extraordinarily expensive to maintain, and one whose efficiency for the main purpose of its existence has been nullified so far as geographical location can nullify it. . . .

"A thorough reorganization of our military establishment to remedy the foregoing defects would involve much legislation and would encounter many most serious difficulties. Upward of \$94,000,000 have been spent upon our existing posts.

"Ineffective and expensive to maintain as this system is, it nevertheless represents an investment which cannot be easily changed or abandoned. The source of profit which each post furnishes to neighboring communities causes a local pressure against any change in location and brings constant influence to bear toward further expenditures in that locality."

The italicized sentence explains why former reorganization plans have failed. It is in proper official language. Stated more baldly the fact is that Senators and Representatives have had posts enlarged which should have been abandoned and others created which have no military reason for existence, as a way of distributing money from the Federal Treasury in their districts. Stated thus baldly it sounds as if the practice should be indictable. But long usage has sanctioned such distribution of "pork" not only through army posts but through special pension acts, tariff privileges, river and harbor

appropriations, public buildings bills, and through a hundred other minor methods. And as long as constituents are made of the stuff they are it is not easy to change this order of things. If the army posts can be consolidated upon purely military lines and this item of "pork" eliminated, it will mean as much to the public in limiting the most corrupting influence in the National Legislature as it will in the increased efficiency and economy in the army.

It is not an easy situation to face. Year after year the War Department has asked for appropriations from Congress, which it has spent on these political patronage posts as freely — if not more so — as it has on the other posts. It knew that the "pork" system was wasteful, but it was afraid that if it did not accept money under the system it would not get it at all. A part of General Wood's testimony makes the army's embarrassment very clear.

We dislike to come before General Wood. Congress with a request for money to build new barracks and quarters when there is, perhaps, a fairly well-built and complete establishment standing in a place where we believe it never should have been put originally, but still it is there. . . . We are now going ahead to make a serious effort to get out of these places, but we are exactly in the position of a man who finds himself in a fairly comfortable house located at a place on his property that he does not like and maintained from time to time with many little expenses that he would like to avoid, and he constantly considering the question of putting a lot of money into a new house, and yet confronted always with the fact that he has a good old house and is fairly comfortable. That is exactly the condition we are confronted with. If I may be perfectly frank, we are always meeting with a certain amount of opposition when we suggest the giving up of a post. You gentlemen know, as well as I do, the pressure which your constituents put upon you when a post is to be given up or when there is any talk of reducing the personnel of the garrison. That, of course, all comes back to us. The concerted effect of many petitions and many applications oftentimes is sufficient to make the department hesitate in abandoning stations. It is . . embarrassing to come before Congress with a request for a large appropriation to build a new post when there are quarters enough for troops at old posts, unsuitably located, perhaps, and

at places which make supply extremely expensive, and there is a tendency to keep up an establishment perhaps at excessive cost rather than frankly abandon it and ask for an appropriation sufficient to construct a new one. To be perfectly frank, it would, as a rule, be difficult to secure an appropriation under these circumstances.

It is not altogether plain sailing for the administration either. To sanction the plan of concentration necessitates the admission that the Government has been for years wasting a great deal of money—while in the control of the Republican party. To admit this truth and to act on the admission is putting patriotism above politics, which is not always an easy thing to do.

Then the Congressmen — those who have gained popularity by securing military appropriations for their districts — will be roundly abused by their constituents if they allow their posts to be abandoned. And other Congressmen, if' they vote against the military "pork" of their colleagues, can hardly expect those colleagues to vote for their river improvement "pork," or whatever variety it is that their constituents demand. It takes courage to vote against a bill, no matter how bad it is, if there is a desk full of telegrams from home demanding its passage.

The committee in its hearings soon ran upon evidences of the delicacy of the situation. One of its members asked Major Cheatham whether, if it had been left to him to select a point in the United States to make a complete brigade post, he would have selected Fort D. A. Russell.

The Major begged to be excused from answering. It does not appear in the proceedings, but everyone in the room knew that Fort D. A. Russell is the pet post of Senator Warren of Wyoming, the Chairman of the Senate Committee on Military Affairs.

Later the same committee-man questioned General Wood about Fort D. A. Russell.

"What advantages, in your judgment, does it possess for building up such a plant or institution as is there now, costing practically \$5,000,000 up to this time?"

"It has a good healthy climate," answered the General.

"That advantage is what might be called indigenous to the whole Rocky Mountain region.

"It had no advantage", the General added "over — any place in the West having good water, a good climate, and good railroad communications."

According to other testimony the water supply at Fort D. A. Russell has been very costly, and it took longer to get troops entrained there for the Texas manœuvres than at any other post; but these are matters of secondary importance. The climate had little to do with its increased size. Senator Warren did that. His efforts in behalf of his fort are similar to those of other Congressmen to get appropriations for theirs, with this difference: the Senator, from his position on the Military Affairs Committee, has more power than any one else, and with that power he has been more successful than any one else.

From June 30, 1906 to June 30, 1911, the amount expended on new construction for the army in Wyoming was \$4,694,699.95, which is about \$400,000 more than was expended in any other state. From its establishment in 1867 as a protection against Indians until June 30, 1906, by which time its chief advantage seems to have been in sharing the climate of a large part of the West, Fort D. A. Russell had cost the United States \$937,779.21. In the next five years, with only the same climatic advantages to recommend it, it enjoyed an expenditure of \$3,873,158.29.

Of the twenty-six states which have been represented on the Military Affairs Committees of the House and Senate, two, West Virginia and Tennessee, have had no money spent for military construction or repairs within their borders. The other twenty-four states have received \$28,167,334 out of the \$36,408,990 that has been spent in all the states in the five years ending June 30, 1011.

The committee's findings evoked little interest in the Halls of Congress. Too much else was going on. Over in the War Department men talked over the testimony and wondered whether anything would come of it. They were not over-sanguine of any wholesale reform. For example, General Wood, when pressed for the names of posts which he thought ought to be abandoned, as he expressed it, side-stepped the question, and for this reason:

Whatever move we make, involving as it will the abandonment of a number of posts, will meet with the strongest opposition from the people of the locality and it does not seem wise to announce at the present time what places are under consideration for abandonment."

At another point he said: "If we make any announcement of policy now, except to you gentlemen con-fidentially, there will be such an everlasting uproar that it will embarrass every move we make.'

The General evidently thought that the only feasible plan was to abandon the worst posts on a piece-meal policy creating as little uproar and commotion as possible. Something has already been accomplished along this line.

The chairman of the committee spoke for a more vigorous policy:

Is not that a situation that you have to face, and would it not be just as well for you to roll up your sleeves and go at it?"

"I think you will find some help from the membership of this committee," he continued.

In this he was right. Mr. Bulkley, of Ohio, one of the members of the committee, rolled up his sleeves and went at it.' He offered a resolution on the floor of the House requesting the Secretary of War to furnish the house with the names of all army posts (1) "which have been located in their present situations for reasons which are now totally obsolete," (2) of those "which have been located in their present situations for reasons which were from the beginning purely local" and (3) of those "which were originally placed with reference to possible Indian troubles-and the names of such of those as are placed where such troubles are no longer possible.'

These three classes will include all the posts which have been established or are maintained for political reasons or through mistakes of the War Department.

The resolution also called for the names of all posts situated in suitable stategic points.

When Mr. Bulkley presented his resolution it was actively opposed by only one member. Mr. Mondell of Wyoming, after defending Fort D. A. Russell, wound up his objections with the interesting remark:

"I would prefer to take the judgment of a committee of the House . . . rather than the judgment of the generals of the army, who view these matters entirely from a military standpoint."

But in spite of Mr. Mondell's objection the resolution passed. The Secretary's memorandum in answer met the request fairly. Fort after fort, long coddled into expensiveness for the benefit of their localities, are slated for abandonment that was willing to pass a resolution asking for the labelling of the posts.

The Secretary's memorandum shows that the effective training of the army and its economical housing at strategic points necessitates, at most, eight or nine groups of posts, each group to be garrisoned by a force properly proportioned between the three branches of the service and near enough together for manœuvres in common. To protect the Eastern coast, there should be two and possibly three groups on the line between the St. Lawrence and Atlanta. Fort Porter, N. Y., and forts Ogelthorpe and McPherson, Ga., would be made use of in this group.

In Indiana, Ohio, and Illinois are three



REGULARS IN CAMP THE MOBILIZATION IN TEXAS DURING THE MEXICAN REVOLUTION PROVED THE INEFFICIENCY OF THE POLITICAL METHOD OF DISTRIBUTING ARMY POSTS

immediately. Others are marked for abandonment later and for retrenchment now.

The communities that have fattened on the army posts will fight to keep them. Private citizens, boards of trade, city councils, mayors, Governors, and Congressmen will struggle, as they have in the past, to keep up the old régime. In the past they have been successful.

But the situation is different now. The Stimson memorandum has separated the military posts from the political posts. It will be hard henceforth for a self seeking community to get army appropriations under cover of helping the army. What "pork" is distributed will have to be distributed with the label on — and that will not be so easy, particularly in a House posts one or more of which might be retained as a nucleus of a concentration centre in that region.

The same is true of seven posts scattered over Iowa, Nebraska, Kansas, Minnesota, and Missouri. From Kansas to the Pacific Coast there would be no garrison of the mobile army. On the Pacific, posts already in existence near Portland, Seattle, San Francisco, and Monterey could be used; and in the Southwest, Fort Sam Houston, Tex., is located in the proper strategic position. There are military reasons for the retention of these also: Fort Sill, Okla.; Fort Bliss, Tex.; Fort Huachuca, Ariz.; and Fort Myer, Va. There the list ends, and if the army were concentrated on this basis it would mean an

THE WORLD'S WORK



SECRETARY OF WAR HENRY STIMSON WHO AIMS TO CLOSE THE ARMY "PORK BARREL"

annual saving of \$5,500,000, and, more important still, an efficient army.

To make the change would cost approximately \$35,000,000. The "watch dogs of the treasury" of the Tawney and Cannon type will oppose such an expenditure. As the Secretary says: "The solution of this problem is ap-

"The solution of this problem is apparently complicated by the fact that the posts now occupied by the mobile army represent a large investment which must be abandoned if an efficient plant is to be established.

"But," he continues, "while most of the posts now occupied have lost their military value, the national military reservations have acquired a great value as real estate. As a business proposition it should be possible to refund the investment and largely finance the relocation of the army from the proceeds of the sale of the real estate which is no longer needed for military purposes. . . ."

The new House of Representatives had

the courage to ask for the real facts and the Secretary of War to give them, and to give, with them, a constructive plan and ways and means to carry out the plan.

Against this plan stand the parasitical posts, and their sponsors. Perhaps most prominent among these is the Wyoming delegation; for Wyoming has been the largest beneficiary of the post largess in recent years.

Inefficiency, waste, and corruption generally go together. The army admittedly is inefficient, its maintenance is wasteful, and by any decent standards the obtaining of money by Congressional delegations for non-military posts is a corrupt practice. The Committee on the Expenses in the War Department, and the Secretary of War, have played their parts well. The facts are known. If the public comes on the stage with a real demand for it, the army will be concentrated as it should be. It will be given a chance to become an efficient army.



GENERAL LEONARD WOOD THE FIRST CHIEF OF STAFF TO TRY TO MAKE THE ARMY POSTS REAL MILITARY INSTITUTIONS



THE SOUL OF A CORPORATION

HOW ITS DOMINATING PERSONALITY IS ALWAYS REFLECTED IN THE ATTITUDE OF MIND AND IN THE MANNERS OF ALL HIS SUBORDINATES — THE SUR-PRISING AND INSPIRING RESULTS OF "THE PUBLIC BE PLEASED" POLICY OF MANAGEMENT — A PERSONAL EXPERIENCE

BY

WILLIAM G. MCADOO PRESIDENT OF THE BUDSON AND MANHATTAN RAILROAD COMPANY

Illustrated with photographs taken especially for the WORLD'S WORK by Edwin Levick

We believe in "the public be pleased" policy as opposed to "the public be damned" policy; we believe that that railroad is best which serves the public best; that decent treatment of the public; that recognition by the corporation of the just rights of the people results in recognition by the public of the just rights of the corporation. A square deal for the people and a square deal for the corporation! The latter is as essential as the former and they are not incompatible. HAT is the creed of the Hudson and Manhattan Railroad Company, which operates the tubes between New York, Hoboken, and Jersey City. It is a workable creed; it has been in effect for

able creed; it has been in effect for four years, and it has made our relations with the public a source of constant satisfaction. Complaints have become a rarity; letters of commendation are of frequent occurrence. The reason for this





THE CONVENIENT SIDE EXIT IT COST MORE BUT IT PLEASED THE PASSENGERS



A THOUGHTFUL PROVISION FOR WOMEN A REST ROOM IN A TUBE STATION



NOTICES CONSPICUOUSLY POSTED THAT EXPLAIN CHANGES IN SERVICE



TAKING THE PUBLIC INTO THE COMPANY'S CONFIDENCE FRANKNESS AND GOOD MANNERS MAKE A METHOD OF PROMOTING FRIENDLY RELATIONS WITH PASSENGERS THAT HAS BEEN VERY SUCCESSFUL

seems clear: we have tried to put the human quality into the management and operation of the Hudson and Manhattan Railroad, and the public has responded by putting the like quality into its treatment of the managers and employees of the road.

It is common belief that public service corporations are "soulless." This is a mischievous error, because, so long as the corporation manager can hide behind the screen of an impersonal entity, he will do things that he would not do if he knew that the public considers him the personification of the corporation and holds him personally accountable for the corporate acts.

This pernicious belief that corporations are soulless has induced a sort of helpless submission on the part of the public to the actions of corporations, even when objectionable. People often say, when something has happened justifying criticism, "What is the use of making a complaint to a soulless corporation?" When they do this they not only excuse



NEATNESS AND ALERTNESS AS ELEMENTS OF COURTESY



EVERY STEP OF THE PASSENGER'S PROGRESS CAREFULLY GUIDED



MR. PLINY FISK HEAD OF THE BANKING HOUSE OF HARVEY FISK & SONS, AND FINANCIER OF THE HUDSON TUBE SYSTEM



DIRECTING A PASSENGER TO THE RIGHT TRAIN. COURTESY TO THE PUBLIC IS THE FIRST DUTY IMPRESSED ON THE EMPLOYEES



MR. WILBUR C. FISK WHO, AS VICE-PRESIDENT AND GENERAL MANAGER OF THE HUDSON AND MANHATTAN RAILROAD, IS MR. MCADOO'S CHIEF COADJUTOR IN CARRYING OUT THE COMPANY'S POLICY the objectionable act, but they encourage its repetition. Whether a corporation is soulless or not, complaint of abuses or derelictions should always be made to the management. In no other way can remedies be found and right results secured.

No corporation is soulless. The trouble is that they too frequently have the wrong kind of souls. The soul of a corporation is the soul of its dominant officer. and the management of the corporation reflects that soul almost as infallibly as a looking-glass reflects an object set before it. If the soul is selfish, little, and narrow, the policy of the corporation will be selfish, little, and narrow; if it is broad, progressive, and liberal, the policy will be broad, progressive, and liberal. So true is this that the rank and file of the corporation — its employees — will inevitably imbibe the spirit of the controlling officer and reflect it in their attitude to the public. But, of course, an officer must be long enough in command to assert his power effectively, before his spirit can dominate. This is readily seen when there is a change in management. Some time necessarily elapses before the new order is able to make its impress upon the corporate organization as well as upon the public itself.

For many years the utterly unnecessary and senseless incivility of corporation employees has been a striking fact, and we determined to put into practice at the first opportunity certain views we had long entertained about the management of a railroad. That opportunity came on February 21, 1908, when the first Hudson River Tubes were thrown open to the public. Five days before that date, the employees were assembled at the Hoboken Station, New Jersey, and were addressed by the president of the company, in part, as follows:

I want to impress upon you the fact that this railroad is operated primarily for the convenience of the public. It is designed to accommodate the people who traverse this river between New Jersey and New York, and the duty devolves upon you to do everything in your power to make this facility as perfect as possible. This can be accomplished by your taking that intense and intelligent interest in your work which is the only guarantee of success.

Safety and efficiency of the service are, of course, the first consideration, but, among the things of the highest importance, are civility and courtesy in your dealings with the public. It requires a great deal of patience to be courteous to people who are rude and offensive to you, and it is human nature not to be, but at the same time, you must learn to take such things in good temper; it is a part of your job. You must treat people courteously, no matter how they treat you. You must not engage in unnecessary conversation with passengers, and you must not address them before they enter into conversation with you. You are not there for the purpose of entertaining the public; you are there for the purpose of seeing that the road is safely and properly operated. Attend strictly to your duties, answering questions when they are addressed to you. No matter if questions seem to you foolish, give civil replies. The day of "the public be damned" policy is forever gone. It was always an objectionable and indefensible policy, and it will not be tolerated on this road under any conditions.

I want to caution all conductors, guards and platform men against telling passengers to "step lively." It does no good; people step as lively as they can, anyway, and to order them to do so in a loud and commanding tone is irritating and objectionable. We don't want to be governed, necessarily, by precedents. We want to disregard precedents, custom, and habits, and be as different as we can in so far as these differences mean better operation and better service.

It is important that you always announce distinctly the names of the stations. Enunciate clearly; do not say "Christopher Street" so that no one knows what it is. It is just as easy to say it so that people can understand it.

There is a thing which the French call esprit de corps: this means a spirit of common devotedness, of common sympathy or support among all the members of an association or body. It means comradeship and a common pride in the general work in which we are engaged and in each other. Let us start this road with this feeling of esprit de corps. We are all working together for the good of each other, as well as for the good of the company and of the community. Let us convince the public that public service facilities can be operated in such a way that the just claims of the public will be recognized and that the public will have proper service and treatment. In carrying out this policy it is necessary, first, that the officers shall sincerely believe in it, and second, that the employees shall catch its spirit and earnestly seek its enforcement.

We have devoted much effort, therefore, to the creation of a body of picked men who would feel a genuine interest in establishing this policy. When a man applies for a position, the superintendent, besides consideration of essential qualifications, carefully observes his manners and personality. He may be rejected on the sole ground of deficient personality. If accepted, he is required to read the address of the president, above referred to, in which the general policy toward the public is defined, and he is examined about the contents of that address, just as he is about the rules and regulations for the operation of trains.

It is difficult to assure civility from employees at all times. Many of them have had few or no advantages and, though they wish to do the right thing, they do not always know how; but, by patience and kindly admonition, we have succeeded in educating them to the required standard, and we now have a body of men who are, we believe, exceptional among corporation employees for their civility to the public; and the public shows its appreciation by treating them in like manner.

The following letter, written by Mr. D. W. Cooke, General Traffic Manager of the Erie Railroad, may be taken as an example of the effect these methods produce in the public mind:

There are so many things to commend in the management of the Hudson and Manhattan Tunnels that the whole would be a long story, but the average of your men is so conspicuously higher than that of any other public service institution that I know, that I believe it is one of the most satisfying things you have accomplished from the standpoint of the public. Last night I came to the ticket office, Twentythird Street and Sixth Avenue, at nine-thirty, bound for the Pennsylvania Station. I gave the ticket agent a quarter for three tickets, and, being unaccustomed to purchasing tickets, walked away without my change. I was scarcely more than seated in the car when the guard or the chopping-box man, I do not know which, came in and asked me if I had failed to collect my change, and on being informed that I had, proceeded to get it for me. I do not say that I kept it, but he did his part, and I congratulate you on having men of this sort in your employ.

Such letters are highly gratifying, because they confirm our conception of the duty of the corporation to the public. They serve the further purpose of stimulating the men to continue their good work, and for this reason we post them on the bulletin boards so that they may be seen by all the employees.

Here is an instance of the effect of the policy of the company upon the spirit of an employee, brought to our attention by a letter from Mr. Farnham Yardley, No. 37 Liberty Street, on January 22, 1910:

It may be of interest to you to learn of a courteous action on the part of one of your employees, that was rather out of the ordinary.

On the 21st inst., a woman, a stranger, entered the tunnel at Hoboken. On opening her bag she thought that all of her money had been stolen. She was naturally very nervous and in her excitement asked your colored porter, No. 10, what she should do. He courteously told her that he would give her what money she required, and she was thus enabled to reach her friends in New York.

Frequently, questions arise involving public relations and policy, which are hard to determine. Wherever practicable, we take the public into our confidence and give the reasons for the action taken.

A notable instance in point arose about four years ago, in connection with an agitation for separate cars for women in the subways of New York. It was doubtful if the anticipated relief would be realized from their operation. We believed that the experiment was worth trying, but we hesitated to take the odium or criticism that might result from its failure. However, we felt that anything that would make it more comfortable for women and children to travel during the crowded hours should be done, so we decided to make the trial.

The new service was announced with a poster in which it was frankly said:

This is an experiment which the management hopes will prove successful in practice, and which it reserves the right to terminate if it should be found to work unsatisfactorily.

The suggestion for separate cars came from an organization known as "The Woman's Municipal League." In order that no doubt should arise about the company's good faith, representatives of the League were invited to attend the inauguration of the separate cars, to watch their operation, and to make any suggestions they might care to offer.

On the morning of March 31, 1909, a large and representative number of women assembled at the railroad station in Hoboken. The company had issued special instructions to all guards and platform men to announce the separate car and direct women to it, so that little or no confusion resulted. One woman asked if the car would be kept in service long enough to demonstrate its usefulness. She was asked how long she would suggest, and said, "two weeks." The company replied that it would be tried for three months.

The car was popular at first, but the newspapers wrote so humorously about it that many women became sensitive. It was referred to as the "Jane Crow Car," the "Hen Car," "The Adamless Eden," "The Old Maid's Retreat," etc. The women were advised that all that was necessary to keep this car in service was for them to prove that they wanted it by actually using it. The patronage, however, continued to decline. Many women frankly admitted that they preferred to ride in the cars with men; that they felt a greater sense of security in case of accident than if they were alone. Long before the expiration of three months it was obvious that the experiment was a failure, but we kept our word and continued it to the end.

When it became necessary to discontinue it, an important question of policy arose. Should we simply drop the car without saying anything about it, or should we give notice of its termination? True to our policy, we decided that just as conspicuous notice of the discontinuance, and the reasons for it, should be given, as when the service was inaugurated. Accordingly, the following was posted in all the cars:

On and after July 1st, 1909, the exclusive car for women will be discontinued, as the patronage does not warrant further maintenance of this service.

Some of our staff feared adverse criticism for discontinuing this car, but the exact contrary was the result. Our frankness in giving complete and truthful information was commended, and we were praised for having demonstrated that there was no real demand for the segregation of women on subway trains.

These incidents are not, in themselves, of much importance, but as illustrating the value of a policy, they are highly instructive. They have been recounted for that purpose.

Our theories of corporation management were, however, put to a supreme test in December, 1911, when it became necessary to make a 40 per cent. increase in the rate of fare. Increases of this kind are never popular, and, even when justified by the facts, may cause much ill-will and resentment if tactlessly or arbitrarily imposed.

The Hudson Tube System comprises two divisions: one, extending from New Jersey to 33d Street and Broadway, known as "uptown"; the other, extending from New Jersey to the Hudson Terminal, known as "downtown."

When the tubes were opened a uniform five cent fare was established on both divisions.

It was necessary to raise the rate on the uptown division from five cents to seven cents. The rate on the downtown line was not disturbed.

When a railroad company engaged in interstate commerce raises a rate, the practice is to file with the Interstate Commerce Commission a tariff reciting the new rate without giving the reasons therefor.

If the public objects, complaint is made to the Commission, which may suspend the rate, order an investigation, and determine the question. Upon such investigation, the corporation is required to give its reasons for the increase, and the burden of proof rests upon it to establish the reasonableness of the new rate. The same old question of policy presented itself: should we anticipate the public's objection by immediately giving, in line with our practice, a full statement of our reasons for the increase, or should we (following the usual railroad custom) simply file our tariff, and, if a protest was filed, meet it then with a statement of the facts?

Without hesitation we decided to issue immediately a full statement and to *publisb* it (notwithstanding the large cost) as an advertisement in the daily papers of New York City and vicinity.

Our policy has been based upon the consistent belief that the public is reasonable — as reasonable as the average individual. This is not the view of most corporation managers. They have acted too much upon the hypothesis that the public is unreasonable. It is a mistake. The public is unreasonable only when it is uninformed. It is often vitally affected by corporate action, but rarely does the corporation manager make it acquainted with the facts upon which alone rational and intelligent opinion may be founded. He would rather establish his position, or do the thing in hand so long as he believes he has the right, without the labor of explanation, even though it involves the loss of popular approval. Why? Because it is less trouble and, anyway, what can the public do about it? He does not realize that in the arbitrary exercise even of undeniable rights, the consequences of public disfavor and ill-will are far-reaching, manifesting themselves, at times, in unexpected quarters and upon unrelated subjects, to the great injury or disadvantage of the corporation.

Even where the corporation has an undisputed right to do a thing — particularly if that thing vitally affects the public — it is far better to accomplish it with than without the favor and approval of the public. There is no corporation, however strong, whose property and assets are not enhanced in value and made more secure by possession of the good-will and friendship of the public. This is merely common sense, or "enlightened self-interest," so called. And so we set out to convince the public that the increase of rate was just and reasonable.

Besides the advertisement before referred to, we issued and distributed to passengers on our trains a small pamphlet in which we compared the convenience, speed, and cost of transportation from New Jersey to uptown New York by way of the tubes with the facilities formerly available, including the necessary change from ferry to street cars, consequent delays, and total cost of eight cents. We then explained at length why the five cent rate, that we had been charging for the superior service, had, after three years' trial failed to earn fixed charges. "For trial, failed to earn fixed charges. these reasons," continued the pamphlet, "it has been decided to increase (beginning December 24, 1911) the rate between Jersey City, Hoboken, and Sixth Avenue, or uptown New York, to seven cents." After pointing out that "it is needless to comment on the fact that the earning of fixed charges is absolutely essential," the pamphlet concluded: "We submit the facts with the hope that the justness of the company's position will be recognized, and with the belief that the public is willing to support an enterprise that has been consistently managed, from the beginning, in the public interest."

Immediately letters, mostly commendatory, began to come. The following will serve to illustrate the temper and attitude of the general traveling public:

MY DEAR SIR.— A fair and just recognition of the convenience of the Hudson River Tubes should, it seems to me, entirely justify in the public mind the proposed increase in fare for the uptown service. — FREDERICK W. KELSEY.

DEAR SIR. — I wish to congratulate you on your card of November 22d. I believe that the public will accept your explanation and accept the raise of fare cheerfully. Railroad corporations so often raise their rates without even recognizing that the public exists, consequently the public are offended. When a railroad president takes the trouble and expense to explain things of this kind to the public it is apt to please them.

Your road thus far practically does all it can to accommodate the public with comfort and I think you have its good will.— GEORGE H. HULL.

DEAR MR. MCADOO: Your circular of November 21st issued to the public regarding the raise in rates to uptown New York, via the Hudson Tube, carefully noted, and I wish to say that I consider you are perfectly within your rights in making this increase in rate as you are most certainly entitled to at least 10 per cent. profit over the operating expenses of your enterprise.

In view of the matter therefore as set forth in your pamphlet of November 21st, I do not see how any one can conscientiously object to this raise, particularly in view of three facts:

(1) That even at a fare of 7 cents, we are making the trip cheaper than the old way of car and ferry;

(2) We are saving about two thirds of the time taken up in going by the old route;

(3) That the old service by car and ferry is not to be compared with the excellent service given in the Hudson Tubes.

From one who admires very much the enterprise which you have put through and one who appreciates very much the added comfort to travel that your Tube affords.—A. E. WILLIS.

DEAR SIR: Noting your adv. — you are worrying about the wrong thing. The people of New York and vicinity are with you to a man. They and I will cheerfully pay any fare you ask.— R. J. CALDWELL.

DEAR SIR: I am in receipt of your circular, issued November 21, 1911, in regard to your proposed increase in fare. It seems to me that the reasons set forth in your circular are entirely sufficient — and I also think that you are handling it in the right manner in giving the reasons to the public before putting in the tariff.— W. J. HARAHAN.

(A Vice-President of the Erie Railroad.)

DEAR SIR: Referring to your circular of the 21st instant addressed to the public. You have stated the position of your Company very fairly and squarely and the public should consent to the slight increased charge which you propose making. The service which you give is excellent and should be appreciated.— GEO. E. HARDY.

DEAR SIR: I was very much interested in reading the public announcement of your increase in rates as it appeared in the papers this morning. I desire to congratulate you upon realizing the necessity for placing these changes upon a logical basis. In London, for instance, those who ride a short distance do not pay as much as those who ride a long distance, and I have wondered for some time whether it would be possible to have an arrangement of that kind in this country. I think that your presentation of the question is a clear and proper one.—S. H. WOLFE.

DEAR SIR: I note your letter to the public increasing rates on December 24, 1911. As an occasional user it seems to me that you do not calculate *convenience* sufficiently high; that the rate should be 10 cents at least.—L. R. COWDREY.

Other letters suggested a variable rate based on distance zones, a discount on large purchases of tickets, and other plans, most of which had been threshed out beforehand and abandoned as impracticable. In every case, however, these letters were acknowledged with explanation of the reasons why the suggestions could not be adopted.

In addition to these individual expressions, formal action of the most gratifying sort was taken by various organized bodies in New Jersey. The Commuters' League, a strong organization formed for the purpose of protecting the interests of those who travel between New Jersey and New York, was invited to investigate the matter and, as a result, issued the following statement:

After a careful examination and consideration of the sworn public statements filed with the Interstate Commerce Commission and presented by Mr. W. G. McAdoo in person, Resolved: that the statement issued November 23d inst. by Howard Marshall, president of the Commuters' League of New Jersey, and the New Jersey State Commuters' Association, in regard to the proposed increased fare on the 33d Street branch of the McAdoo Tunnels as being reasonable and just be and the same is hereby approved by the officers of both organizations in joint meeting assembled. November 20th, 1911.

New Jersey State Commuters' Association, Roy M. Robinson, Secy. Commuters' League of New Jersey,

E. D. McKown, Secy.

The Board of Trade of Jersey City adopted the following resolution:

RESOLVED: That the Board of Trade of Jersey City, having through its Railroad Committee examined the data furnished it by the Hudson and Manhattan Railroad Company, believes that the proposed increase of fare to seven cents for transit between Jersey City and certain points in Manhattan Borough, is reasonable and justified by present condition of traffic, and

That this Board hereby com-RESOLVED: mends said Company for the good service which it supplies, its apparent endeavors to promote the convenience of the public and the manner in which its officers have taken the public into their confidence.

WALTER G. MUIRHEAD, Secretary.

The Committee on Railroads of the Board of Trade of Hoboken, after an investigation, made a report approving the increase of rate to all stations on the uptown division except Christopher Street - recommending that the formerly prevailing five cent rate to this station be maintained.

The editorial comment was, with one exception, favorable, and some of it is quoted because it is illuminating.

The Newark News said:

William G. McAdoo recently served notice of an advance in fares on the Hudson and Manhattan Railway Company's New York uptown line, an increase which amounted to 40 per cent. in the case of those interested. There was no resultant sensation.

The New Jersey Commuters' League did take action on the matter, but it was in approval. If any objections have been made to the Board of Public Utility Commissioners, the fact has not become public. There has been no mass-meeting, few resolutions, almost no organized protest.

phenomenon The is worth studving. especially by Public Service Corporations. It will be remembered that the notice was addressed to the public, the party of the first part. It came in the form of a brief, but careful, analysis of the existing situation. Figures were given showing that it is impossible to profitably continue the present service at a five-cent rate, and the figures covered a period of time sufficient to give their conclusion weight. They also indicated the justice of the rate proposed.

The effect upon the public speaks volumes. The whole incident, if trivial, points the way to a possible solution of some problems that seem very formidable at present.

The people have no enmity against the corporation per se. There is everywhere a disposition to give those who serve the public an adequate reward. The people are just and reasonable. "The common law itself" in the words of Coke, "is nothing else but reason,"

and no one would have it otherwise. "The public be pleased," was Mr. McAdoo's initial platform. This expresses service, the prime purpose of a public service corporation. He now opens the books and on their showing asks for just remuneration.

This evinces a confidence in the reason of the general public that is not and cannot be misplaced. The issue iustifies that faith not The issue justifies that faith, not in the case of the Hudson and Manhattan only, but for any corporation that will take the people into its confidence.

The New York Press said:

That fair treatment of the public by a public service corporation pays better in every way than a "public be damned" policy is seen in the case of the Hudson and Manhattan Company. Mr. McAdoo, the president, has issued a statement announcing its intention to raise the fare from five cents to seven cents for passengers between some New Jersey stations and points on the Sixth Avenue part of the Hudson tunnel.

The reasons for this increase in charges are set forth fully and frankly. . . . The relations between the McAdoo company and its patrons are of such character that the company is not likely even to be asked to defend its increase in fare. Very probably the com-munity will take Mr. McAdoo's word for it that the extra charge is just and necessary, and will pay the extra two cents uncomplainingly for the fine service that it gets from the Hudson Tunnel.

The Globe and Commercial Advertiser:

There's a lesson, big and robust and appropriate to the Christmas season, in the public's reception of the announcement that on December 24th the McAdoo Company on its uptown tubes will begin to charge a seven cent fare. The Commuters' League of New Jersey and the New Jersey State Commuters' Association, speaking for the men and women who will pay the in-crease, pronounces it "reasonable and just."

Managers of public service corporations may study this judgment with profit. Why is McAdoo able to escape attack and opposition? The theory has prevailed in corporation offices that the public is either a fool to be plucked or a monster that blindly and unfairly scratches when enraged. Neither assumption seems warranted in the present instance.

The fare increase on the Hudson Tunnels is declared to be "reasonable and just" by by representatives of the public because the public, if given half a chance, is itself "reason-

able and just." McAdoo was able to show that the five cent rate did not net a fair return on the capital actually invested. The public realizes that improvement enterprises must pay their way. A public service corporation that has a good case need not fear "confiscation." Incidentally, Mr. McAdoo gained some advantage from the fact that he has treated the public with politeness, whereas it seems the ambition of most traction men to be insulting; but the main thing was that he was able to demonstrate that a five cent fare was not enough.

The Outlook said:

The Outlook has had occasion more than once to point out the wisdom of the policy of courtesy and frankness adopted by the Hudson and Manhattan Railway Company, which operates the tubes between New York, Hoboken, and Jersey City. Mr. McAdoo has succeeded in instilling into the employees of the company the maxim "The public be pleased" and the convenience, comfort, and safety of the passengers have been studied and provided for at every point, with the result that the public has been pleased, and has shown a cordial interest in the welfare of the company. . Notice has been given that on and after a certain date the rate between Jersey City and Hoboken and Sixth Avenue, or uptown New York, will be raised to seven cents. Not only has the announcement been made well in advance, but a circular has been put in the hands of patrons setting forth the financial condition of the company, and its reasons for adding two cents to its passenger charge. This is part of the policy of taking the public into the confidence of the company. From the beginning, many patrons of the tunnels have been doubtful of the possibility of covering the enormous running expenses, the interest on bonds, the taxes, and fixed charges at the five cent rate; and they will accept the statement of the Company that on the basis of a five cent fare it cannot earn its interest on these sums, and will cheerfully pay the additional two cents. The railways have been slow to learn that the American public does not object to rates, even when they are large, if they fairly represent the service rendered. It does not object to rates simply because they are high, but because they are unfair, or because they discriminate between patrons.

The Hoboken Inquirer said:

. . . Mr. McAdoo made a good move when he came to Hoboken — like a human

being — and talked like a regular business man to his customers.

He at least gave his hearers something to think about instead of trying to shove the proposition down their throats, regardless of right or wrong.

Mr. McAdoo, the people are thinking it over; if they decide that you are right in asking seven cents, they will pay it — rich and poor alike. Judging from our experience in serving up a good newspaper at two cents, we are inclined to believe that the people will decide that your superior service and the luxury of getting home on schedule time, regardless of fog and ice and what-not, is worth seven cents.

Under the law a rate must be filed thirty days before it can go into effect. During that period the public has time to discuss, investigate, and protest. Whereever an objection was raised we made it a point to communicate immediately with the objector, whether an individual or an organization, and supply all needed information, so that opinion might be formed upon actual facts. In no instance was there a failure to convince the objector of the soundness of the company's position. The president of the company attended two public meetings by invitation and in person presented the company's case. No contest of the rate was made and it went into effect on the 24th of December. It is decidedly unusual, if not unprecedented, that an increase in fare has received general approbation from those who have to pay it.

The lesson to be learned is that there is such a thing as a practical corporation policy capable of enforcement, that will not only destroy unnecessary and hurtful antagonism between corporations and the public, but will be beneficial to both.

It is not only a politic and proper thing for the president of a company to answer personally, wherever practicable, letters of complaint, but he may learn great lessons as well as derive actual pleasure from doing it. There is something of value, too, in preserving that personal touch with all men that keeps one's spirits elastic and sensitive to those sympathies that are the springs of personality and potentiality.

It is not possible, of course, for the president of a great corporation to do

this to a large extent, but he will get a knowledge of actual conditions from the mere reading of complaints (they can be digested by his secretary and submitted to him) which he can use to great advantage in correcting and removing troubles of which he might, otherwise, never hear. It also enables him to know how his subordinates are doing their work, and it has a good effect on these subordinates to know that the president is hearing the things that are said about them or about the affairs under their control. They will be more careful, under these conditions, to do their work well.

In large corporations a "complaint bureau," in charge of a high grade, tactful, and competent man, should always be maintained. Such a bureau, properly conducted, can render immensely valuable service, not only by improving the relations between the corporations and the public, but also by intelligently analyzing the causes of complaint and suggesting or applying a remedy where needed. Complaints give a picture of yourself from the outside, and disclose weaknesses and imperfections in service and system which may otherwise remain undiscovered or neglected. Valuable suggestions for improvement in service often come, too, from the public. Complaints and suggestions should be encouraged and welcomed. Such a bureau can handle both with advantage to the company and the public. Nothing is more helpful, in every walk of life, than intelligent criticism and suggestion, if one is intelligent enough to receive and use them in the proper spirit.

This fact has, of recent years, been gradually dawning upon the progressive corporations and some of them have wisely established such bureaus.

Another important factor to be considered is the press. This is the agency through which the public gets information and reaches conclusions. To be frank, truthful, and honest with the newspapers, is obviously the part of wisdom. Sometimes false reports are published because the corporation manager, who could tell the facts, refuses to do so or to give any information. For instance, if an accident occurs

we give the newspapers the truth as quickly as we can get it ourselves, and we don't wait for them to come for it - we send it to them. Many people regard a reporter as an impertinent intruder. This is wholly wrong, because his mission to get the news is just as legitimate as the duty of the manager to run his railroad. If you can't give a reporter information, tell him so, and let him understand that it can't be had from any other source. If you give information, give him facts. There are only two things that a reporter is a fraid of -a "scoop" and a "con-game." Don't be responsible for either.

Uncivil treatment of the public by employees of corporations has alone created a vast fund of popular resentment and prejudice which has found expression at times in harsh laws, in verdicts for heavy damages in accident cases, and in opposition to almost everything the corporation wants to do.

How easy it is to cure this! Civility can be enforced, and it works wonders in the creation of friendly relations. Here is a reform that can be made without legislation. It is something that we can do ourselves. Suppose every railroad and public service corporation in this country should enter at once upon a campaign of courtesy and civility, it would not take long to effect a complete and happy transformation. And then if the employees of our national, state, and municipal governments could not only be taught but compelled to be civil to their masters - the people - whom they are put there to serve, it would be a great gain. It can be done if we determine to do it. That it is not done is a reflection upon the American people for supinely submitting to it. There is nothing like the power and contagion of example.

Along with civility, and above and beyond it, there must be square and honest conduct of the corporation by its officers and directors. This is more important than anything else. The public is quick to recognize and appreciate a corporation so conducted, because the public is not only reasonable — it is likewise honest, intelligent, and discriminating.

OUR STUPENDOUS YEARLY WASTE

FIRST ARTICLE

AN ITEMIZED ACCOUNT OF SOME OF THE THOUSANDS OF WAYS IN WHICH WE SQUANDER TENS OF BILLIONS OF DOLLARS — A NATION-WIDE EXTRAVA-GANCE THAT COSTS MORE THAN TWICE THE SUM OF THE EARNINGS OF ALL OUR WAGE WORKERS

BY

FRANK KOESTER

(AUTHOR OF "HYDROELECTRIC DEVELOPMENTS AND ENGINEERING" AND "STEAM-ELECTRIC POWER PLANTS")

ENATOR ALDRICH stated that the National Government wastes \$300,000,000 a year, a little more than \$3 apiece for every one of our 90,000,000 inhabitants or about \$16 a family. The loss from fire and floods, largely preventable, is a little more than \$7 apiece or \$36 a family. The many other forms of waste arising from our ignorance and carelessness make this economic tax amount to hundreds of dollars for every family. Even in this country of high rates of wages the average family income is less than \$800 a year, and the burden falls heaviest on the poor.

Perhaps the most important and insidious burden that the American people bear is the cost of poverty, inefficiency, and dependency caused by our needless sacrifice of human life, for we kill and maim more workers than any other industrial nation.

We waste 350 lives and the cost of 2,700 accidents in transportation in New York City alone, with a proportionate loss in other cities throughout the country. These losses involve, in addition, great expenditures in litigation, the total of which is probably not less than \$25,000,000 annually.

We waste \$772,000,000 annually in losses of income, due to industrial diseases; that is, diseases which attack workers on account of the nature of their employment and the insanitary conditions under which their work is carried on.

We waste \$1,500,000,000 a year through loss of life and illness to industrial and other workers, through preventable dissease, accidents, and carelessness. The truth of this is corroborated by the fact that the expectation of life in Germany is ten years longer than in America.

We waste \$2,503,900 a year, in the form of 1465 human lives (using the Government's figure of \$1700 as the economic value of a human life), in coal mine accidents which are almost wholly preventable.

We waste 1058 lives and the cost of 14,179 injuries in railroad accidents. We waste \$13,604,100 (7473 lives) and

We waste \$13,604,100 (7473 lives) and the cost of 80,427 injuries in industrial accidents, leaving thousands of widows and orphans to meet the struggle for existence unaided.

This is not a full enumeration of the waste of human life. It gives an indication of the cost of such wastefulness, enough to show that the lessening of accidents and the prevention of disease could by themselves make us a new nation economically.

Though much has been written and spoken about the better use of our waters, lands, mines, and forests, we still recklessly disregard enormous possibilities in our national resources, which should be used and improved, not abused and wasted.

We waste \$50,000,000 and sacrifice fifty lives a year in forest fires, and have been doing it for a generation. In some years, the loss amounts to \$200,000,000 in money. In addition, the young growth destroyed by fire is far more valuable than the merchantable timber burned.

We waste a billion cubic feet of natural

gas daily, the most perfect of fuels; enough to supply every city of more than 100,000 population in the United States.

We waste \$22,000,000 a year in gases lost in the manufacture of coke; 540,000 tons of ammonium sulphate of similar value; and nearly 400,000,000 gallons of tar worth \$9,000,000, a total with other wasted by-products of \$55,000,000.

We waste an enormous amount, which has not yet been made the basis of a comprehensive examination, in losses due to improper and antiquated methods of mining; in coal, copper, gold, silver, and other metals, and in metallurgical processes of various kinds.

We waste not less than one-third of all the coal used for power purposes and vastly a larger proportion in heating, through failure to adopt modern machinery and methods.

We waste 30,000,000 horsepower every year, by failure to utilize our water power. At \$20 per horsepower per annum, which is below the average price, being less than one cent per horsepower per hour, this waste amounts to \$600,000,000. This is far in excess of the value of all coal used annually, and if this power were utilized, coal could be conserved for future uses, for heating, and for purposes where the power would not be serviceable.

We waste \$238,000,000 in losses through floods and freshets. Most of this could be prevented by proper engineering in the erection of levees and dams.

Within the last few years we have begun to realize what opportunities lie in proper agriculture. But this knowledge has not sunk far enough yet to keep us from being prodigal in this foremost industry. The low yields per acre of our standard crops show that we are still almost in the pioneering stage.

We waste \$500,000,000 a year in soil erosion. Through the neglect of farmers to work their land properly and to prevent the formation of gullies, the fertility of the soil is washed into the lowlands and seas.

We waste vast land resources by failure to drain swamps and overflowed areas. These lands could be reclaimed at small expense, increasing the value of the land threefold, and supplying homes for 10,000,000 people.

We waste \$659,000,000 a year through losses to growing crops, fruit trees, grain in storage, etc., by noxious insects, whose multiplication is largely due to careless methods of agriculture.

We waste \$267,000,000 a year through the attacks of flies, ticks, and other insects on animal life. A greater loss is caused by the enormous sacrifice of human life due to mosquitoes, flies, fleas, and other germ carrying insects.

germ carrying insects. We waste \$100,000,000 annually in losses to live stock and crops by wolves, rats, mice, and other depredatory mammals.

We waste \$93,000,000 a year in losses of live stock due to disease, of which \$40,000,000 is chargeable to Texas fever; tuberculosis, scabies, and cholera are next in importance — all of which are largely preventable if not eradicable.

These things have been carefully estimated, chiefly by Government experts. The \$400,000,000 annual fire loss is a fairly definite figure, as is the extra \$400,000,000 expended for city water used for fire-fighting, fire department charges, etc., all of which make the per capita loss in this country ten times that of European countries. Besides these carefully estimated items of waste there are many others which can only be approximated.

We waste \$650,000,000 annually in mismanagement of railroads, of which \$300,000,000 is due to personal services, \$300,000,000 in fixed charges and \$50,000,-000 in supplies.

We waste perhaps a greater sum in private manufacturing establishments. This, to be sure, has not been ascertained by experts; yet, since the railroads of the country are valued at eleven thousand millions of dollars, whereas the value of manufactured products exceeds seven thousand millions, and since railroad efficiency is 70 per cent., whereas manufacturing efficiency is but 60 per cent., the loss in manufacturing is probably greater than in railroad efficiency.

We waste in careless handling of eggs, \$40,000,000 a year, largely due to breakage

in transportation. What the vast waste of careless freight, express, and baggage handling amounts to in actual damage, besides the increased cost of packing to guard against it, is impossible to estimate.

What our lack of the most modern practices and appliances loses for us in manufacturing can not be computed, but it is probably more than any other single source of waste.

These figures, although startling, are only a part of the staggering price of inefficiency. A multiplicity of additional researches in all industries would be necessary to ascertain the entire amount of waste.

What we waste in losses through inefficiency of administration in cities and towns, what we waste in losses due to crooked and ill-considered contracts, and what we waste in inefficiency of all kinds in city government, though the amounts are not so large in money, are perhaps the most immoral wastes of all.

Making due allowances in the items enumerated, where saving could not be effected, the waste, though great, may be termed unavoidable; the total remaining amounts to a frightful indictment of American extravagance, waste, and carelessness. It is a total of more than ten thousand millions of dollars annually, a per capita loss, with our population of 90,000,000, of not less than \$110. For the 33,000,000 wage-earners of the country, it certainly amounts to not less than \$300 per year, or a minimum of \$5.75 per week, since the burden is concentrated on their shoulders. As the average wage of wageearners is only \$9 per week, the crushing weight of inefficiency, of the enormous graft and criminal waste which pervades our national life from Government to individual, is understood; and the necessity of prompt, thorough, and vigorous efforts at remedying conditions can be appreciated.

(The next article will take up in detail the Wastes of Human Life.)

POPULAR MECHANICS

TWO DEVICES FOR THE BETTERING OF SHIPS

BY

WARREN H. MILLER

A NEW MARINE ENGINE

HE introduction of the steam turbine aboard ship has forced the reciprocating engine manufacturers to cudgel their brains in order to meet its competition. The principal trouble with the turbine lies in the enormous condenser it requires, which makes the combination weigh about as much as the old reciprocating engine. Its condenser must be extra large because the steam economy of the turbine depends upon its capacity to utilize mechanically the lowest inches of vacuum that the condenser can achieve. With its condenser, it weighs so much as to cause the naval architect to look about for something else. The solution appears to be in the introduction of a marine engine adapted to use superheated steam. From the all-important consideration of weight, it gives us a light, compact engine, getting most of the work out of the steam in itself, and hence requiring only a moderate condenser.

Mechanically, it shows a grand housecleaning of moving parts, a rather unusual thing in the conservative bureaus of marine engineering. In the engine room of any large steamer there is an astonishing array of connecting-rods, eccentrics, and other moving things which appear. to prey upon the main crank-shaft. There is a go-ahead and a go-astern connectingrod and eccentric for every single cylinder valve-chest, and these in addition to the piston connecting-rod which alone seems to have an excuse for existence in that it turns the crank.

In fact this latter is all that *does* remain in the new superheated steam type of marine engine, all the rest having been picked clean by a change in the valve system. At a single stroke six eccentrics, six eccentric straps, six connecting rods, and three reverse links have been swept off the engine, leaving it vastly more simple and easy to take care of, and lessening the necessary engine space, which is of tremendous importance on shipboard.

All this is done by using lift poppet valves to admit and exhaust the steam, just like the inlet and discharge valves in an automobile engine. And a single cam-shaft runs all of them, precisely as in the gasolene motor. It is much simpler than the old link and slide-valve of the ordinary steam engine. As the admission and exhaust valves can be exactly opposite each other in a steam engine the same cam serves both, so the cam-shaft runs along in the niche between the admission and exhaust valve-bonnets.

The engine can be reversed by throwing the cam-shaft ahead half a turn. Governor control of all the valves is had by suitable links from an inertia governor to the cam-shaft, a device that will prevent many weary watches at the main throttle, as is now done when the ship pitches her screw out of water during a storm.

A lot of these engines, of 6,500 horsepower, were recently built into the latest torpedo boats for the German navy, and their officers report them more economical of coal and easier to keep in good shape than the turbines of the older boats.

THE GYROSCOPIC COMPASS

ROM the early tenth century until the perfection of the gyroscopic compass, men have sailed the seven seas guided by the magnetic compass. As further aids to arriving at any given port, modern sailors have the sextant and the nautical almanac for latitude, and the chronometer for longitude, but there are weeks at a time when neither sun nor star can be sighted, and, in the long run, the course steered by compass and log must be depended upon for the location of the ship's position on the chart.

This makes it imperative for the compass to be accurate. If the North Magnetic Pole were anywhere within reasonable distance of the North Pole, it doubtless would be accurate and all would be But it is a thousand miles away from well. the North Pole, away over to the south-west on Boothia Felix Peninsula, so that in sailing any course the compass bearing is always changing, and to sail even approximately true this compass "declination," as it is called, must be corrected Added to this is a correction for daily. dip or inclination, as of course the compass stands on its head at the North Magnetic Pole, and more or less so everywhere else. Then there is a correction for diurnal variation, in which the compass swings mysteriously about 18' to the West from seven A.M. to one P.M., returning as mysteriously during the night. Added to these antics are further vagaries caused by magnetic storms, which are constantly occurring all over the earth. All of these vagaries lead to shipwrecks.

Now comes the gyroscopic compass. If you spin a body rapidly about its horizontal axis and leave it perfectly free to take its own position, it will eventually come to rest with its axis This parallel to the axis of the earth. is because the attraction of the earth for anything rapidly spinning on an axis of its own is greatest when it is parallel to that great axis about which the earth itself is spinning. The axis of a free gyroscope, then, points due North and South, and will do so no matter where on the earth it happens to be. And it points true North, too-no Pole-Star variation to worry about, no compass declination, no vagaries from magnetic storms.

This attraction between the axis of the earth and a spinning gyroscope is very delicate. The least friction, the least

external interference of ordinary gravity will destroy it, and the 'scope must be fairly powerful to develop enough attraction to be reliable. Inventors have fussed with the gyroscopic principle as applied to compasses for a number of years. America, France, Germany, and England have all contributed specimens, in more or less advanced stages of experimental and commercial development. One type has been perfected by Dr. Anschlutz of Kiel. To eliminate friction he fills the bowl of the compass with mercury in which floats a hollow steel ring. The ring carries the compass card, from the centre of which hangs the gyroscope. This is a small, light, electric motor, spinning at 20,000 revolutions per minute. The North and South of the compass card is of course adjusted exactly over the axis of the motor. The electricity to run it enters by way of the mercury and steel ring—a frictionless route—and leaves through a mercury cup in the centre of the card, into which the negative lead dips. This compass has recently been tried out in Germany and other countries, and one of them is now on the *Deutschland*.

THE CHOOSING OF A FARM

The World's Work publishes every month an article about getting on the land and making a living from it

HE choice of a farm means the selection of a business and a home combined, a place where money must be made and where domestic happiness can be obtained. There must be a healthful environment for the family and markets for the products; fertile soil and congenial neighbors; available labor and convenient school facilities — in fact a host of details must receive most careful scrutiny. But certain fundamental factors deserve special emphasis and attention. This article, based largely on the advice of a number of expert agriculturists, briefly states these most vital factors.

The Farm as a Business must be, without fail, a paying proposition. Therefore, it is well to consider:

1. Is the price fair as compared with the real value of similar neighboring properties? Don't mistake the meaning of "price." It includes practically all the expenses of the first year, for example: (a) the interest on a mortgage or money borrowed, (b) necessary repairs of buildings, fences, etc., (c) purchase of stock, tools, fertilizers, and seeds for the first crop, (d) cost of raising and selling this crop, (e) insurance premiums, lawyer's fees, taxes — state, county, poll, school and highway, (f) cost of feeding the stock, and (g) the living expenses of the family, all these before a harvest time comes round. Are you prepared to pay for the farm and meet these expenses as well? And have you any idea what they may amount to?

2. Is the title perfectly clear and good? Unless you are considering a Government homestead, have a competent lawyer make an exhaustive search and obtain unquestionable proof of the legality of the ownership.

3. How much *productive* land are you getting? A 50 acre farm of 25 tillable acres, 10 of permanent pasture, and 15 of woodlot at \$2500, means that the actual producing area is 25 acres (unless you plan to sell timber), which must pay interest and return a profit on a valuation of \$100 instead of \$50 per acre.

4. What is the producing power of the farm? Can it meet regularly the cost of operation as suggested above and return a profit besides? This producing power depends on:

(a) The nature, fertility, adaptability, and condition of the soil.

(b) The arrangement, topography, and size of the fields, roads, pastures, etc.

(c) The water supply for stock and crops.

(d) The drainage conditions and arrangements, both natural and artificial.

(e) The number, condition, and capacity of the buildings.

(f) The number of animals that can be maintained.

(g) The crop yields of each field for a series of years — average, maximum, and minimum.

(h) The past management of the soil as to rotations, manuring, cover cropping, etc.

(i) The amounts of feed for stock bought and raised in past years.

5. If crops and animals can be successfully raised can they be easily and profitably marketed? This depends on:

(a) The distance to local and general markets — creameries, grain elevators, canning factories, etc.

(b) The distance to railroad stations, express offices, and trolley lines.

(c) The character of the highways to markets or shipping points.

(d) The express, freight, and passenger rates to marketing and purchasing centres.

(e) The means of communication, i. e., mail delivery, telephone, telegraph.

(f) Banking facilities.

(g) Presence or absence of coöperative associations for buying, marketing, etc.

6. Is the farm adapted to the type of farming that you are interested and proficient in, and that can supply the nearest and best markets? This will be largely determined by:

(a) The location, geographic and topographic.

(b) The climate: average annual temperature, and possible ranges in both directions; length of growing seasons between spring and fall frosts; average annual and monthly precipitation and maxima and minima for a series of growing seasons.

(c) Frequency of severe storms, sudden frosts, floods, forest fires, droughts, etc., and the possibility of protection from these.

(d) Availability of labor.

(e) Presence or absence of swamps, lakes, streams, etc.

(f) Chief agricultural occupation of the section.

The Farm as a Home involves the entire range of social and domestic conditions of both locality and community. For example:

1. How far is it to the nearest town and how large is it?

2. How far are schools, churches, grange halls, etc. Can they be reached easily? Are the children carried to and from school?

3. What is the color, nationality, and character of the dominant population? What is that of the immediate neighbors?

4. What is the sanitary condition of the locality and the property?

5. Are the size, location and condition of the dwelling good? Are water supply, heating, lighting, and plumbing equipments installed or can they be installed without excessive expense?

6. Can the location of and the life on this farm give your family as much benefit socially, financially and in every way, as their present condition?

And finally, are you equipped and trained for, and capable of managing a complex business in which your time, money, and energy are all to be invested?

There are, therefore, three heads under which the information can be grouped, viz. the property itself, the environment, and the community; and there are likewise three aspects in regard to which the farm must be analyzed, viz. the farm as a manufacturing plant, its commercial relations with markets and sources of supplies, and the farm as a home. Study the property from all these points of view; get, if possible, expert advice as to the technical matters; and above all, visit the farm and see for yourself whether it suits your needs and desires. THE WORLD'S WORK is ready and anxious to assist with any advice or suggestions that its Land Department can provide. That there is a field for this sort of cooperation seems clearly proven by this brief report:

From November 1st to January 17th, the Land Department answered 410 inquiries about farms and farm lands from correspondents in thirty odd states of the Union, in Mexico, Panama, Holland, Peru, Canada, Hawaii, and Porto Rico.

THE MARCH OF THE CITIES

SEATTLE'S NEW IDEA IN CITY PLANNING

EATTLE has taught the country something new about city San Francisco's explanning. perience with the Burnham plan gave the northern city the hint In San Francisco, a number of wealthy men clubbed together, made up a fund, and invited Mr. Daniel Burnham, of Chicago, the distinguished architect and designer of the Government's plan for the beautification of Manila, to come and devise a plan for the improvement and orderly growth of their city. Mr. Burnham came — donating his valuable time to the cause of beauty - spent months in study and discussion and designing, and at length presented a report upon his admirable and beautiful vision of a San Francisco that might be. The gentlemen who had got the work done were delighted; they congratulated Mr. Burnham upon his achievement and thanked him for his services; they paid all the expense he had incurred; they ordered copies of the report to be printed for public distribution, and they said to the people of San Fran-cisco: "Allow us to present to you this plan for a greater city. It has been our pleasure to save you all the trouble and labor and expense of devising it. Here it is, complete, with our compliments.

The people of San Francisco said "Very nice" and "Thank you;" and — the next day (literally) the city burned up. "How fortunate!" exclaimed the gentle-

"How fortunate!" exclaimed the gentlemen who had paid the bills, "that we have this plan all ready just at this time when you have to rebuild anyway. This shows you the way to do it right."

But the people of San Francisco, strangely enough, were not impressed. They turned down the Burnham plan and turned to on their own plans, and the vision of a beautiful and orderly city is still a dream. Why?

The city planners of Seattle thought they knew why. So, when their local chapter of the American Institute of Architects and a few choice spirits in the Commercial Club and the Chamber of Commerce decided that Seattle needed a plan for its future growth and a vision for its future beauty, they said to one another:

"It will do no good if we devise such a plan and present it to the people. That would be our plan, not the people's plan. The people must say they want it before we get it for them, so that, when they do get it, it will be received with interest and joy as the realization of a city-wide hope."

So these men began an agitation. They talked city plan to the real estate district improvement clubs, to the labor unions, to the commercial bodies, to everybody they knew and to anybody that would listen. Pretty soon the city plan idea was in the air everywhere. People were asking one another: "How can we get a plan for Seattle?"

Then the originators of the idea clinched their advantage. Seattle has the initiative and referendum, so they easily persuaded the council, who saw that the people were greatly interested in the project, to propose an amendment to the charter providing for a Municipal Plans Commission. The aid of the Municipal League This organization of 700 was enlisted. men included much of the best young blood in the business and professional life of the city. They aided greatly by blocking such counter moves of the opposition as proposals to commit the city at once, by bond issues, to the location of the site of the city hall, the courthouse, and the museum of art — buildings that should be included in all plans for a civic centre.

The amendment was voted on at the regular city election on March 8, 1910, and carried by the biggest majority of all charter amendments ever passed in Seattle. The demand for the plan had been created.

The composition of the Municipal Plans Commission was designed to foster the universal public interest in the enterprise. The amendment required that every class of citizens be represented, for the commission was to consist of twenty-one members, to be chosen as follows: three to be elected from the city council by its members; one to be elected from each of the following by their respective members - board of public works, county commissioners, city board of education and the city park commission; and the mayor to select one of two nominees to be named by mass-meetings of each of the following interests — Pacific Northwest Society of Civil Engineers, Washington State Chapter of American Institute of Architects, Seattle Chamber of Com-merce, Seattle Commercial Club, Manufacturers' Association, Central Labor Council, Seattle Clearing House Association, Seattle Bar Association, Seattle Real Estate Association, Carpenters' Union, water-front owners, steam railroad companies, marine transportation companies, and the street railway companies.

That list included nearly everybody. The agitation in these several organizations over the nomination of commissioners kept alive public interest in the project.

Then the people who objected to any plan at all took the amendment to the courts and fought it out and were finally beaten. The uproar they caused gave the idea more publicity and crystallized a lot of sentiment for it. By the time the commission was actually formed and had got down to business, everybody in Seattle knew what a city plan was, and a big majority of them wanted one.

The amendment required the appointment of a non-resident expert to prepare the plan. The commission chose Mr. Virgil Bogue, an engineer of international fame, who had just finished building the Western Pacific Railroad and who had begun his professional life on the engineering staff of Prospect Park, Brooklyn, as a pupil of Frederick Law Olmsted, Sr. He worked from September, 1910, to September, 1911, and his work was constantly advertised by the public meetings of the commission, held

bi-weekly. The plan assumes Seattle's growth to 1,000,000 population and provides an elaborate scheme for harbor development, a civic centre, arterial highways, transportation extension, park improvements, and municipal, decorations for a city of that size. It cost \$49,614.12 to prepare it, and every citizen of Seattle was taxed to foot the bill, and knew he was so taxed and was (by majority vote) glad of it. It was the people's own plan: they had ordered it, and they paid for it.

And the people also guaranteed the expenses of publishing 10,000 copies of the plan that have lately been distributed at cost throughout the city for their own enlightenment.

Taking for granted that the people will officially adopt their plan when they vote on it, what will they then have? A community vision of the right way to develop their city. The ordinance accepting it will provide that the plan may be altered at any future election, but, unless so altered, all future developments shall be made in accordance with its terms. In other words, it provides a coherent scheme of growth, and throws the burden of proof on those who at any future time may object to any particular part of it, to show that such part ought to be altered or omitted, whereas, hitherto, the burden of proof has been on the city builders to show that every step of their plan was justified by the exigencies of the moment.

The adoption of the plan does not commit the city to the expenditure of a single cent: it does commit it to an orderly and comprehensive development. Every step in this development requires a bond issue, with its election and consequent publicity that protects the public interest.

But, whether Seattle accepts or rejects the commission's report of Mr. Bogue's work, the significant and interesting and original idea that is noteworthy of itself is the democratization of the plan, so that it comes up from the people and is not handed down to them. Other cities, in this and in many other public undertakings, may learn a helpful lesson from the example of Seattle.

The World's Work VALTER H. PAGE. EDITOR

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THE MARCH OF EVENTS

STAGNANT world would soon begin to go backward and it would be very dull. Yet a warring world is disquieting and unhappy; and turn where you will now there is trouble. In the East that slept so long the struggle of China to set up a real government causes intermittent civil war and continuous unrest. The old rivalry between England and Russia goes on in Asia. Turkey and Italy are still at war. England has an internal industrial disturbance of a magnitude that may imply a revolution in government; and England and Germany are yet in suspicious moods toward one another. In Central and South America there are not the frequent revolutions of former times, but there is constant danger of them. Mexico has not yet found stable government since the overthrow of Diaz. And in our own country we have industrial troubles and - a Presidential campaign. If, therefore, one look about the world for trouble, there will be no difficulty in discovering it.

But, suppose instead that one look for progress and human betterment, one will find these too in even more abundant measure. One of the results of universal and swift communication and publicity is that all the trouble in the world becomes quickly known. There are, for instance, two or three great quiet movements going on in the United States that mean incalculable good to our people. One is the organization and betterment of country life, including the reconstruction of the rural school. Another is the improvement in agriculture whereby those who do till the earth are coming into a higher economic and social life. Another is the sanitary improvement that goes on almost everywhere, notably in the Southern states.

And, for that matter, even out of our political turmoil, clearer judgments will come. There is no other light as bright as the intense beating of publicity on men and measures that comes with a Presidential campaign.

The great duty and the somewhat hard task in such a time is to keep one's own attention to the main duties of life, to keep one's own judgment free from warping, to learn without being disturbed and — to do one's business with 'quiet zeal.

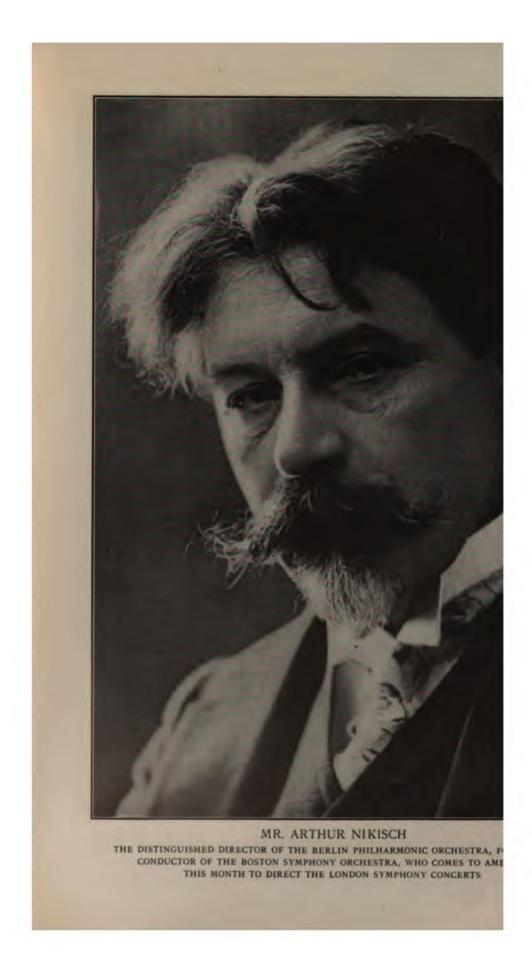
Neither the big world nor our own country is going backward.

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JUSTICE MAHLON PITNEY FOUR YEARS CHANCELLOR OF NEW JERSEY, WHOM PRESIDENT TAFT RECENTLY NAMED AS ASSOCIATE JUSTICE OF THE SUPREME COURT TO SUCCEED THE LATE JUSTICE HARLAN







MR. ROOSEVELT AGAIN

R. ROOSEVELT has disappointed and shocked many of his friends by putting aside his declaration against a third term with the remark that of course he meant three consecutive terms: and he has shocked and disappointed others by what seems to them a lack of frank and open dealing with Mr. Taft. He has put himself in personal opposition to the President without giving the public in the beginning a sufficiently candid explanation of his change of mind about him. These failures in prompt frankness are more than a tactical mistake. They lay him open to the suspicion of misconstruing his own declaration of 1904 or of forgetting its plain meaning and to the suspicion of forgetting also the square deal. He stands, therefore, as a champion of the progressive spirit of popular government, but as a champion under personal suspicion of having been somewhat less than frank and somewhat less than fair.

Nobody who has well known Mr. Roosevelt doubts his sincerity in thinking it his duty to run the risk of defeat for what he regards as the right spirit of government. But his entering the race under these circumstances does suggest the gnawing that Lincoln spoke of in connection with the Presidential ambition. Many great public men have suffered the hallucination that their own practised hand is necessary for the safe piloting of the ship; and this hallucination has often dried up generosity of judgment and narrowed the arc of vision. Consider the case of the deposed Bismarck.

The need of a strong leader of the Progressive wing of the Republican party is a mere incident of the moment. But Mr. Roosevelt's change of mind about a solemn resolution and his personal opposition to Mr. Taft after their former relations are more than incidents. They are actions that will have a permanent influence in the appraisal that men are now making and will hereafter make of him and of the breadth and generosity of his judgment. Look at the whole incident as it is likely to appear twenty-five or even ten years hence, and it will inevitably present chiefly the aspects of an ugly personal contest. It was Mr. Roosevelt who selected Mr. Taft for his successor. If Mr. Taft has failed as President, that is a bad fact for Mr. Roosevelt's judgment of men. If Mr. Taft has failed merely to adopt Mr. Roosevelt's manner and spirit and his particular policies, then Mr. Roosevelt's candidacy looks like an effort to punish him. In a word, Mr. Roosevelt is in a position to enter this race with somewhat less grace than any other man. He is open to these suspicions; and whether they are just or unjust, it is surely true that he has plunged the party and the country into a most bitter personal political contest that will have many unpleasant consequences. This is a high price to pay even for success.

Yet in his belief in government for the people by the people he is in line with the true spirit of the Republic, unfortunate as he has recently been in trying to find definite and clear-cut expression of this belief in terms of immediate problems. If Mr. Taft's mind is fettered by formalism, Mr. Roosevelt's runs to extremes. The true American spirit will survive them both. It depends on no man and no party. It is inherent in the people and they will and do find many ways to express it. lt is sheer vanity to assume that it depends on any one man. And the true American spirit, when applied to individual action, forbids any man from breaking over the bounds set by his own good faith with himself and with his countrymen, in an hour of humility and appreciation.

The promise of the struggle at the beginning seems in favor of Mr. Taft. The bitter attack on him is helping the President to regain something of his lost popularity, and it has provoked him to a degree of energy that, if shown throughout his administration, would have kept him in much higher popular favor. But Mr. Roosevelt of course, *may* win the nomination. The action of a convention is a hazardous thing to guess before most of the delegates are chosen. Yet the character of his support, as the contest begins, does not ensure victory.

One odd fact is this — that in a fight

both are on the defensive, Mr. Roosevelt for a breach of good faith and Mr. Taft for the shortcomings of his administration.

Mr. Roosevelt's nomination would be an acknowledgment of party desperation. The best way out of the difficulty for the Republican party would, if it were possible, be to nominate a dark horse — an acceptable Progressive like Senator Cummins or a man who has not been involved in this bitter inter-party fight, such as Justice Hughes. But in any event the party is in a dangerous plight — provided the Democratic party has the good judgment to nominate its strongest man.

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Its strongest man is Governor Wilson of New Jersey. There is no other Democratic possibility in his class. He is of the progressive temperament, and a believer in the people; and his record as Governor of New Jersey is as good credentials as any man has presented for the Presidency in our time.

Of one fact there is little doubt: if primary elections were held in every state to choose delegates to the national conventions, Mr. Roosevelt and Mr. Wilson would almost surely be nominated.

ABOUT THE THIRD TERM

ASHINGTON and Jefferson each declined a third term as President, because they thought that a longer tenure of office than two terms was dangerous to true republican government. Their declarations made the unwritten law, which public opinion has ever since approved. But, if the people wish any man for President for three terms or four or five, there is no reason other than the danger or the folly of it, why they should not have him.

There are objections, as Mr. Roosevent has pointed out, to a third consecutive term that do not hold against a third term after an interval of retirement. The office-holding machine has been changed, and something of the danger of a continuous bureaucracy has been averted. But these are minor considerations.

The difference between a third con-

secutive term and a third term with an interval is not fundamental. For, whatever real danger to the spirit of our institutions there may be in one, there is also in the other. The essence of the objection to a third term under any conditions is the offense to right government given by building up a personal party, the offense of sheer hero-worship.

of sheer hero-worship. The power of the President is almost incalculable; and, since he stands as the only officer of the Government who is elected by the whole people, he is thought to be more powerful than he is. The popular imagination has greatly magnified the office. Now the moment that any one man begins to think that his Presidency is necessary for the safety of the country or is so persuaded by his friends, he is in grave danger for that very reason of becoming an improper man to be President; and the moment that any large body of men begin to think that only one man can save the country, they begin to form an unwholesome public opinion. A personality takes the place in their minds of principles; and this is the gravest possible offense against true republican government.

Such is the real objection to a third term, whether they be consecutive terms or not. In the case of Mr. Roosevelt there are the additional objections that he is breaking a solemn pledge as the people understood it and is confessing how bad his judgment was of the man he chose to succeed him.

The third term "gnawing," moreover, attacks Mr. Roosevelt's extraordinary character precisely where it is weakest his self-confidence, or, in plain English, his vanity. For he is extraordinary in this as in other qualities. If he should again become President, he would again make an extraordinary record. Again the whole government would become energetic. His incomparable activity would be felt in the remotest post office in the land. Again, too, his ambitions that the Government should serve the people in their social needs and become something more than the formal working of courts and custom-houses would find wide range. The toiling masses and the injustices worked by vested interests would become

governmental problems. Herein is the strong appeal he makes to men who know how fast the world is changing and how fixed social wrongs become. In the old fight between men and property, Mr. Roosevelt is on the side of men. The multitude recognize this; and this is the secret of his popularity.

Yet is a personal party less offensive because it has good aims? Is a hero in politics less un-American because he is a hero for the humanities? Is vanity in good causes less offensive than plain vanity of other sorts?

One way to put the truth is — We are not so poor in men as to confess that any one man is necessary for our salvation. That is the real force in the objection to a third term whether it be consecutive or not. And this feeling will play an important part in shaping men's preferences during the next few months.

A CLASS WAR

LASS war has come not only in the Old World but also in our world. The indictment by a Federal grand jury at Indianapolis of fifty-four labor leaders, most of them members of the Bridge and Structural Iron Workers' Association, and the strike of the operatives in the textile mills at Lawrence, Mass., and the attendant misdeeds in the efforts to end it - these events following the great excitement caused by the McNamara convictions at Los Angeles, have made it very plain that a considerable part of our population no longer regards a labor trouble as a single or local matter. Every clash is to them an event in a continuous warfare between two classes. The impending danger of grave trouble, when this is written, in the coal-mining regions is another provocation of similar discussion.

We have continued to go on the theory that classes in the United States are subject to such rapid change that we need not fear class-warfare. But this comfortable old idea is become a delusion. We had just as well face the truth. Whereever the fault may lie, it has come to pass that in the minds of a very great number of men the working class and the owning class are with us. It is a sad confession to make in the United States.

Timely and wise, therefore, is President Taft's recommendation to Congress of a Commission on Industrial Relations to make a "patient and courageous" inouiry. This may be a step toward some better machinery for insuring industrial justice and peace than any that we now have. For we need some means of quickly making the facts of every such trouble known. If nothing else can be done, quick and authoritative publicity can be given; and that is much. The dynamite outrages, for example, which extended over a number of years, went on without an awakening of the public to the fact that this coward y warfare was in continuous progress, until the great Los Angeles tragedy shocked the world. The fewest number of men know now the essential facts about the coal-mine trouble. Mere publicity will go far if it can be made promptly and with authority.

The debatable area of governmental action affecting the organization of men on either side of this struggle; the grave problem of keeping freedom of contract unimpaired; the place where discipline ends and oppression begins on either side; the division of the profits of industry — these are the real problems of our industrial era. Beside them the tasks and policies that we label as "politics" and discuss to weariness are insignificant.

A LITTLE GLIMPSE INTO CHINA

LETTER from a small city in California contains the following sentences:

We went to Chinatown to see the Chinese New Year celebration Saturday night (Feb. 17th). We wanted the children to see it, as it is to be the last. They are now Republicans, they say. We tried to get a dragon flag the old style—but they said they were all destroyed. We got some new ones, the flag of the Chinese Republic.

By such little tokens near at hand we may guess something of the mighty upheaval that is now wrenching China. Suddenly through such a little arch of human sympathy as this we see vistas of real people stirred to unwonted passion



REPUBLICAN GOVERNMENT FIFTY YEARS AGO THE AREAS MARKED IN BLACK SHOW THAT, OUTSIDE OF AMERICA, ONLY THREE REPUBLICS EXISTED

by new ideals of life and government. Is it the birth of a new nation that we see, or is it only old and unchanged China turning over in its sleep? Is Western civilization about to see the last triumph in its conquest of the world, or does the sleeping sage still rule the spirits of that people? Is it true that "East is East and West is West and never the twain shall meet," or is the oldest monarchy in the world to be the newest imitator of a Western republic?

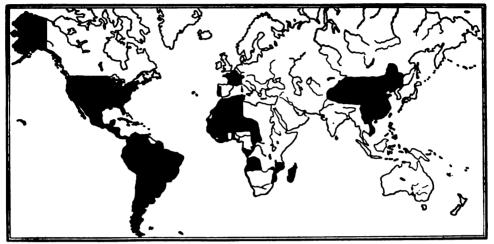
These questions perplex China no less than they perplex us. Even so learned and sympathetic a student of Oriental affairs as Professor Iyenaga, himself an Oriental, who writes elsewhere in this magazine of these problems, confesses that they baffle him.

THE PROGRESS OF REPUBLICAN GOVERNMENT

THE overthrow of the Manchu dynasty adds four hundred million to the population that lives under republican government. They are not bad material, either. In fact the Chinese probably have a better chance of success in their new venture than the Portuguese. Certainly they are at least as well fitted by temperament and training for selfgovernment as the Japanese were when they got their constitution and entered upon the Era of Enlightenment; for the Chinese have no feudal system to bother them, and they are accustomed to managing their local affairs. They have the knack of forming voluntary societies for promoting movements and they have a competitive examination system.

a competitive examination system. It is well to take a look backward and see how rapid has been the advance of the republican form of government throughout the world. A glance at the accompanying maps will show what progress has been made within the lifetime of many of us. Fifty years ago Switzerland was practically the only republic in Europe. In Africa there were only the Boer republics and Liberia. In Asia none. In America alone republicanism flourished, but here Brazil still had an emperor, and imperial France was engaged in overthrowing the Mexican republic.

Now look on the map of to-day. France, Portugal, and Switzerland are conspicuous on the European continent. France and Portugal have the lion's share of Africa. The Chinese Republic and the French possessions take up a large part of Asia. And America is all republican except Canada, the Guianas, and a few small islands. Or, to put it otherwise, the area under republican control in 1862 amounted to about 8,000,000 square miles. In 1912 it amounted to more than 22,000,000 square miles — an increase in territory of about 175 per cent. in 50 years. THE MARCH OF EVENTS



REPUBLICAN GOVERNMENT TO-DAY SHOWING THAT A LARGE SHARE OF FOUR CONTINENTS IS EITHER REPUBLICAN OR DEPENDENT ON REPUBLICS

The gain in population is much greater. In 1862 the inhabitants of republican territory numbered some 87,000,000. In 1912 they, numbered more than 712,000,-000 — a gain of 718 per cent. in the half century.

THE POPULATION OF REPUBLICAN TERRITORY In 1862:

ln 1912:

Of course these comparisons are between purely formal republicanism, and do not accurately indicate the real spirit of all these governments. If we consider the aim and essence of popular government, its progress is still more encouraging, for practically the whole habitable world has within this period been brought under a constitutional régime of some sort. Even Russia, Japan, Turkey, and Persia have their parliaments, and Abyssinia and Siam are no longer pure autocracies. The only loss suffered by formal republicanism is the overthrow of the Transvaal and the Orange Free State, and to accomplish it strained the strength of the strongest monarchy on earth. And this was merely a nominal loss, for both Boers and British enjoy more real freedom under King George than they enjoyed under President Kruger. "It would be absurd to suppose that the island of Madagascar, which appears on the map as republican territory because it belongsto France, has a greater degree of selfgovernment than the island of New Zealand, which owes allegiance to a monarch.

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Nevertheless, these maps show real progress of a certain kind; and republican government is a good thing in itself, even where it is purely formal.

THE EVERGLADES LAND SCANDAL

A SCANDAL and a swindle of large proportions have taken place with regard to the Everglade lands in Florida. Promoters have collected by mail many millions of dollars from the victims of their reports and descriptions in payment for lands that cost \$2 an acre (when they cost anything) and were sold for ten or twenty or more times that sum — lands yet under water and yet of no practical value whatever. The scandal, when this is written, is

The scandal, when this is written, is undergoing investigation; and no definite report of these fraudulent transactions is undertaken in this paragraph. It is possible now only to point out with regret that the love of land is an easy road whereby a shrewd swindler may reach the credulity of large numbers of people.

Of course you may say that anybody who is fool enough to buy land that he hasn't seen deserves to be cheated. But that easy judgment helps nobody. When most seductive reports which seem to carry state authority reach persons at a distance who dream of rich land in a warm climate, any untoward thing may happen to those who lack business experience and therefore good business judgment. It is the story of the bond and stock and mine swindlers done in even better form.

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And, in addition to the scandal and the loss of millions of dollars by the victims of this swindle who live in every part of the country, a grave damage is done to the state of Florida. There is, of course, much very valuable land there, and there are wonderful opportunities for fruit and vegetable growers who know or will learn the business. Even to doubt the possibility of draining the Everglades is unnecessary. It is but a huge, complex engineering problem calling for time, money, expert knowledge, conscientious work. The soil of the Everglades varies greatly; in places irrigation will be essential, in others superfluous. How many years, how much fertilizer, what special treatment will be needed before crops can be profitably grown? What crops will, after all, succeed under the conditions that will exist when the swamps are dry, Can these be marketed promptly and economically? The answers to these questions are not known and will not be until the Everglades are finally drained. And even then, there and everywhere and always, a man who buys land that he has not seen is - silly.

A WORLD'S WORK FARM CON-FERENCE

A RE there competent persons who want farm-homes and do not know how to find them? The WORLD'S WORK has proved that there are many such persons. Within three months 460 such men wrote to this magazine and a larger number wrote during the same time to the authors of recent articles on successful agricultural enterprises in different parts of the country.

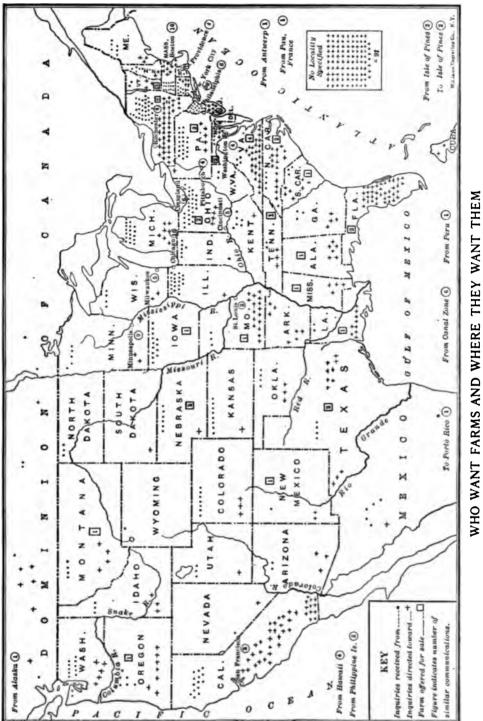
The accompanying map shows the places of residence of the writers of the 460 letters that came to this office. Every round dot on the map shows a place from which somebody wrote an earnest letter; and every cross shows a place or part of the country about which some writer inquired. These inquiries show two or three general movements of people, as was to be expected. The largest movement is from the northern middle states eastward, especially southeastward; and smaller movements to the southwest and to the northwest are shown.

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But the next question is not quite so easy — how to give these inquirers definite and accurate information about particular localities. To help answer this, the WORLD'S WORK invited representatives of the Agricultural Department at Washington and of the departments of the states where land is much in demand, and of the industrial or agricultural agents of the principal railroad systems to a conference at Garden City, N. Y., on February 15th. Thirty men came and the whole subject was discussed by them at luncheon and during the afternoon and further at dinner.

The descriptions of farm-lands and of farm-life issued by the states and by the railroads are good, for they have constantly become more definite. The writers of these pamphlets and folders are getting further and further from the vocabulary and the point-of-view of the typical real estate agent: they have less and less of the "boom" tone and more and more of the tone of the practical student of country life. The best of this matter makes a good preliminary guide. It tells a man enough general facts to enable him to make up his mind whether he cares to inspect the neighborhood. They give social as well as purely agricultural facts.

This conference made it plain, first, that these agencies — the states and the railroads — are doing good work; but it made it plain also that one essential task is yet not done. Can a man find reasonable local financial help if he buy a farm in a given region? For instance, can he borrow on his land a sum to pay his first





AND SMALLER MOVEMENTS TO THE SOUTHWEST AND THE NORTHWEST

year's expenses at a reasonable interest? What about markets, too?

Most men who seek farm-homes are men of small capital, and the farmer, as a rule, gets his money for his crop only once a year. The financing of farmventures — giving careful and safe financial help to trustworthy and capable men — is one of the most imperative needs of our time. And the sparsely settled states might well consider whether it would not be wise to further such work. The railroad companies, perhaps, have grave reasons to hesitate. But somebody ought to do it. The nation did such service, in effect, by the homestead law, so long as there were good free public lands; and it now makes the purchase of irrigated land comparatively easy.

Here is a task for local credit-societies, such as exist in Europe, and for such statehelp as Victoria, Australia, for example, gives by selling land to settlers on perhaps the most favorable terms on which land can now be bought anywhere in the world.

There was brought out at this conference, in many interesting ways, the fact that the states and the railroads desire good farmers on the untilled or poorly tilled land — want them badly, will work hard to get them, and appreciate their economic and social value to the utmost. Yet here are these 460 inquirers — by this time there are 460 more — eager to get good land. Some of them are finding what they want; but many of them never will find it, do what we may, what the states may, and what the railroads may.

states may, and what the railroads may. Nobody has yet quite mastered the problem. It consists of even more accurate and comprehensive authoritative information not only about the land itself but about credit, markets, the neighborhood, schools, the organization of the community, labor, the kind of welcome and helpfulness that awaits a new comer.

All these things the WORLD'S WORK will try more and more fully to supply information about. And in the meantime it wishes publicly to thank the gentlemen who came and by their discussions made the complicated task clearer, and who help to supply such information as is now obtainable.

THE GREAT COUNTRY LIFE MOVEMENT

N EXT to national politics the subject that serious men seem most to be thinking about and working on in almost every part of the Union is the organization and improvement of country life. Consider these extraordinary facts: The value of farm lands doubled during the last decade. Yet there are good farm lands in parts of the country that can be bought practically as cheap as good farm lands were sold for a hundred hears ago. Agriculture has been completely revolutionized by those who know how to conduct it, but the revolution is just beginning to take effect. It is more profitable than it ever was. Yet the drift to the cities is not checked because country life, except in comparatively small areas, is still unorganized.

Unless all signs fail, therefore, this situation is quickly going to change. A knowledge of these facts is becoming so general and the meaning of them so plain that we shall presently find ourselves in an era of rural organization that will mean a revolution. Some hints of this varied activity may be got from such incidents as follow, and hundreds more could be got even from the current news:

"Circular of Information No. 29" of the University of Wisconsin's Agricultural Experiment Station is about "a method of making a social survey of a rural community." A social survey, it explains, "is an attempt to photograph the community so as to show every home in all its social connections with all other homes." Such a photograph reveals "the lines of strong, healthy socialization and discloses the spots and lines of feeble association." You are told how to take a social census and to make social maps. Among such possible maps are those showing the newspapers and magazines read, the community events, homes with and homes without children, and hired help. In a few communities thus studied, the maps show to what extent the country homes and the village homes have a common

social life. Such commingling takes place with the best country homes. Few tenant homes on these maps take part in community activities. The maps show a few isolated neighborhoods "neglected, overlooked, or indifferent to social life." It was found, too, that nearly all the "socialized" homes are on the main roads. Back roads and bad roads meant social backwardness.

Studies like this are the beginnings of a real science of country organization, and they emphasize the fact that isolation is the mother of stagnation.

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Here is a pamphlet issued by the Commissioner of Agriculture and Immigration of Virginia which contains a list of Virginia farms for sale. It gives the name of the owner, his post office, the county, the number of acres, the buildings on the farm, the kind of farming, and in a few cases the price. The Commissioner advises inquirers to write directly to the owners.

So far, so good. But this pamphlet doesn't go far enough to be of much real help. There are farms for sale in almost every neighborhood of every state that is as sparsely settled as Virginia. Now if any such neighborhood would publish an illustrated agricultural and social survey such as the University of Wisconsin suggests, it would probably find the folks that it is looking for — folks who would make the soil yield wealth and make the community life full and rich.

Such people are waiting for just such information, and they don't know where to get it without travel, which they can't afford.

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The National Education Association appointed at its meeting last summer a committee which is engaged, under the chairmanship of Mr. E. T. Fairchild, State Superintendent of Public Instruction in Kansas, in preparing a report on "the agencies for the betterment of rural school conditions in the United States." Subcommittees are at work on all important divisions of the task, from methods of raising and using school funds to the organization of neighborhood life about the schools. Of the twelve million rural children of school age in the whole country less than three million complete the grades of the primary school. This is another way of saying that, as a whole, our country schools are yet a farce; or, a better way to say it is this: as a people we have not yet taken up the task of the country school; or, let us say, we haven't country schools yet — only one here and there. Thus far practically all our schools are town schools.

For instance, Mr. T. J. Coates, State Supervisor of Rural Schools in Kentucky, after a survey of Whitley County, said in his report that there were 7,058 (or 63 per cent. of all) children in the county who were out of school. Of 11,633 pupils of school age only 24 completed the elementary course in 1910, and only one school in six had a single pupil to complete the elementary course. The Supervisor said to the people of the county: "If your county supported as many unbroken and untrained horses as it supports untrained and idle men, your business men would stand aghast." But the point is that there is now a Supervisor of Rural Schools a new office; and the people are for the first time finding out the facts about their own country life.

IV

The Bureau of Education at Washington, under Commissioner Claxton, is giving emphasis to the subject. A recent monograph, issued by the Bureau, prepared by two professors of the Western Kentucky State Normal School, Dr. Fred Mutchler and Professor W. J. Craig, sets forth the proposition that rural school teachers are a positive force to depopulate the country The courses of study, the districts. method of teaching, the general tone and influence of the country schools tend to drive the young to the towns. The teachers idealize city life and unconsciously lodge the conviction in the youthful mind that only the town means civilization and opportunity and that the country means monotony and dulness. Then the pammonotony and dulness. phlet cites such definite commercial facts as these:

Canada's country schools increased the average yield of wheat 5 bushels an acre. The same increase in the Kentucky corn-crop in 1910 would have been 18,500,000 bushels, worth about \$10,000,000. This sum would have built 2,000 miles of good roads, or it would have paid the expenses of the State's public schools for two-and-a-half years. And what the rural schools can do for the corn-crop they can do for almost any other crop *if they bave capable teachers*.

Then the writers of the pamphlet proceed to lay down a proper course of study for country schools. If you are interested, send for a copy of it — "A Course of Study for the Preparation of Rural School-Teachers." The Bureau of Education at Washington distributes it free.

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A few months ago a big meeting was held at Spokane, Wash., with the coöperation of the State Country Life Commissions of Washington, Idaho, Montana, Oregon, and of the Spokane Chamber of Commerce, the energetic and patriotic moving spirit of which was Mr. David Brown of Spokane. This was a sevendays' Congress, not of speeches only but of exhibits and demonstrations of many useful kinds. For example, the Grange set up a model kitchen whereby it was shown by measurements that a housewife would save by its arrangements and devices from 300 miles to 400 miles of walking every year. It was shown that a septic tank costs only one third as much as a coffin. Problems of marketing farm produce were discussed; for it is as important to get \$2 for the stuff that now fetches \$1 as it is to make two ears of corn grow where only one now grows. The country life institute or club near Spokane is a remarkable gathering place for men and women of the community a real country club where real country people congregate and learn from one another.

V1

Almost simultaneously such old states as Maryland and Pennsylvania, and of course a number of newer states, have recently held big Rural Conferences, meetings of three days or more at which men and women of experience explain practical plans. In such programmes sanitation and coöperative buying and selling have an increasing share.

In Lewiston - Clarkston (Idaho and Washington) there was lately opened a school of horticulture, independent of all other institutions, for the training of men and women, most of them adults, for practical orchard work, by short courses of study. The orchard owners of the valley and the business men of these two cities have made it possible for this school to give free instruction to residents of the valley and to charge others a fee that is little more than nominal.

VII

Another aspect of the "forward-to-the land" movement was mentioned in this magazine two months ago by a writer who said that many town men would go to farming but for the hardship that farm life has for their wives; and this drew from Mrs. Caroline H. DeLong, of Kalamazoo, Mich., this very true protest:

Drudges are born, and the farm need not make them. It takes brains to avoid being a drudge anywhere. Especially does it take brains and ability to avoid being a farm drudge. It takes all the skill that the highest training she can get can give her. If she is college educated, so much the better. She needs her physics, her chemistry, and her sanitation to help her find the essentials in her household management and to help her attack them in the most direct way.

The woman who dreads going on a farm hasn't yet made the acquaintance of the new type of farmer's wife. If she had she would be envious for she is a much more alert and useful woman than her city sister. She has cultivated that variety of employment which keeps all faculties alive; she has some outdoor work and some indoor work, some book-keeping and some bargaining. The telephone and the rural delivery are inexpensive and they bring the community to her door. She has much greater opportunity for public service than the average city woman, for in the city are many women of leisure who are looking for something to do. What has become of the drudgery? Some she has found is not What she must do she resolves necessary. into a problem of efficiency and manages so as to save much time and strength.

It may take the woman a little longer than the man to become imbued with the back-tothe-soil spirit; but, if she will keep an open mind, she will be convinced that vast opportunities lie before the farm woman of to-day.

So the man who has a reluctant wife needs only to carry on a campaign of education, get her informed and she will go with him.

VIII

It is not in the United States only that good tillers of the soil are sought. The state of Victoria, Australia, arranged a cheap land-seekers' excursion at low rates and energetically solicited emigrants from every part of our country. The cost of a return trip from San Francisco ranged from \$64 to \$200. The state has control of all the water and has spent \$16,000,000 on irrigation works; it owns large tracts of irrigable land which it sells for a cash payment of 3 per cent. and a payment of 6 per cent. a year for 31¹/₂ years which will When the excomplete the purchase. cursionists reach Melbourne, a state agent will take them on state railways to examine these state lands, offered by the state on these easy terms.

Here, then — to repeat — surely is an extraordinary fact: Agriculture, extensive and intensive alike, has been revolutionized in every civilized land. In every land there are individuals and communities that have won such prosperity and happiness as the soil never before yielded. The applications of new scientific knowledge have made the tilling of the earth a new industry and the organization of rural life has in places brought it to a degree of efficiency and comfort never before known. Yet there is an abundance of good land in the United States that can yet be bought as cheap as much land was sold a hundred years ago; and from many rich-soiled regions the people continue to flock to the towns.

This state of things will not long so remain. But it is a humiliating comment on the lack of training and on the lack of knowledge and on the lack of courage and initiative of this town-lured generation. The continued flocking to the town is proof, too, of what organization can do to attract men; for town-life is yet our only organized life. A similar organization of country life will produce similar results.

THE REGENERATION OF WALL STREET

IN FOUR successive recent numbers of a weekly publication devoted to financial news, there appeared items concerning eighteen American industrial enterprises involving the news of issues of new stocks and bonds of more than a million dollars in each case and aggregating \$82,769,000. This was the grist of industrial news concerning such corporations in less than a single month of the past winter.

This process is the culmination of four years during which almost every important industry in the United States has sought to raise money for carrying on its business, for expansion, for paying debts, or for strengthening working capital. In a single great industry, the manufacturing of harvest machinery, nearly \$75,000,000 of new money has been raised by the sale of securities during this period. In the automobile and motor truck trades an even larger amount of capital has been invested.

This tremendous gathering of cash has two meanings. The first is the unbounded belief of the manufacturing powers of the country that industry is going forward, when once it starts up, at a pace that has never been equalled, and that will demand a strength of resources that the old methods of financing never could have afforded. The second meaning is that those who administered great manufacturing plants discovered in 1907 and 1908 that bank-credit in times of stress is a broken reed to lean upon. Hundreds of prosperous industrial enterprises during that trying time found themselves crippled and sometimes in serious danger because they could not borrow from the banks. The source of cash with which they had carried on their business in years past was suddenly taken away from them. The new financing represents the determination of these scattered manufacturers never again to be caught dependent upon bank credit.

These companies are not financing for to-day, but for to-morrow. The carrying out of their policy, therefore, at the present time is not a fulfilment but a prophecy. It means undoubtedly that the scattered manufacturers, particularly in Indiana, Illinois, and Ohio, are looking forward to a period of tremendous industrial growth and are arming themselves for the greatest campaigns of industry that they have ever undertaken.

Going a little deeper into the matter, one is astonished to find that the great part of this new capital has been raised not by the trusts but by independent, separate, and individual manufacturing plants. In several instances sums ranging from \$5,000,000 to \$10,000,000 have been raised in Wall Street by manufacturing concerns the names of which had never before appeared as active participants in big financial matters. Such corporations as, for instance, the M. Rumely Company, Deere & Co. and the J. l. Case Threshing Machine Company, although they are household words in the West and possibly in all the agricultural regions of the world, were practically unknown in Wall Street. Their stocks had never been traded in, and their bonds had never been floated in this market. Yet these three companies alone have raised in the great financial market of the East something

approximating \$20,000,000. In this fact there is something more than a mere record of a financial event. Is it possible that the true function of the Wall Street market is coming again to be its chief activity? All men know that the only real justification for the existence of a great central securities market in which men and institutions, corporations and municipalities may barter and trade is to provide a clearing house through which industry, transportation, and commerce may draw to their support the investment capital of the nation and the world. For years Wall Street has stood for something different. For a number of years the very name became a synonym all over the world not for sober, decent, and honest financial activity, but for stock market gambling on a scale such as had never been seen before.

But the events of this past year in Wall Street may be signs of one of the most significant changes in our financial organ-They may mean, in fact, that this ism. great financial mechanism is coming back in the course of the next few years into its proper place in the life of the nation. It is certain, at any rate, that speculation such as we saw in 1906 is dead in Wall Street. It is also certain that, while the great speculative houses have declined and fallen into oblivion and eclipse, the great investment houses have stood in the forefront of the activities of the Street as they have not stood before in more than a decade. In fact the leaders of the financial world to-day are men and institutions who are engaged in the task of pouring into the industries, the public utilities, and the transportation machinery of the country capital gathered from all the corners of the world; and they are not engaged in speculation.

ABOUT FRENCH REVOLUTIONS AND SUCH THINGS

THE Chairman of the greatest corporation in the United States, Mr. Gary of the Steel Corporation, made a speech before a dinner in New York a little time ago in the course of which he said:

I say to you that things are being said and printed similar to the incendiary speeches which aroused the peasants of France and caused the French Revolution. Unless something is done, the spark will burst into a flame. I am not asking for sympathy, nor have I hoisted a flag of distress. I suppose it is only fair to say that, perhaps, we men of great influence have not always done exactly right. I think that it would be better if we sought to remedy some of the ills of the body politic, and, instead of taking offense, seek to benefit by criticism, however unjust.

Unless the capitalists, the corporations, the wealth of this country take the first step in this direction, and assume a leading position in the fight to remedy evils, that action will be taken out of our hands by the mob. My counsel to the big interests of the country is to deal squarely with their employees.

There are many men of high station in the business world who say that they

share this fear. Their theory is that if you don't give the public what it wants the public will become violent. This is very much older than the French revolution and as old, in fact, as the time when one man first became superior to his fellows.

But such a public utterance is not the soberly thought out judgment of our industrial leaders. We have heard the same thing often before. It was in fact a constant theme of conversation during the great coal strike of a few years ago, and long before that in the days of the Homestead strike and the Pullman strike. It has been, in fact, the cry of capital whenever the dominancy of capital seemed to be threatened even in an unimportant corner of the business world.

Sober men in the United States are not much afraid of socialism, anarchy, nihilism, French revolutions, or any other such final resorts of passion and desperation. One can see in the determined effort of the people to check the tyranny of gigantic combinations and to cut off the sources of monopolistic power the very strongest possible cure for all the causes that underlay not only the French revolution but every revolution of its sort in history.

What the people of this country want is not the destruction of capital, the ruin of great industries nor the wiping out of vested rights. What they want is so to regulate capital, industry, and the use of vested rights that these ancient and honorable institutions may not be allowed to rush forward into self-destruction as they did in France in the days of the terror and as they did in almost every instance of widespread mob violence that Mr. Gary or any one else can cite from history. This is what the people demand, that capital, industry, and vested rights shall be the servant and not the master of the nation; for the results which Mr. Gary fears flow only from the gaining of too great power over the people by the masters of capital, of industry, and wealth. There isn't the slightest danger of French revolutions from the people so long as they have, what they are now using, the power of compelling publicity, investigation and, when necessary, prosecution.

THE AMERICANIZING OF FRANCE AND THE FINANCING OF EUROPE

RANCE is becoming Americanized. There is noticeable, throughout the country, a growing appetite for luxury, an increasing use of those aids to the comfort of living which, until five years ago, Frenchmen of the middle class considered far and away beyond their means, but which the average American of equal station has long counted among the common necessities of life.

Bathrooms, electric lights, telephones, steam heated apartments, musical instruments, and labor saving appliances in the kitchen have, until very recently, not been deemed adjuncts to a comfortable existence by a Frenchman of the bourgeois class. His formula for living comprised only a simple diet and barren surroundings. His idea of happiness was to live on a comparatively fixed income, to cut the garment of his daily necessities according to the cloth of his productiveness with a generous slice left over for the rainy day hoard. Adherence to this formula in the last quarter of a century has won for the French middle class the just title of "the greatest money-saver of the world."

In no other way than by the most rigid self denial could the French have become such a nation of capitalists. It is thrift and not cheapness that has made them so. For the average income of Frenchmen of the middle class gives them no advantage over Americans in "the high cost of living" as estimated by the cost of the three actual necessities of life: food, shelter, and clothing. A table recently prepared by James E. Dunning, United States consul at Havre, proves that the average cost of food in Havre and other provincial cities is 50 per cent. higher than in American cities of the same rank. Rents in both countries are practically the same, but the French tenant gets none of those modern conveniences which an American landlord feels compelled to provide without extra charge. In France, a flat or small house without a bath or anything but the simplest sanitary appliances, rents for \$150 to \$200 a year, and

the Frenchman who insists upon better accommodations must pay \$300 to \$900, according to the location and size of the house. Among the middle class in France, the rent ordinarily is reckoned at one tenth the total income, while in America it is the custom in our cities to spend one sixth or even one fourth merely to keep a roof over our heads.

The tendency toward Americanization in France is well illustrated by the fact that recently, in many of the provincial cities, apartment houses have been erected that are equipped with elevators, bathrooms, and heating appliances and that compare favorably with American standards. These apartments rent for \$800 to \$1,000 a year and the demand far exceeds the present supply. And American methods of advertising — all the allurements about "labor saving" — and the seductive plans for "easy payments," have whetted the appetite for luxury, in the middle class of France. Out of these advertising methods has grown the demand for ornamental furniture, musical instruments — self-playing pianos and phonographs — fireless cookers, electric flat-irons, and illustrated periodicals. Low priced automobiles manufactured in the United States are coming into more common use - the importation of these cars was \$150,000 in 1910 against only \$16,000 in 1907. Even the wretched telephones of the French government service are coming into popular favor.

This growing appetite for luxuries must result in taking from the French their title of "money savers." Their stockingpurses cannot long withstand the drain of these new demands. And then a very real problem will confront the world, for these stocking-purses have financed many wars and many railroads; and financiers will not easily find a substitute for their rich yield of cash for new enterprises.

AN UNCONSCIOUS CARRIER OF DEATH

B OTH the amazing ways of communicable diseases and the almost equally amazing possibility of thwarting them are shown by this experience reported in the *Journal of the Ameri-* can Medical Association by Dr. Charles Boldman and Mr. W. Carey Noble, of the New York Department of Health:

One man, two years ago, sent 380 persons to bed with a dangerous illness, and spread an epidemic of typhoid fever that threatened the safety of half the population of New York City before the source of infection was found. He was a dairyman, and an unusually cleanly and careful dairyman, too. But the officers of the New York Board of Health, by patient investigation, made the extraordinary discovery that he had been a typhoid bacilluscarrier for forty-six years. In that time he had infected three of his daughters, his son-in-law, two of his hired men, and, every year since 1866, he has, on an average, infected fourteen of his neighbors in Camden, N. Y., or about 544 in all. "Camden fever" had become a fixed name for typhoid with the Camden doctors, who would not believe that so many cases of real typhoid could occur every year in such a small village. The reason the infection had not gone farther at an earlier time was that this dairyman did not sell his milk to the creamery, but only to the villagers of During the month preceding Camden. the outbreak in New York City, he had been in the habit of taking his left-over milk across the road to his son-in-law, who included his father-in-law's milk in his own shipments to the creamery.

Here is an example of the startling possibilities of infection that have come with the complex inter-relations of modern life. One man, in a week's time, unknown to himself, endangered the health of 4,000,000 unsuspecting people — for, mark you, the health officers noticed the epidemic on August 28th and closed his dairy September 1st; but even with such quick work as this the epidemic had spread to "really enormous proportions."

One such typhoid bacillus-carrier carries greater power of destruction than a war fleet. If it be discouraging that he lived unsuspected in a small community for forty-six years, it is also encouraging that he was discovered within three days as soon as the disease broke out in a community that commanded specialists, bacteriologists, and laboratories.

WHAT HAPPENED TO ONE WOMAN

HIS is the story of a comfortable little fortune and the things that came of it. It is the episode of a Connecticut woman and of the way she gained her meagre education in the science of finance.

Many years ago a company was started in Connecticut to manufacture a specialty that was used in the beautifying of women's faces. It succeeded, and for twenty years it earned very handsome dividends on its stock, which was small and which was owned almost exclusively by its officers and directors. About nine years ago one of the principal officers died and left to his widow an estate consisting of about \$8,000 in cash and real estate, and stock in the company that paid her dividends of \$6,000 a year. She sold her Connecticut property, moved to New York, and bought a house on the West Side. Here she settled down to live in peace and comfort with her only daughter.

Four years ago the dividends dropped suddenly from \$1,500 a quarter to \$750. She made diligent inquiry about the matter, and discovered that certain new electrical appliances that had recently been invented had seriously cut into the market for the old product, and indeed threatened its extinction before very long. The management was perfectly honest and candid in its statement to her. She decided to sell her stock. She offered it at first for what she thought it was worth, later for what she thought she could get for it, and at last for almost a song; but there were no buyers willing to take it at any price. A year ago it ceased paying dividends altogether. Last summer she managed to dispose of it, receiving a little more than \$1,000 for assets which had produced for her for many years an income of \$6,000 a year.

When the problem of saving this difficult situation first came up, it was apparent that no ordinary financial operations could be of any avail. It was obvious that

either she or her daughter must turn into cash whatever latent possibilities they possessed for the earning of money. Under advice, the daughter took a commercial education. The house, of course, was sold. A year or so ago the daughter went to work and they moved into a small apartment in the city. Later on the relics of a fortune were invested in a sound and substantial way, and upon the little income from this and the proceeds of the labor of a clever and ambitious girl life goes on apparently in a very happy and not at all a poverty-stricken way. Therefore, this little story ends without much real misery to cap the climax.

The object of telling it here is to point the inevitable moral. It is the same old moral of the eggs and the basket, but it is in a slightly novel setting, for it is the story of a basket which was really carefully watched and which its owner had every reason to believe was a sound and secure basket. In fact, it is simply the commonplace story of a commonplace thing — a thing that about nine business men in ten will inevitably do and that thousands of business men do all over the country every year.

As I write, I have before me full lists of securities owned by twenty estates placed on file in three New York counties in the last month. These statements furnish some first rate illustrations of this same habit. In one, for instance, the entire estate is represented by a substantial block of Borden's Condensed Milk common stock. That is a very good stock, as industrials go, but the man who would leave a family dependent upon an investment of that sort without at the same time leaving instructions that the estate should be split up and diversified, would be simply laying up for his heirs the same sort of trouble encountered by the woman in Connecticut.

In another of these estates, the total value of which is less than \$140,000, I find two items, one of \$50,000 in a railroad

bond, and the other of more than 1,500 shares of a cold storage warehouse company. The other items are negligible. It would be interesting if one could dig into the past and find out by what process of mind any one reached the conclusion that nearly the entire wealth of a family should be wrapped up in two items of this sort. In another estate of \$30,000, more than \$20,000 is in the stock of a little gas company 2,000 miles away; while in an estate of \$62,000 there are 520 shares of a local street railway. A strange little estate is made up almost exclusively of securities representing the taxicab business in the principal cities of the country.

Purely on a guess, and without knowing anything about it, it is pretty logical to conclude that in one of these estates there is represented the wisdom, or the lack of it, of a man who had some connection with the milk business, of another man who had strong connection with the cold storage business, of a third who had some knowledge of the gas business, and of still another who had some connection, direct or indirect, with the business of operating taxicabs.

It does not take the wisdom of Solomon to discover that none of these four businesses is apt to be represented by stocks that are sufficiently stable, solid, and permanent to satisfy the care that a man ought to project far into the future to look out for those dependent upon him. Milk is a staple article of diet; but stocks of milk concerns come anew into the market every year and go betimes the way of most industrial enterprises. Gas is a public necessity; but gas stocks rise and fall sometimes with astonishing swiftness. Cold storage is a wonderful system, but who dare guarantee the permanence of any one plant or any one company? Taxicabs doubtless are a permanent form of vehicle, but the percentage of mortality in the companies that own them is extremely high. Therefore, one would say that all these men, wise and successful as they may have been in life, bid fair to prove but foolish failures after their death unless they provided for a much better and more permanent investment of their funds after the courts have passed upon them.

There is no other form of investment so alluring as industrial stocks, but some times one is moved to wonder as one finds huge blocks of them held in the hands of women who live upon the income; for all men know that while industrial stocks are probably the most profitable form for the business use of money they are also the least stable and the least secure form of permanent investment in the hands of those who cannot in the nature of things watch them closely.

One of the greatest industrial corporations in the country manufactures a specialty that may be found in almost every home in the land and that makes a special appeal to women. l have the list of its stockholders before me as 1 write. In this list there are twenty-one women who hold 500 shares apiece, that is, \$50,000 or more of this one stock. lt happens that one woman of whose affairs I know something is a large stockholder in this concern. She lives on a very high scale of wealth. I do not believe that she has a single investment in the world or a single asset, except a little real estate and personal property, outside her investment in this stock. In her case the investment was made for her by an adviser and was not a bequest. It has turned out wonderfully well and she has, to-day, nothing to regret about it; but every time one thinks of it one is inclined to go immediately and look up the news of the latest trust prosecution, the latest strikes, and the latest new inventions in household articles; for there is in every industrial venture of this sort, no matter how great and powerful it may be, the primary element of financial tragedy such as that with which this story began.

It is strange that out of all the experience of all the world in matters of investment it has not become a universal axiom that money entrusted to one enterprise or one security is money engaged in business, and not money invested. The fact of the matter is, of course, that this really is an axiom amongst scientific investors. Any insurance commissioner in any state who caught an insurance company investing 50 per cent. or even 25 per cent. of its assets in any one security would put

the lid on that insurance company in a hurry. Any bank examiner who discovered a bank doing the same thing would report it immediately to the Department. Every banking law provides a limit beyond which a bank may not lend to any one borrower or invest in any one security. The Savings Bank Law of New York provides, for instance, that not more than to per cent. of the assets of any bank shall be invested in any one railroad bond, even inside the state itself and under the most rigid restrictions, nor more than 5 per cent. in any other railroad bond.

If one runs over the history of all the great collapses that have occurred in all parts of the world in matters of finance, one finds in many cases that what led to ruin and disaster was simply the neglect of some one to comply with this very clear and well established rule. The Baring collapse in England was due to over-loading in Argentine securities. From our own history, it is enough perhaps to recall the collapse of the Trust Company of the Republic in 1903 as a result of similar over-trading, and a narrow escape from a similar episode in the case of the Tennessee Coal and Iron Company and one of the banks in 1907.

Let us take it as an established fact in the world of banking and big finance that no sane and honest officer, executor, administrator, trustee, or individual would dare to venture any large part of a fund entrusted to his care in the securities of any one institution, corporation, or firm. Why then is it that in the most sacred and serious trust, namely, providing for the future of one's dependents, a man will leave almost if not quite his entire fortune wrapped up as it were in a single napkin, and often not too secure a napkin at that?

The answer is, of course, lack of education. No educated investor would take such a chance. Business men are not investors, and in this country they are prone to ignore the very simple fundamental rules worked out by the experience of the world for the conservation of money. Doubtless the time will come, in the industrial history of this country, when the handling of fortunes from generation to generation will become so much a matter of habit and of precedent that it will be done scientifically and sensibly, but perhaps it is too much to hope that in this first generation of industrial wealth anything but haphazard methods can prevail.— C. M. K.

AN AMERICAN ADVENTURE IN BRAZIL

A SEARCH FOR GOLD THAT LED 5,500 MILES, TO THE SOURCE OF THE AMAZON, UP THE RIBERAO RAPIDS, THROUGH THE JUNGLE, ACROSS THE PAMPAS, AND DOWN THE PARAGUAY

ΒY

ALEXANDER P. ROGERS

PHOTOGRAPHS BY THE AUTHOR

N 1768, eight years before the Revolutionary War, a Portuguese soldier of fortune breasted the vast current of the Amazon upward past the mouths of dozens of tributary streams, braved hundreds of miles of rapids, risked the fever of the swamps, escaped the arrows of unseen Indians that lurk even yet in the thick undergrowth, hacked and crashed his way through the tropical jungle, and found, at last, thousands of miles from the coast, a little vein of gold that made him rich.

In 1911, the fame of this old pioneer's discovery came to the ears of an American capitalist, who commissioned me to make the same journey to the same spot to prospect once more for gold. My trip was very different from the Portuguese. The differences measure much of the progress of the world since 1768. I

traveled the same streams and traversed the same jungle, but 900 miles of the journey from the coast was made on a sea-going steamship; along here I passed cable stations momently in touch with all the world; "wireless" annihilated the next 500 miles of wilderness; busy Americans building a modern railroad and conquering the fever by methods learned at Panama broke the solitude of the next 220 miles; steam launches screeched where the Portuguese had paddled a canoe; fortunes in crude rubber destined for New York and London floated by me where nothing but driftwood had broken the surface of the river he ascended.

I entered this region by going up the Amazon to one of its sources, near which the mine was located. Instead of returning by the same route, I crossed a low divide to the River Paraguay and came down that river to Buenos Aires, a trip few white men in recent years have taken.

The ship I was on — like all ocean vessels entering the Amazon - called first at the city of Pará and then went through a tortuous channel south of the island of Marajo for twenty-four hours before reaching the main river. In this way we avoided many of the dangerous bars at the mouth of the river and had deep water all the way to the city of Manaos, 900 miles up stream. During most of this distance, the Amazon averages between three and four miles in width, with nothing of interest to see except a low wall of green jungle upon either bank, so far away that no details could be distinguished. The scenery was a disappointment, and the beautiful birds one reads about were remarkable chiefly for their absence.

It was very warm, and as there are few settlements or points of interest along the banks, I was heartily glad to reach Itacoatiara, near the mouth of the Madeira River, where I was to leave the steamer and go up the Madeira, while the steamer went on up the main Amazon to Manaos. Here there really seemed to be life. Large steamers were anchored close to the shore and a busy little launch was scurrying from one to another, all the time giving out an unearthly screech from its tiny

whistle as it tried to hurry the transfer of baggage to the Madeira-Mamoré steamer waiting to take us up to the railroad that our countrymen are building through the jungle around the Madeira Rapids. Such hurry seemed a little out of place in old Brazil, but 1 had not been in the country for ten years and did not realize how times have changed with the advent of Americans. The sleepy tropics can not destroy *their* electric energy, and even the shiftless natives catch a little of the hustling spirit in spite of themselves.

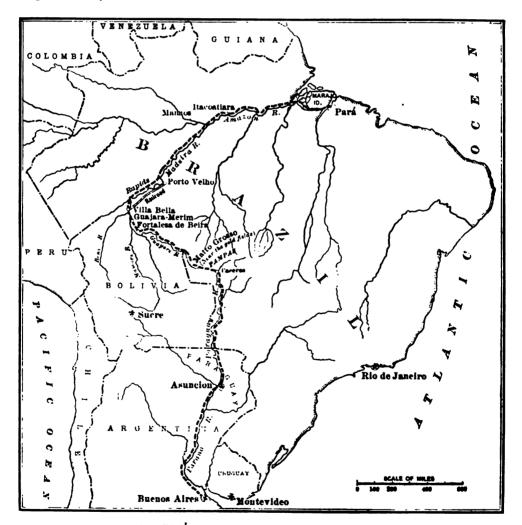
The steamer we now embarked on was a river boat designed for the special use of the railroad. It makes the trip of 700 miles from Itacoatiara to Porto Velho — the lower terminus of the road — in four days under favorable conditions. She has two decks and a number of cabins, but most of these were reserved as dressing rooms for the use of ladies, and every one swung his or her hammock on the upper deck to get the air.

The crowd aboard was made up of employees of every branch of the railroad service, from the head contractor and his family, trained nurses for the hospital, engineers and mechanics, down to the Greek and Spanish laborers on the road. Four days of such travel is apt to prove demoralizing, but every one was good-natured and all friction was forgotten when Porto Velho came in sight. This is the lower terminus of the Madeira-Mamoré road - a wonderful feat of American engineering, accomplished in spite of almost insurmountable difficulties and untold suffering. Even now, it could not be sanely undertaken without the experience gained at Panama in battling against the deadly fevers. When this road was first conceived by the Brazilian Government, tropical sanitation was not so well understood as it is to-day, and the first attempt met with dismal failure. Men sent to start the work died in a few weeks from fever, and the survivors fled in terror. Finally, Americans of indomitable courage became interested, and, by a lavish expenditure of money on the most up-to-date sanitary arrangements and a perfect hospital service, they have brought it almost to completion. To one who

travels over the line to-day in a comfortable coach, these statements may sound like exaggerations, as there are no great mountains to pass over and all he sees are swamps and jungles; but in those quiet jungles lurk the most intangible of deadly foes, in the form of microbes and poisonous creatures against which you have no chance without costly preparation.

Porto Velho is a thriving little place supplied with the best of everything, even a weekly paper giving the news along the line for the benefit of the employees. The greatest care is taken to avoid disease: every house in town is heavily screened with mosquito netting. Every traveler is vaccinated on the boat before arrival, and examined for other symptoms which may endanger the community. Those who show even a trace of sickness, are sent at once to the hospital.

On the highest hill, the railroad company has built one of the most powerful wireless stations in the world to communicate with Manaos across 500 miles of swamps and jungle. But this is only for business messages and for those extreme emergencies of personal communication where wireless and cable talk are worth their



MR. ROGERS'S ROUTE THROUGH SOUTH AMERICA FROM PARA TO BUENOS AIRES, A DISTANCE AS GREAT AS A COAST TRIP FROM MAINE TO SEATCLS BY WAY OF PANAMA, WHICH, EXCEPT FOR A STRETCH OF 180 MILES, WAS MADE BY HIS PARTY IN BOATS

cost. So everybody at Porto Velho looks forward to the arrival of the steamer, as it brings the mail and news from those at home.

My mission, however, was to take me far beyond all this, to the source of the great river. There are 200 miles of vicious rapids above Porto Velho, and, with ten tons of freight to carry, I was extremely busy in making preparations. In ten days, however, I was ready. We went by rail about 100 miles to the present end of the line at construction camp No. 26, and there boarded our native boat — a low-lying craft with the bow lines of a racing yacht, the better to take the rapids.

These boats are the best freight carriers that could be devised for this risky business where one must paddle or pole over quiet waters and pull them by main force over the ugly rapids. Down stream they shoot all but the worst places with varying success. The men who handle them become very skilful in their trade, but they would try the patience of a saint. Mostly Negroes of Brazilian stock, with a dash of Indian in their blood, they work when they feel just like it with tremendous To my sorrow, I found that they energy. did not feel like it very often, especially when we were in a hurry. Seventeen men to a 10-ton boat is the usual crew, with a master pilot in the stern, manipulating a giant rudder to steer through the rushing waters while the rowers ply their paddles. Every man, in addition to his work, keeps an eagle eye upon the shore for any kind of game, and when he sees it everyone stops paddling while the pilot takes a shot. Our old pilot was an expert at this business: almost every time he shot he knocked over a turkey or a monkey.

In going upstream, we kept our boat as close to the shore as possible in order to avoid the strongest current. The men paddled in unison, starting slowly and gradually increasing their speed until the stroke oar in the bow gave a long hoot. The next three strokes were finished by a flourish of the paddle, throwing the water high in air, after which they all settled down to work again at a much lower stroke until the same operation was repeated.

When a place was reached where the current was too swift the paddles were discarded and the men resorted to poling, or, if that was not effective, most of them jumped ashore, taking a heavy hawser, and pulled the boat along by main force. When one of the larger rapids was reached, however, the process was quite different. A loaded boat cannot be pulled over these; so the crew unloaded the cargo and carried it around the rapid, sometimes for half a mile or more. Then they for half a mile or more. Then they dragged the boat up over the falls to the smooth water above and reloaded it. Sometimes we spent three days at one of these places; and there were more than twenty of them altogether.

I built a shelter of palm leaves over the stern of the boat to protect us from the murderous sun, and from the rain which may come down at any hour. We always tried to keep moving until darkness made us halt, but the natives do not like to be rained on, as it may produce a chill and For this lay them low with fever. reason we often tied up until the sky cleared. The natives all have the fever in their systems, even the most husky looking, and among our crew there were always one or two men so sick that they had to be taken care of.

Every night we camped on the shore. On the Madeira this is not the pleasant task one is used to in the Adirondacks, but after a few days' practice we were able to devise a system to accomplish the disagreeable work in the shortest time. Certain men were told off to clear away the jungle for our tent, while others took the baggage ashore and the cook prepared the supper. I tried to clear the jungle myself with a machete, but soon learned the folly of it when a swarm of small red ants dropped down from the trees I touched, and made me run to cover. They are the most vicious little beasts that one would care to meet and will bite right through a heavy shirt. While they are no kinder to the natives, the effect seems to be less startling.

The custom of the country is to sleep in a hammock swung between two trees, but 1 found a folding cot-bed, with the finest cheesecloth mosquito nets, far su-

perior. The mosquitoes that spread the bad fever have rather late habits, fortunately, which enabled us to enjoy the evenings in comparative safety until 9 or 10 o'clock. In fact, this was the pleasantest time of day and really the only time when some kind of insect pest was not on the rampage. During the night we hung our clothes and boots to the top of the tent, or took them to bed with us, out of reach of another kind of ant which loves to eat them: leather shoe strings seemed to be their special hobby and they would cut them all to pieces every time they had a chance.

Every few days we came to one of the big rapids where the freight had to be unloaded and packed around by hand. After this laborious task had been accomplished and everyone had a good rest, the hawser was passed forward to the men along the shore, and the boat was shoved off with the pilot at the rudder and two men standing in the bow holding its nose to the current with their long poles. Slowly the boat would be drawn up to the swiftest waters, the men on the cable all heaving together while a leader urged them on.

It was seldom, however, that it could be drawn up by this simple method. It would strike some projecting boulder or get wedged between two rocks, and all their efforts could accomplish nothing until those in the boat jumped overboard and lifted it by the combined force of all.

Our 'pilot gave a fine exhibition of cool nerve in this dangerous work. The towing line once got caught below a sunken boulder while the boat was in a most dangerous position half way up a raging tor-The water was too deep and swift rent. to stand in near the bow, so he jumped in, holding fast to the tow line, and pulled himself along under water until he was out of breath; then, after coming to the surface for a moment, he dived down again along the rope. I was sure he would be drowned or hurt before he reached the boulder; but I was mistaken, for he soon freed it and came drifting back to safety, yelling for everyone to pull.

One famous rapid is called the Riberao. Here, even the boat must be dragged overland for half a mile. Usually several boats arrange to arrive at this place together and help one another around, for a single crew is not strong enough to drag one of these heavy boats on skids. When such an arrangement cannot be made, blocks and tackle must be rigged somehow.

As the men all knew how to do it without any outside advice, I amused myself by bathing while they worked. The pleasure of this sport, however, was largely spoiled by the necessity of being constantly on the watch for some wily alligator or stingaree, so I usually contented myself with a very short dip and a long scrub on shore.

After days of such traveling l reached Villa Bella, at the mouth of the Rio Beni, the first settlement in Bolivia, and the gateway to the wonderfully rich Villa Bella is one Acre rubber country. of the dreariest places I ever saw. Probably more barbarities have been perpetrated here, by a cowardly set of villains who are in power, than in any other part of South America. They entice peons to come here from the interior of Bolivia under the promise of high wages. As soon as the unsuspecting natives arrive, they are arrested upon complaint of an agent of these men, who charges that the *peons* owe him a sum of money They are taken before the judge, who is also an accomplice and he immediately finds the peons guilty and sentences them to work out the debt on the boats that carry gold and rubber down the rapids. The conspirators own the boats, of course. They force the victims to work until they drop from exhaustion or die of fever. This conscription has been carried to such extent that there are not enough natives left to do the work to-day. If they will not work, the poor creatures are taken to the jail and stretched out on the ground while a burly ruffian gives them from 200 to 500 lashes with a deadly leather whip. You can tell these sufferers ever after, if they survive the ordeal, by the peculiar walk they have. We were told everywhere that the Bolivian crews were far better workers than their Brazilian brethren and (believe they are, but after same

it at Villa Bella, I did not wonder much. I actually saw one boat's crew of Bolivians work for two long days in the blazing sun without being given a thing to eat except a little cold salted beef, while they paddled. Among the *peons*, a smile is rare.

I was glad to leave Villa Bella, especially after being charged a pound sterling per day for a room without meals in the only hotel. The only furniture in this room was a box and a tin basin, and the floor was dirt. No one, however, lives there for his health.

Above Villa Bella the river is called the Mamoré for some strange reason. There are only fifteen or twenty miles of rapids before reaching the quiet waters at Guajara-Merim, but it required ten days of strenuous effort for us to get over them. Guajara-Merim is 220 miles from Porto Velho and will be the future terminus of the railroad. When the road is completed the train will cover, in one day, this distance which had taken us thirty-five days to make in our boat.

The railroad will do a tremendous business, although at the present time it is difficult to realize where in the world it will come from with so few towns in evidence. This is the gateway to a vast country in which wealthy companies gather the finest grade of Para rubber. They have been forced heretofore to send it to market by other slow and expensive routes, but, with the opening of the railroad, it will all come out this way. And there will be a large return traffic of the things these people will buy from the markets of the world.

A dozen river steamers ply a lucrative trade on the upper Mamore and on its greatest tributary, the Rio Guaporé. As these boats have no sailing schedules, you must await your chance to catch one when it happens to come along. I was so fortunate as to find one the following day ready to take my party up to Matto Grosso, which is at the head of navigation on the Rio Guaporé, nearly a thousand miles from Gaujara-Merim. This distance we were now to make in a 75-foot steam launch, with two open decks and a mixed Bolivian and Indian crew. The launch had no cabins (none of these upper

river boats have), but we had the boat all to ourselves and with several tent flies it was easy to rig up a crude shelter against the rain. Every night we tied up to the bank near some protected spot where no savages could get at us, and for double protection everyone slept on the For river side when that was possible. the country along this river is populated in places by aborigines who creep upon an unguarded person and pelt him with a shower of huge arrows that fly with great You seldom see these fellows, and force. they never make a sound, but they can shoot with wonderful accuracy. Only a rifle can scare them off, though we found that a long shriek from the whistle had a splendid effect in shattering their nerves. We met their more civilized brethren in every settlement; in fact, we had some of them among our crew. They were sober, silent fellows, with the characteristic straight black hair and high cheek-bones of our own Indians, and were the best workers that we had for tasks that required no great brain work.

The country all along here was so very flat that the river seemed to be constantly tying itself into bowknots, until suddenly it would straighten out and shoot off on a long tangent for several miles before another turn appeared. We amused ourselves by shooting alligators; and whenever a stop was made to cut firewood, someone would get a turkey or fat duck for the table. This hunting on shore had its disadvantages, however, for you were almost certain to be stung or bitten by the ants and other creatures which seemed to be just as plentiful up here as on the Madeira River.

Two days after leaving Guajara-Merim we arrived at the Fortalesa da Beira, which is the first settlement on the Rio Guaporé. This place, near the mouth of several rivers, was at such a strategic point that the early Portuguese governors of Brazil erected an imposing fortress on a hill behind the town to guard the upper river from their enemies in Bolivia. The old fortress is fast falling to decay, and it has been nearly swallowed up in the jungle; but it must have been a masterpiece in its day. The massive walls are

made of fine cut stone. Inside the fortress a town was laid out, and a tunnel was run to the river so that drinking water might be obtained in case of siege. In one part of the town 1 found a maze of corridors with hidden pitfalls and other pleasant little surprises that the inhabitants had prepared for unwelcome guests.

These early adventurers were truly a most wonderful race of men, although 1 have no doubt they were as tough characters as one would care to meet. We were supposed to be exploring an unknown region, and here we found proof that it had been run over fully 150 years ago by these indomitable gold seekers, who seemed to have had no more fear of fevers or savages than we did, for all our medicines and high power rifles.

They were remarkably successful in their search for gold too, and found every mine which is known to-day in that region. Their energy was prodigious, for the nearest settlement was at Para, distant eight months of hard labor by boat, over a route beset by the dangers of savage attack.

The river became extremely crooked toward its upper end and the water hyacinths at times made our progress not only slow but really exciting. We never knew what each sharp turn held in store for us until the turn was past. Once we ran smash into a fallen tree that stretched out over the water and lost the bow support to the upper deck; at another place the chicken coop on the after deckhouse was brushed overboard and the chickens were nearly drowned. But they climbed out somehow, and the rooster began to crow. But the incidents of this kind were trivial and merely added zest or amusement to the trip, until finally a huge limb put the bathroom out of business. That was the last straw; but fortunately we arrived at Matto Grosso that same evening, before any more accidents occurred.

We were now almost 3,000 miles up the Amazon from the city of Pará, and at the head of navigation, except for small canoes that can go nearly 200 miles farther by climbing over rapids. Matto Grosso

was once a very important place when the mines in the vicinity were turning out their gold. To-day, however, its glory has all vanished, leaving desolation in its wake. Some 200 ex-slaves are all that are left of its once considerable population. Their principal amusement seems to be in having fiestas, and one of these fiestas was under way the day we arrived. A lot of crazy Negroes were dancing and singing a weird chant through the deserted streets, all the while beating time on a curious set of instruments which gave forth a melody that sounded something like the hoochee koochee tunes. The Negroes were all dressed in outlandish costumes. They were in deadly earnest, and so was the solemn procession that followed them, men and women, headed by an old couple dressed as king and queen. It was just such a scene of childish and superstitious make-believe as one would find in the darkest part of Africa.

While this parade was in progress, a set of boys in the plaza were firing off a toy cannon, made from gas-pipe, and some home-made rockets, under the direction of the priest.

I was amused for a time, but after four days of this spectacle, with an all-night variety of tum-te-te-tum music going on next door without a moment's intermission, it began to get on my nerves. 1 was anxious to secure horses and men to take me out into the mining region, miles back of the town, but I might as well have tried to fly as to persuade these people to give up their pleasure until they were tired of the game. Even after they became exhausted, it took me another week to secure a party of twelve young men, horses, mules, and bulls; and then a few more days were needed to equip them with arms and to secure the food we needed for the trip. Finally all was arranged, however, and we spent a month scurrying around the mountains before my work of examining the mines was completed.

Among the properties I visited was one interesting mine that the old Portuges had worked 150 years ago. It lay at the foot of a low range of moved where several little streams howed had been a famous property in its day. The old workings and ditches are now covered with a heavy growth of jungle, but even that failed to obliterate them altogether and I was able to trace them by crawling around with the aid of a machete.

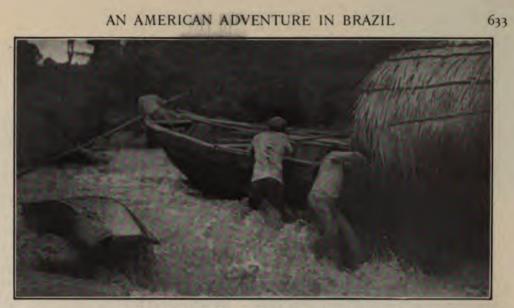
In such a dreary place, I could not help wondering what the prospect must have been to the first man who discovered the mine, in 1768. Struggling through this deadly jungle, miles away from everyone and surrounded by a horde of hostile savages, he came on the vein at a little stream where he stopped to slake his thirst. Breaking off a few pieces of the white quartz, he crushed it and washed it in his batea until he saw the gold -- small chunks of it scattered through the dirt. Then he tried some more quartz with even better results. After that it took but a short time to trace out the vein, and hurry back to Matto Grosso, where the right to mine the land was secured.

After this beginning, he and his friends brought in a small army of slaves and cleared off the jungle for a mile around, while others were set to work constructing a long ditch to bring water to the flat below. It was a clever piece of work for men without surveyors' instruments. They cut the ditch through a cement formation, that in places was twenty feet in depth; and near the lower end they constructed a great chamber in which they ground the ore between huge rocks. Whether they used mercury to amalgamate the gold I could not determine, but several stone tanks and sluices made me think that possibly they did. They built a town around these works with a brick kiln and a distillery as the most important adjuncts. It must have been a busy and exciting place to live in, ruled over by an iron hand, the master's word law in everything, and a cruel law it was.

Several times these pioneers were attacked by the merciless tribes of savages. Sickness in every form was always present among the inhabitants of the town. In spite of everything, however, they took out a large amount of gold. And then, to enjoy it, they had to get out to the civilized world with it, through 3,000 miles of hostile country, where freebooters lay in wait. A convoy of several boats was usually formed to take it down the rivers to Pará, but even with these precautions they sometimes lost it and their lives as well. After seeing the country, I marveled at the wonderful courage these old fellows had—rough and ambitious, ready to sacrifice everything to a stupendous greed.

From Matto Grosso there are two routes to the outside world; one the way we had come, and the other over a low divide to the southeast and down the River Paraguay to Buenos Aires, a distance of about 2,500 miles. It was then July. As the dry season was far advanced, the Guaporé River had become very low and it would be difficult for any steamer to descend. Furthermore, our launch had long ago departed and there was no other to be found. So it did not take me long to decide to make the trip by the other route, overland to San Luis de Cacares, on the Rio Paraguay, nearly 180 miles from Matto Grosso. This is the route by which all the rubber on the Gauporé is sent out, and I understood that a good road would be found after the first 40 miles had passed.

Before starting, 1 had an opportunity to see a good deal of rubber on its way to the outer world. The trees grow wild all along the Rio Guaporé, and several strong companies are established in the field. At the beginning of the dry season, groups of rubber gatherers with their families scatter along the river where the trees abound and tap them in the same manner as a maple sugar tree is tapped. The milk, which looks exactly like sterilized cream, is found directly under the bark. A slanting upward cut is made in the bark with a little hatchet, and a small tin is fastened below to catch the milk. The lower this cut is made on the trunk of the tree, the better the grade of milk. Every day hundreds of these little cups are filled and brought to camp. Here a smoldering fire is built out of a certain kind of palm, producing a thick, heavy smoke; and the milk is smoked. This process consists in revolving over the



OVERBOARD TO GET UPSTREAM BY SHEER FORCE ASCENDING THE RIBERAO RAPIDS ON THE MADEIRA RIVER, WHERE THE NATIVE BOATMEN PERFORM THRILLING FEATS IN THE HAZARDOUS WORK OF CLIMBING THE TORRENT

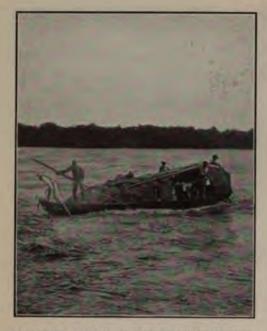
fire a stout stick upon which the milk is slowly poured. After a time it hardens and a large white ball is formed, perhaps two feet in diameter, weighing from fifty to

seventy-five pounds. It is then placed in the sun, where it turns black and is ready to be shipped to market either at London or New York. Hundreds of these balls



CREW MAKING READY TO HAUL THE BOAT OVER THE RAPIDS WHERE THE WATER WAS TOO SHALLOW AND THE CURRENT TOO SWIFT TO POLE UPSTREAM

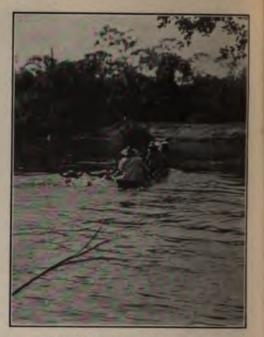
THE WORLD'S WORK



TRANSPORTATION WITHOUT COMPETITION THE ONLY CRAFT ON THE AMAZON BETWEEN PORTO VELHO AND VILLA BELLA

of rubber were scattered all along the route we took, each having the owner's mark upon it.

We departed from Matto Grosso one bright afternoon in July. Our outfit consisted of two huge wooden bull carts, to carry our food and baggage, and a half dozen riding animals. The trail led over the pampas toward a low pass in the mountains which we could see a long time before we reached it. This was my first experience with bull teams and their drivers; and I hope it will be the last. So long as we plodded along on a nice open road



SWIMMING THE BULL TEAMS ACROSS THE JAURU RIVER — A NECESSARY STAGE OF THE JOURNEY TO CACERES

everything was lovely, even though it was most dreadfully slow traveling; but when we reached those mountains where the road was only a memory the whole outfit began to tire and the situation became distressing. The road was so badly overgrown that there might as well have been no road at all. Our progress became so slow that I feared we should run out of water. For three days we made only three miles a day, cutting every foot of the way through the thickest kind of jungle, without sighting the least puddle of water. We still had a little in our



DRAGGING THE BOAT BODILY AROUND THE WORST RAPIDS WITH THE AID OF OTHER CREWS THAT HAD PLANNED THEIR TRIPS SO THAT ALL SHOULD BE AT THIS PLACE AT THE SAME TIME, FOR MUTUAL MELPFULNESS

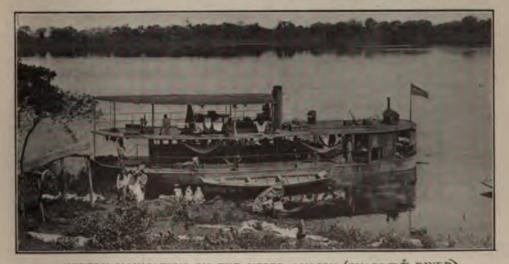
AN AMERICAN ADVENTURE IN BRAZIL



"WIRELESS,, IN THE BRAZILIAN JUNGLE AT PORTO VELHO CAPABLE OF TALKING 500 MILES TO MANAOS. ALSO PART OF THE RAILROAD BEING COMPLETED AROUND THE RIBERAO RAPIDS BY AMERICAN CONTRACTORS

canteens for the men to drink, but the animals were getting desperate. Finally we drove them blindly, crashing through brambles and over rocks in a mad search for water, until we arrived at a river on the farther side of the range and rested for a day. The bulls were getting so tired now that they refused to drive well in the day time, and our men insisted on traveling in the early morning and after dark. During the heat of the day we rested, while the animals roamed about and ate a little.

It was tiresome work, but we agreed to anything so long as they got ahead and did not wreck the outfit. Occasionally, one of the top-heavy carts would tip over and spill everything out; or the bulls would take it into their heads to swerve off the road into the jungle, causing all kinds of trouble; but we persevered until the Rio Jauru was reached. This is a branch of the River Paraguay, about 200 feet in width, which must be crossed on the road to Caceres. There is no bridge, and I was rather interested to see how our drivers would get the heavy carts over. This proved to be a simple matter, however. After unhitching the animals, the carts were rolled down into the water on top of two large canoes which afforded enough buoyancy to float them



MODERN NAVIGATION ON THE UPPER AMAZON (GUAPORE RIVER) A STEAM LAUNCH SET UP AFTER THE MATERIALS COMPOSING IT HAD BEEN TRANSPORTED 2500 MILES UPSTREAM AND AROUND 200 MILES OF RAPIDS

THE WORLD'S WORK



GETTING FUEL FOR THE LAUNCH ON THE UPPER AMAZON WITH THE AID OF INDIAN WOMEN-NATIVE THATCHED HUTS IN THE BACKGROUND

across to the farther shore. The animals were all made to swim across.

From the Rio Jauru to the Rio Paraguay was only 40 miles, but the road was rough enough to break the axle on one of our carts before we got there. It was really a marvel that it lasted as long as it did, for these bullock carts were frightfully heavy and they were subjected to very rough usage. The wheels were of solid wood, 5 feet in diameter and 3 inches thick, fast on the wooden axle. The body of the cart was simply placed on top of the axle, being held in place by two pins, like inverted rowlocks on a boat. Every time one wheel crashed off a large rock or sank down in a deep hole, it put a terrific strain upon the hub and axle, and we had to wedge them tight



THE BRAZILIAN INDIANS' IDEA OF A GRIST MILL MR. ROGERS'S TRINIDAD NEGRO COOK TAKING A LESSON FROM NATIVE INDIAN WOMEN ON THE GUAPORÉ RIVER IN THE ART OF MAKING CORN MEAL

AN AMERICAN ADVENTURE IN BRAZIL



FIESTA OF THE EX-SLAVES AT MATTO GROSSO WHICH CONTINUED FOR FOUR DAYS AND NIGHTS WHILE MR. ROGERS TRIED VAINLY TO BUY A CAMPING OUTFIT AND TO HIRE MEN TO ACCOMPANY HIM TO THE MINES

every little while. When we were almost in sight of the end of our journey, one cart slid down into a deep rut and the axle simply twisted in two. Fortunately, we were so near our destination that we could afford to throw away some of our food and load the remainder on the other cart with the baggage. In this manner we reached the River Paraguay after seventeen days' traveling, and were ferried across to Caceres.

We rested for a week at this pleasant little town and then took steamer down the River Paraguay to Buenos Aires. This trip of two weeks can be made in comparative comfort, provided one is not too particular what he eats. The steamers on the Paraguay all have cabins,



THE "KING" AND "QUEEN" OF THE FIESTA AND THEIR ESCORT OF MUSICIANS PLAYING WEIRD AIRS ON STRANGE INSTRUMENTS

THE WORLD'S WORK



CROSSING THE PAMPAS FROM THE AMAZON TO THE PARAGUAY WHERE MR. ROGERS AND HIS PARTY NEARLY DIED FOR LACK OF WATER

but I preferred to sleep on deck in my own camp bed for various reasons. In summer this is a frightfully hot trip and the constant rains make life disagreeable. During the winter season, however, the climate is delightful.

I made the acquaintance of a most interesting character on this journey. This was Captain Marquesa de Souza. He had been a member of the exploring party sent out by the Brazilian Government under Colonel Randon for the purpose of blazing a way for a telegraph line to connect Rio de Janeiro with Monaos. They traveled from Cuyaba to San Antonio, on the Medina River, a distance of 700 miles straight across an absolutely uncharted, unexplored and almost impenetrable jungle. This gallant little band of 150 men had plunged undaunted into this morass, headed directly for San Antonio. They were soon lost in the depths of the jungle, but drove their way forward in the general direction they had planned, cutting down trees and building rafts to transport themselves across rivers,



RAPID TRANSIT IN BRAZIL CART WITH SOLID WOODEN WHEELS, DRAWN BY EIGHT BULLS



A "ROAD" THROUGH THE JUNGLE OVER WHICH THREE MILES WAS OFTEN A WHOLE DAY'S ADVANCE

AN AMERICAN ADVENTURE IN BRAZIL

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compelled almost all the way to hew a path through the forest, discouraged by fever and disheartened by the shadow of death that hourly hovered about them in the arrows of the savages who, unseen, hung constantly on their flanks. It was Colonel Randon's strict command that no natives should be injured. No matter how fierce their attack, no attempt was made at repulse. Whenever natives or their children were captured, they were treated with distinguished consideration and sent back to their own people, loaded with gifts. This policy placated many of the tribes, though others were unreconciled. At length, struggling on, their way entirely lost and their provisions running low, the expedition came to a broad river which they did not know. Determined now to seek the nearest outlet, they followed this stream to its mouth and found, to their astonishment, that it brought them out exactly at the point toward which they had aimed. Captain de Souza had just recently left the Randon party and his modest narrative was full of thrilling interest. As we approached Asuncion, the capital



AN ANCIENT PORTUGUESE FORT IN THE BRAZILIAN WILDERNESS THE "FORTALESA DE BEIRA," ON THE RIVER GUA-PORÉ, A RELIC OF THE PORTUGUESE PIONEERS WHO FOUND GOLD HERE 150 YEARS AGO, 3000 MILES FROM THE COAST



EACH OF THESE BALLS OF "SMOKED" CRUDE RUBBER WEIGHS ABOUT 75 POUNDS, AND 18 THE PLET \$1.25 A POUND, SO THAT SEVERAL THOUSANDS OF DOLLARS' WORTH APPERATE IN THE PLET MR. ROGERS PASSED MANY SUCH PILES LYING IN THE JUNGLE. PRECE EXCEPT FOR THE OWNER'S MARK STAMPED UPON EACH

THE WORLD'S WORK



THE PILOT AND HIS CATCH AND A GLIMPSE OF THE JUNGLE

of Paraguay, rumors of a revolution began to circulate, and the nearer we approached the more persistent these stories became. The Paraguayans on board were most excited, and it even looked a little serious for ourselves, for the steamer was owned in the country and would most likely be seized by one side or the other. In that case it was a question how we would come off. All our anxiety, however, was allayed, upon arrival at Asuncion, to find two cruisers - one Brazilian and the other Argentine - drawn up in a commanding position with their guns trained on the custom house and on the Paraguayan navy, consisting of one little tug boat. If any fighting had taken place they would have blown the whole town to pieces. Recognizing this fact, the quarreling parties had decided simply to change the President, a proceeding which usually occurs every few months.

From Asuncion we took passage on an attractive steamer and arrived in a few days at the great city of Buenos Aires.

We had traveled from Para, at the mouth of the Amazon, inland seven eighths of the width of South America at its widest part, and southward to Buenos Aires at the mouth of the River Plata. An equivalent in distance — 5,500 miles though not in hardships, would be a journey from Maine, down the Atlantic Coast to Florida, across the Gulf of Mexico to the Pacific Ocean, and then up to Seattle. We had made the whole of this vast distance upon rivers, except 180 miles. And we sailed from South America only four months after we entered it.



AN ANCIENT GOLD DITCH LEFT BY PORTUGUESE PROSPECTORS 150 YEARS AGO



THE PENNSYLVANIA MOUNTED POLICE

MAINTAINING LAW AND ORDER WITH LESS THAN 250 MEN TO THE STATE — A SIGNIFICANT EXAMPLE FOR THE REST OF THE COUNTRY

BY

BLAIR JAEKEL

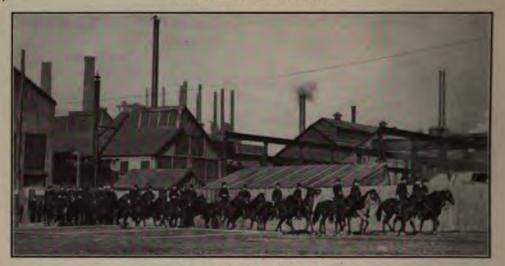
HE Texas Rangers and the Canadian Northwest Mounted Police are famous the world over. These are frontier forces. But such organizations would be equally effective against the disorders of the older states — lynchings, violent strikes, night riding; and the Pennsylvania State Mounted Police has demonstrated that this is true. Its work has many significant lessons for others of the older states.

In April, 1905, the Governor of Pennsylvania, Samuel W. Pennypacker, wrote a letter requesting Captain John C. Groome, of the Philadelphia City Troop (Militia) to come to Harrisburg. Captain Groome had seen active service in Porto Rico at the time of the Spanish War; he was well versed in the manœuvring of mounted men. "Captain Groome," said the Governor,

"Captain Groome," said the Governor, in effect, "1 am responsible for the maintenance of peace and order throughout these 45,000 miles of Commonwealth. Whom have 1 to help me? Wharton, my secretary, and my stenographer. It's too big a job for three. I had the last session of the Legislature pass a bill creating a department of State Police. Will you assume charge? Will you be its Superintendent?"

Captain Groome went over the particulars of the plan, and accepted.

Thus, with little ostentation, came into being the Pennsylvania State "Constabulary," as the layman sometimes calls them — the most picturesque, the most efficient, the most effective body of armed men in these United States. Sift the country from Tacoma to Tampa and you will not find its equal. Ninety per cent. of its members have served in the United States Army, and with the word "excellent" following the "conduct clause" in their discharge papers — Major Groome is most particular about that. Many have seen active service in the Philippines, Cuba, Porto Rico, in China at the time of the Boxer uprising. Now and again you will find among them a man who fought the Boers in South



GOING OUT ON PATROL A PLATOON OF THE PENNSYLVANIA STATE POLICE ON STRIKE DUTY AT SOUTH BETHLEHEM IN 1910

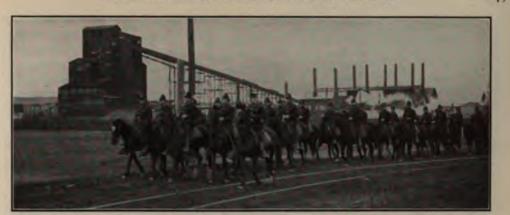
Africa under the British flag. There are doctors, lawyers, college graduates, cowpunchers, genuine blown-in-the-bottle soldiers of fortune on the Force. Each is a well set up, well seasoned, thoroughly disciplined, and gentlemanly — let me italicize that — and gentlemanly veteran, perfectly able and willing, and paid by the state to ferret out the foreigner who stole chickens or to protect life and property. He knows neither friend nor foe. He is paid to do his duty and he does it, the responsibility of his doing it well resting often wholly upon himself, which fact alone places him upon a slightly higher plane than the army man, constantly under the eye of his superior officer.

Before the advent of the State Police, the Governor of Pennsylvania was wont to commission, at the request of property owners, what were called the Coal and Iron Police, to preserve order as best they



KEEPING THE PEACE WITH CLUBS AND CARBINES

THE PENNSYLVANIA MOUNTED POLICE



"TROOP B" OF THE MILITARY ORGANIZATION OF STATE POLICE

could in times of labor troubles at the steel mills or in the coal regions. These Coal and Iron Policemen were, for the most part, men who sided with the operators for the time being and for a certain monetary consideration. In many, indeed, in most cases they were inexperienced and inefficient, and their terms of service were for some unaccountable reason unlimited. Not a few of the crimes committed in times of industrial peace were laid at the doors of men who still wore the badges of Coal and Iron Policemen.

But one thing to their credit: they were not under the many obligations during strikes, as are the township constables to-day who are upon one side or the other in the quarrel for election. The deplorable constable system, as well as some of our municipal police systems, where the patrolmen act also in the capacity of "ward heelers," are but two of the reasons why it ought to behoove every state in the Union to follow Pennsylvania's exmple and inaugurate a force of mounted police, free from politics, responsible to no one but its Superintendent and the Governor of the State.

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The sentiment toward the "Pennypacker Cossacks," as the miner and mill worker dubbed the Pennsylvania State Police at the time of their organization, was about one tenth pro and nine tenths



GUARDING PROPERTY DURING THE STEEL STRIKE OF 1910 STRIKERS IN THE BACKGROUND



KEEPING TRAFFIC OPEN DURING THE CHESTER CAR STRIKE OF 1908

con. The extent of their popularity with organized labor can best be epitomized by quoting a part of a hand-bill printed and circulated in Sharon, Pa., in the spring of 1907, when a strike was in progress in the mills at that place. The circular



MAJOR JOHN C. GROOME SUPERINTENDENT OF THE DEPARTMENT OF STATE POLICE OF PENNSYLVANIA

was headed, "Scab Protection in South Sharon," and read partly as follows:

A detachment of the State Constabulary, better known as the "Pennypacker Cossacks," have taken up their abode in South Sharon. This organization is created ostensibly for the purpose of upholding law and order, but in reality to protect scabs during a strike.

This unprincipled and . . . set are upheld in their dastardly occupation by the press and pulpit of this entire country.

But, contrary to the opinion of the writer of the circular, the press in general was not so favorable to the State Police as he would have his readers imagine. Scathing articles appeared against them from time to time in the smaller newspapers throughout the state.

The operators were no less dubious as to the effect that would be produced by the State Police than were the miners and mill workers. Certain railroad officials were bitterly opposed to them on the ground that they constituted simply a political organization, valueless in time of real trouble. But it turned out otherwise. According to Major Groome, the competitive physical and mental examinations which every aspirant to the force must undergo, and which was mercifully mentioned in the Governor's act, precluded all possibilities of making the force a political asylum for vote-getters.

THE PENNSYLVANIA MOUNTED POLICE



INSPECTION OF A MOUNTED TROOP OF STATE POLICE

In the early years of the history of the Pennsylvania State Police Force, the Commonwealth was scarcely any busier trying to convict men arrested by the troopers for various offences than were the friends of the alleged offenders in trying to convict the troopers of illegal procedure. Arrest was followed closely by counter-arrest; and all the while organized labor was hammering at the powers that be in Harrisburg to have the Force abolished.

The operators, however, soon commenced to realize the inefficiency of their Coal and Iron Police as compared with the state's troopers — educated men with a keen perception between right and wrong, better trained, better armed, better versed in the laws of the Commonwealth — while successive instances, of which the following is an example, are strengthening daily the belief in the minds of the laborers that the State Police do not discriminate between miner and millionaire: The little child of a Hungarian miner in the anthracite regions had disappeared, supposedly had been kidnapped. A whole troop of State Police was put on the case. They scoured the country for a number of days, mounted and on foot. The child was finally found and returned to its parents.

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As further evidence of the strengthening confidence in the force among the laboring element — last summer some



INFANTRY DRILL OF STATE POLICEMEN



WHEN THE STATE POLICE COME TO TOWN QUIET REIGNS EFFICIENCY THROUGH MILITARY DISCIPLINE INSURES PEACE AT ANY COST

Mine Union officials called on the telephone the headquarters of Troop "B" at Wyoming, Pa., and asked that a detail of troopers be sent to preserve order at a union picnic to be held the following day.

Major Groome counts one state trooper equal to an even hundred of the average mob. One or two striking comparisons of their effectiveness as against that of the old time Coal and Iron Police or the State Militia will suffice.

In July, 1892, 8563 Pennsylvania Naional Guardsmen were summoned to attempt to maintain order during the great strike among the steel workers at Homestead, Pa. The maintenance of these



"MOVE ON" A STATE POLICEMAN REEPING THE CROWD MOVING DURING A STRIKE

THE PENNSYLVANIA MOUNTED POLICE



BACK TO BACK AGAINST ALL COMERS GUARDING A RAILROAD DURING A STRIKE

men in the field and salaries paid for their services cost the Commonwealth exactly \$440,386.22 — more than the total appropriation to maintain the entire State Police Force of Pennsylvania for one year.

The steel strike at McKee's Rocks in 1908 promised to tower head and shoulders above the one at Homestead. A troop of State Police were on the ground at the first hint of disorder. Their superb courage and diplomacy brought about a satisfactory settlement at a total cost to the Commonwealth of *nothing*, because "in a fight or a frolic" they are at all times on the pay roll.

times on the pay roll. A riot is like a runaway — if it gets its head it is fifty times as hard to stop as when it started. The trouble with the old way of things was that they called out the militia only as a last and often hopeless resort. The State Police prevent a riot from getting its head — and strike violence is usually nothing less than an exaggerated riot prolonged indefinitely. Again, during the strike in the anthra-

Again, during the strike in the anthracite coal fields of 1900, 2,500 militiamen were sent to the region to preserve order. Their maintenance cost the Commonwealth, according to the figures of the Adjutant General, \$113,842.52. In the same field in 1902 the entire military force of Pennsylvania, 9,000 men, was called upon to quell the great strike authorized by John Mitchell. Funds from the State Treasury to the extent of \$993,856.46 were eaten up in salaries and maintenance of the militiamen, while the money lost by them in being ordered to forsake their vocations for the time being, their various business enterprises suffering proportionately, can not be computed.



THE "HURRY-UP WAGON" OF THE STATE POLICE



A NEAR VIEW OF THE POLICEMEN MR. ROOSEVELT AND MR. JOHN MITCHELL IN THE GROUP

Captain Adams with eight troopers from Troop "D" preserved order and consequently brought about the settlement of the 1906 strike in the bituminous coal regions, where, during a previous outburst of lawlessness, a whole brigade of militiamen had been used.

A short summary of a few of the accomplishments of the State Police Force will show the class of men that it is made of, their duties and their methods.

Early in April, 1908, the motormen and conductors of the Chester, Pa., traction company went on strike. Upon the re-quest of a city official of Chester, Lieutenant Feuerstein and a detail of sixteen men from Troop "C" were sent to the scene to preserve order and protect property. Upon their arrival a mob of 1,500 men surrounded the car barns. The sixteen troopers, under command of their Lieutenant, dispersed the crowd, although not without frequent and effective use of their clubs. In return, they were stoned and hooted at, the local police abetting the methods of the mob in making things as uncomfortable for them as possible. Only by bringing their revolvers into play could the streets be kept clear. In spite of this, Chester's Chief of Police assured Lieutenant Feuerstein that the local force could handle the situation. The detail was promptly withdrawn and ordered to return to its barracks.

With the State Police out of the way the



STATE POLICE SPIES DISGUISED AS COAL MINERS

strikers ran things to suit themselves in The local police force proved Chester. itself thoroughly incompetent to cope with the situation, and either through fear or sympathy with the striking carmen, failed to restore order in the community. After three days of tearing up car tracks and switches and demolishing Traction Company property the Governor on April 16th received a telegram signed by the mayor and the chief of police of Chester and the sheriff of the county to the effect that "the strikers had overcome the local police force in open conflict" and asking that a detail of not less than 150 men be sent to Chester immediately.

Early the following morning 10 officers and 135 state policemen, under the command of Superintendent Groome, detrained at Media. By 8.30 they were marching toward Chester. By 4 o'clock that afternoon they had the mob well under control and the streets cleared. At 4.30 the first trolley car that had clanged through Chester in weeks was started from the car barn, preceded by a platoon of fourteen mounted men. State policemen patroled the entire route of 61 blocks, and the car proceeded upon its none too peaceful way, interrupted occasionally by a fusillade of bricks and stones. During the pageant more than a dozen belligerent and excessively aggressive strikers were arrested and turned over to the local authorities. From that day until the state police were ordered to quit Chester, cars were operated upon regular schedule over as many routes as the members of the force were able to patrol. In his official report of this affair, Major Groome says that "during the six weeks the Force was in Chester law and order was maintained, not withstanding the encouragement given to the disorderly element by the authorities and citizens.'

The effective work of the state police force in restoring and preserving order during the Philadelphia street car strike in 1910 is still fresh in the minds of many of my readers.

Details from the four troops, numbering 8 officers and 170 enlisted men under the personal command of Major Groome were ordered to Philadelphia to quell the riots and disorders which were of daily occurrence, and which the entire police force of the city had been unable to control. The men were assigned to a certain section known as the Kensington District, 16 blocks square, wherein are located many of Philadelphia's large manufacturing establishments — the most troublesome section in the opinion of the local authorities. By noon on the very day of their arrival, order was restored out of apparent chaos, and violence was effectually put to an end. Numerous arrests were made the first day that the district was presided over by the troopers, and the Rapid Transit Company commenced forthwith to operate their cars regularly and with perfect safety.

The deeds of that day were characterized by frequent and convincing proofs that the actions of the state police were not curbed by any fear of personal danger; that the troopers knew they were above the influence of politics; and that they cherished no sentimental affiliations either with the strikers or the traction company.

A curious thing about the Philadelphia strike was that a greater part of the disorder and violence was done by youths of twenty years of age or under, who were not and never had been employed by the street car company.

A state policeman saw one lad throw a brick through a car window. After a chase of three blocks the trooper caught him. Instead of "beating him up," the usual method of procedure with the local policeman, the trooper learned from the boy his home address, escorted him thither and delivered him into the hands of his father, who waxed right wrathy toward the boy as the trooper told of what he had caught him doing. The trooper reported that as he was leaving the premises, sounds indicated that the boy was not being spared.

During the same strike the men employed in some of the mills in the Kensington District annoyed the law-abiding citizens a lot more than did the strikers themselves. One day just at the close of the noon hour, a couple of rocks were thrown at a passing trolley car by two members of a group of workmen who sat smoking on the entrance steps of a large hat factory. Two state policemen on patrol in the vicinity saw what had happened. By the time they had reached the steps the factory whistle had blown and the workmen had disappeared into the building. The troopers notified the superintendent of the factory that they would have to make the arrests. Permission being granted, they walked through the different rooms until they found the culprits, arrested them on the spot, and marched them downstairs through 600 sympathetic workmen without hearing even a whimper of protest.

As an example of sheer nerve in the face of almost certain death, I have a story to tell of Private Homer Chambers (since promoted to Sergeant) of Troop "D."

About 4.30 on a Sunday afternoon in September, 1906, Sergeant Logan of Troop "D" arrived in New Florence, Pa., on the trail of Leopold Scarlat, an Italian, who had killed his brother-in-law during a family altercation the previous evening. The description of the murderer Scarlat tallied with that of a man who boarded at a certain house in New Florence.

In attempting to make the arrest, Logan was shot at five times. He retreated and, after securing two men to watch the house, telephoned to the barracks, then located at Punxsutawney, for assistance. Privates Henry, Chambers, Mullen, Koch and McIlvain arrived on the next street, car.

As the six men approached the house to arrest Scarlat and when within twentyfive paces of the building, the Italians opened fire from a second story window. Henry received a charge of buckshot full in the abdomen, and fell dead. Mullen went down with the second volley, wounded in the right leg. The men fell back to allow Mullen to hobble to a freight car that stood on a siding close to the scene.

At this point Chambers darted forward, under a steady fire from the house, to rescue Henry. While attempting to raise the body of his comrade he was shot three times in the head, once in the eye, once in the stomach, and three times through the lungs.

"I've got enough," he said; and he tottered back to the freight car, reluctantly leaving the body of the dead trooper to be bullet-riddled by the Italians.

Further assistance was telephoned for to the barracks and eighteen more men, in charge of First Sergeant Lumb and Sergeant Marsh, galloped down the road to New Florence. At the sight of the dead trooper the hearts of the new detail burned with revenge. They rescued his body by a ruse; then rushed upon the boarding house. Private F. A. Zehringer was shot and instantly killed as he entered the building at the head of the detail.

The troopers again withdrew and decided to wait until morning. Throughout the night the battle continued intermittently. The house was surrounded, perforated with bullets, and many foreigners were arrested while trying to assist the besieged Italians. Although searchlights were mounted and brought into play, it is supposed that several inmates of the house escaped during a heavy rainstorm that raged part of the night.

In the morning the outlaws still refused to surrender, and Captain Robinson of Troop "D," having arrived on the scene, resolved to blow up the house. In a charge led by him, and while he placed a boxful of dynamite among the foundations and lighted the fuse, Sergeants Lumb and Marsh entered the house and snatched from the foot of the stairway the body of the unfortunate Zehringer. Hardly had they retreated to a safe distance when the dynamite exploded, shattering the side of the building. Three Italians, including the murderer Scarlat and Jim Tabone, an outlaw wanted in a dozen counties, were found dead in the ruins.

Upon the arrival at New Florence of the second detail of eighteen men, Mullen and Chambers were escorted over to the street car line to board a car for the Punxsutawney Hospital. As he undressed, preparatory to being operated upon, Chambers stood in front of a long mirror so that he might see just where he had been hit. It was more than two hours after

he had been shot that he became unconscious, and then only on the operating table under the influence of an anæsthetic. For two days all hope of his recovery was despaired of. Now, however, except for the loss of the sight of one eye, Chambers is hale and hearty and doing active state police duty as Sergeant of Troop "D."

No trooper of the famous Northwest Mounted Police of Canada experiences one half the action that does one of Pennsylvania's organization of peace promoters. The number of law-breakers throughout the whole of Canada's Northwest might be divided into the number of bad men in Pennsylvania a good many times without any fraction remaining. As will be observed, the trooper has other duties to perform than quell riots, restore order, and protect property during strikes. He is a game and fish warden, a county detective, a fighter of forest fires, and a health officer, all in one.

In February, 1907, several members of Troop "B" were detailed as "plain clothes men" to investigate Black Hand outrages in the vicinity of Wilkesbarre. But two or three days were consumed in procuring the necessary evidence. On February 4th, Captain Page, Lieutenant Lumb, three sergeants, and forty men were sent to a place nearby called Browntown to assist the county detective in making Twenty-five Italian members of arrests. the Black Hand fraternity were taken into custody, together with nine stilettos. twelve revolvers, and seventeen rifles and The result of this raid pracshotguns. tically obliterated the nefarious society in that district.

Another comprehensive round-up of the Black Hand was made in Barnesboro, Cambria County, on May 5th of the same year. Troopers in plain clothes had been gathering evidence for some weeks previous. On the day mentioned, twentyfour men of Troop "D" under Captain Robinson, Lieutenant Egle, and two sergeants descended upon a house in Barnesboro that had been known as the district headquarters of the gang. The society happened to be holding a meeting at the time and all fourteen were captured. Every one of them has since been tried and convicted.

Again, in August, a sub-station of Troop "D" was established at Hillville, Lawrcene Coutny, to suppress Black Hand activities in that vicinity. During the month and a half that the detail was on the station, twenty-three Italians were arrested, tried, and convicted, and are now serving sentences of from three to ten years in the penitentiary.

In October, 1907, Sergeant Price and seven privates from Troop "B," upon the request of the county medical inspector, were sent to a foreign settlement near Wilkesbarre to establish a quarantine during a prevalent scarlet fever epidemic, the local authorities being unable to enforce the laws governing the conditions. While on this assignment a serious case of the disease was contracted by one of the troopers.

No star reporter on a great daily newspaper is trained to observe more closely than are the members of the Pennsylvania state police force. For example: One day in November, 1907, three troopers were sent from the Wyoming, Pa., barracks to investigate the robbery of several hundred pounds of copper wire from the Moosic Lake Traction Company. Its poles had been cut down for more than a mile. Marks along the road suggested that a two-horse wagon had been used to haul the wire away. After following the tracks for several miles the wagon-load of wire, unattended by man or beast, was located in the mountains, the robbers having unhitched the horses and ridden them off. Private Smith dismounted to examine the hoof marks. One of the horses seemed to have been shod with a peculiarly shaped bar-shoe. The trail of this horse was followed by the troopers forty-three miles to Carbondale, in an adjoining county, where it was found in a livery stable. The three men who had hired the team were located, and not being able to give conclusive proof of their whereabouts at the time the wire was stolen, were arrested, tried, and found guilty.

While riding out along his patrol one day Private Snyder of Troop" C" noticed a thin column of smoke rising from the centre of a corn field. Positive that no farmhouse stood in the immediate locality, Snyder rode into the field to investigate. To his surprise and delight - for his investigation cleaned up a mystery that a whole force of railroad detectives had failed to solve - he found two men smelting brass railway journals bearing the stamp of the Philadelphia and Reading Company. Snyder placed both men under arrest. At the trial it was found that one of them had been arrested before for larceny and released on bail. Both were sentenced to the penitentiary.

The Pennsylvania police like "Er Majestie's Jollies" of whom Mr. Kipling sings, never ask what to do. They think for themselves and they act for themselves. Sergeant Mais and four privates of Troop "B," sent to the Mount Lookout Colliery near Wyoming to preserve order after an explosion of fire-damp that snuffed out the lives of fourteen miners, helped in the rescue work with such a will that the whole state applauded; Privates Hentz and White of the same troop dispersed a mob of several hundred striking miners at Dunmore and rescued 75 nonstrikers; Sergeant Jacobs and 5 privates of Troop "A" stood up under the terrific strain of 32 hours' continuous duty, handling the morbid crowd at the mine shaft and maintaining perfect order during the recovering of the bodies of 154 men killed in the terrible mine explosion at Marianna in November, 1908; Private Ames of Troop "A" trailed a murderer down into Alabama and brought him back to the Westmoreland County jail; 36 men of Troop "A" spent two months preserving order as best they could, which was infinitely better than any one ever expected, among the striking employees of the Pressed Steel Car Works at Butler. Private Kelleher of Troop "C," veteran of the Boer War, while trying to assist defenceless woman who was being 2 beaten and robbed by two Italians, was stabbed by one of her assailants and killed. His entire troop scoured the country for six days in search of the murderer before they got him, but get him they did.

In one year the state police enforced

the laws, maintained order, and protected millions of dollars' worth of property during five great strikes, and, in addition, the Department received during that year 3,550 calls for assistance from sheriffs, district attorneys, chiefs of police, justices of the peace, mayors, and fish and game wardens — nearly ten a day! In a single year the force, taken in the aggregate, rides 390,000 miles, visiting upward of 2,000 towns and boroughs in 60 different counties, while the money collected and turned over to the counties and the fish and game commissions from procured convictions runs well up into the thousands of dollars annually.

The force is only 228 officers and men. Notwithstanding the facts that the entrance examinations to the force are rigid, the training and duties more often arduous and dangerous than pleasant, and the pay insufficient, there are fifty or more applicants for every available vacancy. On the other hand, many men after their first term of enlistment of two years have left the force to accept better paying positions. The Pressed Steel Car Company in Butler, for example, will take on all the ex-state policemen they can get to act as private detectives about the plant at salaries ranging from \$75 to \$100 a month. Eighty-two of the 138 men discharged from the force in one year bore excellent records, were well trained and efficient, but left to accept positions offering more' tempting salaries.

Through the activities of Major Groome, a substantial increment was added last year to the pay of the men. To-day the salaries range from the \$900 a year of the private to the \$1,800 of the captain, plus \$60 a year for every term of reënlistment. Out of this the trooper pays on an average of \$18 a month board at the barracks. Horses, arms, equipment, and two uniforms a year are supplied by the state.

But Major Groome is by no means satisfied. With the proper and wellapplied coöperation of the legislature and the chief executive of the commonwealth he hopes to make of the state police force of Pennsylvania a something to be envied abroad and respected and honored at home.

"WHAT I AM TRYING TO DO"

AN AUTHORIZED INTERVIEW WITH

DR. RUPERT BLUE

(SURGEON-GENERAL OF THE UNITED STATES PUBLIC HEALTH AND MARINE HOSPITAL SERVICE)

BY

THOMAS F. LOGAN

T WAS Dr. Rupert Blue, the new Surgeon-General of the Public Health and Marine Hospital service, who proved that rodents are the agents of the bubonic plague and who, by ratproofing the houses and buildings of San Francisco after the earthquake and fire, drove out the rats as well as the plague, which had been menacing the lives of the people of that city. And he was second in command when the service drove the mosquitoes and the yellow fever out of New Orleans.

New Orleans. "My greatest ambition," said Dr. Blue, in an authorized interview, "is to clean up the United States. Were every building rat-proof, there would be no plagues and much less disease. I look forward to the day when the good housekeeper will feel that it is as much of a disgrace to have mosquitoes and flies in the house as it is to have bed-bugs. When that time comes, disease in the United States will be reduced one third."

As the chief health officer of the United States, it is Dr. Blue's duty to protect this country from foreign invasions of microbes. He has charge of the investigation of all leprosy cases in Hawaii; forty-four quarantine stations in the United States and others in the Philippines, Hawaii, and Porto Rico; and he supervises the medical officers detailed to American consulates abroad to prevent the introduction of contagious or infectious diseases into the United States:

But the real problem that confronts him is to prevent epidemics in the United States. At the present time, the laws do not permit the Surgeon-General to interfere with the health authorities of the various states, but in most of the states they coöperate with him. In emergencies, the Surgeon-General has the authority to override the state authorities, but he rarely exercises or finds it necessary to exercise this power.

essary to exercise this power. Here is the story of the Surgeon-General's career as told in his own words:

"I began by studying law," he said, "because it was my father's wish. For six months I studied under him. I disliked it. Immediately after his death I took up the study of medicine. I entered the University of Virginia, where I took some preparatory courses. Later, in 1891, I went to the University of Maryland, in Baltimore, and finished my course there, obtaining the advantages of hospital work. Just after I graduated I saw a notice that there would be an examination in Washington for what was then called the Marine Hospital Service, and I immediately wrote for permission to come before the board. I received the proper invitation from the Surgeon-General and presented myself in April, 1902, with the result that I was passed and accepted.

"I was then sent to Cincinnati. The most helpful experience that I had was as an interne at the Cincinnati Marine Hospital, where I came into touch with Surgeon Carter, who afterward became very famous as a yellow fever expert in our service. In fact, he was doing advanced work in yellow fever in those days.

"I remained in Cincinnati about six or eight months, as I recollect it," continued Surgeon-General Blue, "and later went to Galveston. In 1899 I went to Italy. The plague was then threatening the United States from several points in Europe and I was sent over to inspect passengers and freight en route to the United States. I returned to this country, went to Milwaukee, and finally was ordered to California, where the plague had broken out. That mission was the beginning of my real work in life.

beginning of my real work in life. "There was so much opposition to the plague work in San Francisco that we could not get the consent of the people and the state to do certain work. After a while, however, a new governor was elected — Governor Pardee — and he favored all methods necessary to the eradication of the plague. I decided that the only way to handle the situation was to make Chinatown rat-proof.

"Rats get into buildings by gnawing through the wooden floors. So I hired gangs of laborers and had them cut away all wood-work and substitute concrete in the foundations and basements of all the buildings in Chinatown. Our success in eradicating the plague by this method established the principle that by ratproofing buildings and driving the rats out of their homes we could destroy the plague.

"We learned, beyond all chance of a mistake, that rats are almost invariably the carriers of the disease. A flea bites an infected rat, and is thereby infected. Then the flea bites another rat — or a human being — and so transmits the bubonic infection.

"The disease has been known for centuries in Western China and Northern India, but the first permanent anti-plague work ever done was accomplished in this country - out there in San Francisco. Altogether, we rat-proofed the entire twenty blocks of Chinatown, even wiring any openings that might be near the ground. I had one hundred men at work. The buildings were condemned in half-We then sent men into the block lots. condemned buildings to tear out all the ground woodwork, and before the owner could occupy a building again he had to have it concreted. Up to that time there had been 121 plague cases, nearly all of which were confined to Chinatown. About eight were white. We finished the work in 1904, and the last case of plague for several years occurred in February, 1904.

I was kept out there until a year after the last case occurred.

"Then I had charge of the Marine Hospital at Norfolk, Va., for awhile. Next, I was ordered to New Orleans, where a yellow fever epidemic had broken out. We got rid of the yellow fever two months before the frost by putting into effect the principles we had learned from Surgeons Reid and Carroll — that you could get rid of yellow fever entirely by destroying the mosquitoes and by no other means. Dr. White was in charge of the campaign, and I was second in command."

The Dr. White referred to by Dr. Blue was his chief competitor for the office of Surgeon-General, and for some time it was doubtful which would win.

Blue, "Experiments," continued Dr. "had been made in Cuba to determine the mode of transmission of yellow fever. We had known for many years that the burning of sulphur would get rid of the infection of yellow fever in a building. but we did not know why. Now we know that it was because the sulphur killed the mosquitoes. The value of this principle was first demonstrated at New Orleans. We would simply go into a house and destroy the breeding places of the insects by closing it up and fumigating it thoroughly. We did this everywhere in New Orleans. And we educated the people to the danger of mosquitoes, showing them how they could be destroyed by cleanliness. There has been no yellow fever in New Orleans since 1905.

"The following year I was ordered for duty on a tuberculosis board to inspect Government buildings and outline certain methods for preventing the spread of Before completing that tuberculosis. work the earthquake and fire occurred in San Francisco in 1906. I was sent out there and assisted in the formation of sanitary camps for the refugees. The sanitation of these camps was very important. We put them in salubrious places, protected the water supplies, and screened the kitchens against flies, and arranged for the disposal of sewage.

"Shortly afterward I was detailed as director of health of the Jamestown exposition, staying through the exposition

until September, 1907, when the second epidemic of plague broke out in San Francisco. The mayor and other authorities requested that 1 be sent there. I worked out my plans on the train. This time the plague was all over the city. There were probably one hundred cases, and they were among the white people. The Chinese were protected by the work that had been done before.

"From September until January there were 160 cases. I knew exactly what I would have to do the moment I arrived in San Francisco. The only things I needed were money and the coöperation of the people. The people were almost in a panic. They were afraid of the disease, but they did not want the city quarantined.

"I did not want to quarantine the city either, because it was a matter of tremendous importance, for San Francisco is the main port on the Pacific Coast. I met several of the leading men of the city and made the proposition that there should be no quarantine if they would back me up in securing the coöperation of the people. In the meantime, I went to work with the money on hand and started a campaign based entirely on the destruction of the rats and not on the isolation of persons or the disinfection of buildings.

"We found that the trapping and poisoning of rats would not suffice. These things would have to be supplemented by the rat-proofing of buildings, so that the rats would have no place to multiply. Their habitations and food supplies had to be destroyed.

"Ordinances were passed that provided severe punishments and penalties for throwing garbage in alleys and elsewhere. We first made a crusade on their favorite haunts — stables, granaries, delicatessen shops, bakery shops, and other places that contained food. About 3,000 stables were rat-proofed. The total estimated cost of the rat-proofing done during the campaign was about \$4,000,000.

"The city was then bankrupt. The officials gave me all the money they could spare — for the first two months about \$30,000 a month. They then called on President Roosevelt, with the statement that they were bankrupt, and asked that the Government come to the rescue. President Roosevelt authorized the expenditure of \$250,000 from the national epidemic fund. The city then cut down its appropriation to \$10,000, and later to \$5,000 a month. The state did not spend as much as it should have spent. It contributed only about \$4,000 or \$5,000 a month.

"Then we found that the plague among the rats was increasing, although human plague had almost disappeared. I took the matter up with the Chamber of Commerce and the city authorities.

"The mayor appointed a committee called the Citizens' Health Committee. A sub-committee was formed, of which Mr. Charles Moore, now president of the Panama-Pacific exposition, was chairman. Those people tore down and burned a part of 'Butcher-town.' They got stringent health ordinances passed, and they pushed forward the work of rat-proofing the buildings of the whole city.

"One prominent citizen objected to this treatment of his residence and secured an injunction from the court. Other injunctions followed, and a hearing was held before the Board of Health. An appeal to civic spirit won in some cases; in others property owners were ashamed to follow up their contention that their property should not be treated in the same manner as that of their neighbors.

"In that way, with great gangs of laborers and cement workers, we made the whole city rat-proof. The last case of human plague in San Francisco was reported in January, 1908, and there has not been one since. "You see," explained Dr. Blue, "San

"You see," explained Dr. Blue, "San Francisco was liable to plague because of its nearness to the Orient. Ships coming in there as early as 1896 and 1898 undoubtedly brought in infected rats. Plague doubtless existed two or three years in Chinatown before it was found. The Chinese, of course, would say nothing about it. We suspected it in 1899, but, as the Chinese never employ white physicians, no official reports of any cases were ever received.

"It was because of our suspicions that

the board of health appointed what they called an 'inspector of the dead' and passed a regulation that no person dying within a specified district could be buried without a certificate from this inspector. The first inspector, Dr. Wilson, began the inspections in 1899, and by March, 1900, had found a case of plague — the first case discovered. At the present time it is very hard to find a rat anywhere in San Francisco. We have thirty-six men still working there, under a doctor who is one of the best men in the service in this particular line of work.

"Another phase of the plague situation came to my notice first while I was in California in 1903. I had been called to inspect a sick man at the German Hospital in San Francisco. He died soon afterward. We held a post mortem and found that he had died of a case of virulent bubonic plague. The peculiar thing about the case was that he had come down from the country, where there had been no plague. I followed this clue and went to his home in Contra Costa County. There I found his brother, who told me that the dead man had not been out of that particular district for forty days before he went to San Francisco.

"Asked with regard to his brother's habits, the man told me that he had been shooting and handling ground squirrels. I thought that squirrels, being rodents, were as likely to be carriers of plague germs as rats. No other case occurred immediately afterward and we had no funds for examination of rodents outside of San Francisco. Later, however, I received notice of a case of plague in Oakland. There I found a boy, the history of whose case showed that he, too, had been shooting ground squirrels. I went to the Governor and told him that I believed there was plague infection among ground squirrels outside the city. He was skeptical, but allowed me to write a telegram to the Surgeon-General, requesting a thorough examination of ground squirrels. Soon afterward, equipped with money, I got all the proof I needed. Squirrels were shot and sent to the laboratory in San Francisco, where they were found to be infected. In the last few years, plague infected squirrels have been found in about ten counties. Probably they were infected from the rats in San Francisco.

"As these squirrels live in the open, there is no way to use concrete against them. Hence we have carried on a campaign of education through the newspapers, warning the people against eating squirrels or handling them. At the same time we are doing our best to exterminate the infected squirrels. We have extended this campaign to seventeen counties. It is of the greatest importance that the rodents of the Sierras be protected against the advance of this disease, for, once carried across the Sierras, the situation would have grave possibilities."

Dr. Blue feels that the work of the Public Health and Marine Hospital Service should be carried out along the present lines, but that much more might be accomplished were he given a freer hand by the statutes and by the Constitution. The writer asked him how he was hindered from extending the scope of the service, and he replied:

"The limitations are contained in the Constitution, with which the present laws are in conformity. We now have some very good laws, but not all the necessary machinery to carry them out. State and municipal health organizations are a part of the health organization of the country and on these authorities devolves a great deal of responsibility for the protection of health, for sanitary police powers within the states have been reserved by the states themselves.

"There is authority for the service to aid state and municipal health authorities in the prevention of the spread of contagious and infectious disease, and, of course, if the states and municipalities should fail or refuse to take the necessary measures of prevention, the Federal Government could go in and do so.

"The question of how the laws could be improved has received a great deal of consideration, both in and out of Congress. It is my intention to study the legislative situation, and to confer with the Secretary of the Treasury and other gentlemen interested in the improvement of the public health to see what can be

done. I have not yet had time to do this, or to decide what additional legislation would be of the most benefit. The possibility of infringing on the police powers of the state must, of course, be avoided.

"I should like to see such measures adopted as would reduce the morbidity rate in this country below that of other countries, and as would increase the expectancy of life.

"A great deal is being done, of course, at the present time. Such reports as are available are being collected and published to show the prevalence of such diseases as typhoid and tuberculosis. Investigations of contagious and infectious diseases, and of other matters pertaining to the public health, are being carried on in the Hygienic Laboratory.

"Special investigations of leprosy are being made in Hawaii, Congress having made annual appropriations for the purpose. As a result of these studies, the leprosy bacillus has been grown in artificial media, and studies are being made to determine the facts concerning epidemics of the disease and to discover possible curative agents.

"In connection with the anti-plague measures on the Pacific Coast, a Federal laboratory is maintained, and investigations are being made of the plague in special relation to the occurrence of the disease among rodents in its bearing on the health of human beings. At this laboratory a plague-like disease among rodents and the organism that causes it have been discovered and described. The occurrence of rat-leprosy on the Pacific Coast has been proven, and the susceptibility of various animals to plague has been demonstrated.

"Investigations of pellagra are to be pushed in the Southern states, laboratory and hospital facilities for this purpose having been provided at Savannah, Ga. I should like to see the bookworm wiped out and will work to that end. Systematic investigations of intestinal parasites of man have been carried on at the Marine Hospital in Wilmington, N. C. And tuberculosis is now being studied at the tuberculosis sanatorium at

Fort Stanton, N. M. Bulletins treating of these subjects are being issued now.

"An investigation that should be enlarged is that of the pollution of interstate waters. The work thus far done has been done on the Great Lakes, and it is of an educational character and of great value. Similar studies should be made of those rivers which are sources of supplies for cities. The Great Lakes, for instance, are polluted mainly by sewage. The water can be filtered, but the control of streams is one of the big problems before the country to-day.

"We can greatly reduce the sick-rate in cities by cleaning them up and providing a pure water supply and that is one of my chief ambitions. The definite policy of cities should be to clean up, to perfect the collection of and disposal of garbage, to put into force the best methods of the disposal of sewage, and to prevent the propagation of rodents that may transmit disease. All new buildings should be constructed with concrete foundations. A great many health officers in cities and states are doing excellent work along these lines, but unfortunately their tenure of office is uncertain, and about the time a good standard of efficiency is reached

other persons take their places. "Another serious problem that I shall consider is the milk supply. Where milk is shipped from one state or territory to another, it would seem that it should receive special attention from the Government. Very active studies of milk have been made by the Hygienic Laboratory within the last five years, and some very comprehensive information has been collected.

"One of the reforms that I should like to see accomplished is the enlargement of the Hygienic Laboratory of the Marine Service in order to provide a course of instruction on public health for municipal, state, and other health officers.

"I should like to feel that soon the whole country will know that the greatest agents of disease in the world are rats, mice, and rodents of all description, as well as flies and mosquitoes and other similar insects. My war will be upon all this tribe and it will be unrelenting."

A FACTORY THAT OWNS ITSELF

HOW THE GREAT ZEISS OPTICAL WORKS OF JENA RUNS ITSELF FOR THE BENEFIT OF ITS EMPLOYEES, OF THE CITY IN WHICH IT STANDS, AND OF A FAMOUS UNIVERSITY — A FINANCIAL SUCCESS IN COOPERATION

BY

RICHARD AND FLORENCE CROSS KITCHELT

OWN in southern Germany near the Thuringian forest, in a section so beautiful that Charles V is said to have placed it next to Florence, there lies, like plum pudding in a bowl, the little old town of Jena. Its first famous plum, the University, has been a wellspring of science, æsthetics, and philosophy these several centuries. And the second famous plum is the Carl Zeiss Works, where the science of coöperation and the philosophy of human brotherhood are being practised and proved as a byproduct of optical instrument manufacture. Years ago, back in 1846, one Carl

Zeiss, scientific instrument maker to the University of Jena, established his first little workshop, which, after thirty years, employed only 36 people. But in the next dozen years the number rose to 300. It is now 3,000 and still growing, while there are 1,000 more in the affiliated glass works. At first they made only microscopes: now they make also photomicrographic instruments and appliances for visual and ultra-violet light, lantern and projection apparatus, instruments for the observation of ultra-microscopic particles, also photographic lenses, stereoscopes, binoculars, and various kinds of measuring instruments, such as rangefinders for the army and navy, and finally great telescopes.

For these things the Carl Zeiss Works are famous. They are becoming equally famous as a great industrial enterprise not owned by capitalists but by itself, completely the common property of all connected with it. And this is the more interesting story.

interesting story. When Carl Zeiss found his business growing too large for him, in 1866, he took into partnership a young University professor, then but twenty-six years of age. This man was the son of a spinning-mill operative of Eisenach, and was named Ernst Abbe. He became remarkable as a scientist and inventor, and also as a business organizer.

This last talent he used in a new way. The child of a spinning-mill operative must have come face to face with the problems of bread without butter and of a home without security. Whatever may have been the cause, he was as deep a student of social and industrial conditions as he was of pure science, and, because of his interest in those conditions, gave up high professorial honors. When he became impressed with the fundamental injustice to the wage worker inherent in the modern capitalistic system - that injustice involving the insecurity of his position, and the expropriation of part of his earnings - he determined that he, at least, as far as he could, would establish juster conditions in his own province.

In 1891, two years after Abbe had acquired sole control of the optical works, upon the death of Carl Zeiss, he forswore his great fortune and created the Carl Zeiss Stiftung. To this foundation he transferred the ownership of the business and a controlling share in the affiliated glass works. That is, he transferred the ownership of the Zeiss Works to itself. In five years more, 1896, the grand-ducal government of Saxe-Weimar ratified and invested with statutory force the provisions of this foundation. Over it the State has final control, but subject always to the charter.

The administration is vested in a committee representing the works, the university, and the Government. Only

general features of the charter can be outlined here, for, complete, it covers fiftyseven printed pages.

It is notable that no capitalists draw any dividends from the industry. Income in excess of current expenses is devoted to three general purposes: first, improvement and enlargement of the business itself; second, increase in the wages of the operatives; third, betterment of their social conditions.

This common good to everyone in the works.is attained in various ways through Abbe's charter, and in no spirit of paternalism. Of that he was intolerant. He sought merely justice.

No superintendents or higher officials may receive more than ten times as much in wages as the average wage paid for the last three years to all the workmen over twenty-four years of age who have been in the factory for three years. Therefore at present the highest salaries are about \$5,000 a year. And the managers, those officials who act on the governing board, may not share in the dividends.

All workmen are guaranteed a definite weekly wage which is the minimum they may receive. But all work is done on a piece basis, and the weekly income is supposed to be in excess of the minimum wage. In addition to this, at the end of each year a part of the surplus is also distributed. This, during the last fourteen years, has averaged 8 per cent. of the wages. There has been an increase of about 14 per cent. in the average wage since 1902, and the wage, not including the annual bonus, is at present somewhat higher than the average paid elsewhere in Germany for work requiring similar skill.

Eight hours is a working day. It is worthy of note that on the eight-hour basis, which was introduced in 1900 by vote of the workmen themselves, the average product is 4 per cent. larger than it was when nine hours made a day's work.

Overtime, which is always optional, is paid for at 25 per cent. (when done at night 50 per cent. and on holidays 100 per cent.) more than the regular rate.

For regular holidays, and when called from work unavoidably for emergency military service, jury duty, sickness in family, etc., workmen are allowed full pay; for service with the reservists, lasting six weeks, half pay. A six days' vacation with full pay is allowed each year to employees over twenty years old who have been in the establishment at least one year. A longer vacation may be taken, but they are paid only for six days.

No fines are assessed for any reason. For specified offences, reprimand or discharge may be inflicted after due trial.

Complete personal liberty of association, and in religious and political affiliation, is guaranteed.

Five to fifteen years' service entitles the workmen to a pension for disablement, equal to 50 per cent. of the regular wage received during the last year of work. Additional pension of 1 per cent. is allowed for each additional year of service up to 75 per cent. of this wage. Old age pensions, amounting to 75

Old age pensions, amounting to 75 per cent. of the last wage, may be claimed after 30 years of service by employees over 65 years of age. Upon the death of a workman, the widow receives four tenths of the amount of pension to which he was entitled, and each orphan two tenths. The full wage of the deceased workman is paid to his widow for three months, regardless of the length of time he was in the employ of the establishment.

Probably the most unusual provision anywhere existing for the well-being of workingmen is that of continuing, for a period, the wages of discharged employees. When it is necessary, because of slack work or change in methods in any department, to dismiss employees, their full wages are continued for a period equal to one sixth of the time they were employed, but not exceeding six months.

A sick fund has been established. From it employees receive 75 per cent. of their regular wage, when incapacitated through illness, for a period not exceeding one year. Free dental, medical, and hospital service, and also free burial are provided from this fund, both for workmen and their families.

Apprentices are examined medically at intervals.

For suggested improvements in it

establishment, and for new inventions by employees, money prizes are given, from thirty to forty such awards being granted annually.

In these ways the income of the works goes to the weekly wage and financial security of the employees. Many other things are done for their well-being. The establishment does not build homes for its work-people. That is done by a wholly independent association, the Jena Cooperative Building Society, which thus far has erected 168 homes. But the Zeiss Foundation has donated \$3,750 to this society, and has lent it \$26,250 at 3 per cent. interest.

Aerated water, milk, and rolls are sold within the works at cost.

The town of Jena also comes in for a share of the profits. Two splendid buildings have been erected for it out of the profits of the works. They are the Public Bath and the Volkhaus. In the latter there are a reading room and library, a school of arts and crafts, a museum for popular and technical physics, and two assembly halls, one large and one small, open for any kind of popular or political meeting.

To the old university, this business, founded on a science learned within her walls, pays its respects. The Zeiss Works have added to its regular funds, and also have made extraordinary improvements: new buildings for physical, hygienic, and mineralogical institutions; an institute for scientific microscopy; extensions of the chemical institute; and a seismographic institute for the astronomical observatory. And the entire scale of professorial salaries has been raised.

From their earnings, the works have greatly enlarged the plant, and have improved the product in scientific and commercial value. The business is eminently successful from a financial as well as from a human point of view. In the face of the competition of other purely capitalistic enterprises, in the last ten years, under Abbe's charter, the number of employees has more than doubled. The new buildings are large-windowed and of concrete, and similar construction is gradually replacing the older brick buildings. The glass works spread their buildings and raise their thirteen great chimneys on a hillside on the edge of the town.

For the administration of this unusual enterprise there is, as regulated by the Stiftung, a self-perpetuating governing board of four members, who must be experts in science or business. In addition. there is a fifth member who is a commissioner appointed by the grand-ducal government (through its department that directs the university). This commissioner cannot be appointed against the unanimous opposition of the other members, and one of these must be connected with the glass works. None of the members of the board may share in the dividends.

In a plain little office lined with books and pamphlets, and decorated with one picture (that of Ernst Abbe), is found the secretary, Dr. Frederick Schomerus.

the secretary, Dr. Frederick Schomerus. He acts as a sort of intermediary between the workers and the management. It is worthy of note that there have never been any strikes or labor troubles at the Zeiss Works.

The interests of the workers are represented by a committee of 120, elected by the votes of all employees over eighteen years of age. From this large group an executive committee of seven is chosen, which meets weekly.

The fact that the workmen can thus deal directly with the management has not prevented at least two thirds of them from becoming members in the national unions of their respective crafts. Naturally, they elect their local union officials to the works committee. However, negotiations are made with these men not as union officials but as elected representatives of the workmen.

Because of the pressure of outside competition, the Zeiss enterprise has been limited in the extent to which it could improve the condition of its work people. But it has demonstrated how much can be done even under present conditions. Finally, it has taught the further lesson that the complete elimination of the capitalist from an industrial enterprise does not prevent its progress and success, even from a business point of view.

THE BISHOP OF THE ARCTIC

THE RT. REV. PETER TRIMBLE ROWE, WHOSE DIOCESE IS INTERIOR ALASKA, AND WHO VISITS HIS MISSIONS BY TRAVELING THOUSANDS OF MILES BY DOG SLEDGE AND REINDEER TEAM, BY SNOW SHOES AND CANOE, OVER ICE AND THROUGH FROZEN WILDERNESS

BY

CARRINGTON WEEMS

HE charge of a bishopric containing six hundred thousand square miles, no small part of which lies above the Arctic Circle; the yearly visitation of a chain of missions long enough to reach around the globe; the consequent exposure to all the perils of an unknown, icebound land; traveling, in season and out, by steamboat, canoe, reindeer, dogs and snowshoes - all these burdens are contemplated with equal cheerfulness by the Bishop of Alaska, even in this easeloving twentieth century when few apply "to tend the homely, slighted, shepherd's trade." He proves himself one of that long line of hardy, adventurous churchmen - perhaps the last. For the frontier will soon be only a memory. Alaska is the end. What Jacques Marquette, the French Jesuit and missionary explorer in the seventeenth century, was to the Indians along the Wisconsin River and the Mississippi and to the Illinois, among whom he died; what Father Herman, the brave bishop of the Orthodox Church, was a hundred years later to the Aleuts of those far-flung Western islands, whither he came with the first Russian fur traders from the coast of Asia; that and more, the Protestant Episcopal Bishop Rowe is to-day, in the vaster area drained by the Yukon River and its tributaries, to all the Indian tribes from the Thlinkits in the near Southeast to the Eskimos of the Arctic coast. To them Bishop Rowe brings medical aid, religious instruction, and the schooling so necessary to prepare them against the civilization which otherwise engulfs them disastrously. By the lonely prospectors scattered through the mountains and valleys of the interior,

Bishop Rowe is as well known and as warmly welcomed — welcomed for his genial presence as well as for the news and reading matter which it is his custom to supply to these isolated men. With them the Bishop's formula is a wise one. First of all he meets the human craving for tidings from the outside world. At night, before time comes to turn in, when confidence has been gained all round, the Bishop remarks: "You are a long way from any church; let's have a little church here by ourselves." The next time he strikes that camp, the request to have church doesn't have to come from him.

Peter Trimble Rowe was born in Toronto in 1859. The name is Irish and he no less so. To that perhaps he owes his unflagging buoyancy and good humor, and the ready human sympathy which so eminently fits him for the work he has to perform in one of the few earthly dioceses where a pure democracy prevails and perfect equality is the rule. By training, likewise, he was tried and tested for his arduous life work. After ordination, which followed graduation from Trinity College, he moved to an Indian reservation at Garden River on the northern shore of Lake Huron. Here the round of his duties, by canoe in summer and in winter on snowshoes, gave him the dexterity to which later in Alaska he has frequently owed his life. From subsequent service in Michigan, where he established a circle of missions, he acquired the constructive and administrative experience indispensable to his office in Alaska where the long distance and uncertain periods of interrupted corr munication necessitate the working o of plans years in advance. Altogether it would have been impossible for the convention of the Protestant Episcopal Church, assembled in Minneapolis in 1895, to elect a better shepherd for their little flock in that boundless pasture of Alaska.

Frank and open, of direct, unstudied address, the Bishop's faculty of speaking his mind without fear or favor might have been reckoned against him in an older episcopate, in an atmosphere charged with tradition and convention. It is on the frontier that he is at his best, among sturdy, plain-speaking men, and on the trail where grit and not cloth counts. Once on the little wooden coastwise packet Bertha - a survivor from halcyon whaling days which seems still to reek of rendered blubber - I saw him thus in his element, supreme. A rare crowd had gathered in the tiny smoking cabin, prospectors, miners, adventurers, derelicts — what-not? The bishop stood out strongly, but always as one of the crowd unconsciously better for his presence. In the long twilight, stories were being told, they too, better for his presence. Himself a natural story teller, with a keen sense of humor, a hearty welcome for his own sake is assured him in any jovial company in Alaska. "Powerful Joe," the bishop's warm admirer, was also of the circle. For the length of the coast and the Yukon River, he is famous for the potency of his narrative and de-scriptive gifts. His experiences have been varied even for that shifting Northern life; he has known the comforts - one speaks seriously - of an Alaskan jail; even his friends, held by his unfailing geniality, reluctantly admit him a brand past saving. His case is fitted accurately by a story which the bishop tells of himself. Once at Allakaket, beyond the Circle, he was making ready for a dash farther north. His party was to be increased; and more dogs were needed. With his Indian, Kobuk Peter, he went to look at some animals that were offered and picked a likely husky with intent to trade. Kobuk Peter shook his head. "How about him, Peter?" said the bishop. "I like his looks; shall I buy him?" Peter's

head continued to shake; plainly he considered the husky hopeless. At last in his labored English, of which he was vastly proud, be blurted out: "Him no good — him too much long time dog."

— him too much long time dog." The generosity of Mr. J. P. Morgan made the consecration of the first Bishop of Alaska possible, on St. Andrew's Day, 1895, and Bishop Rowe took up his work at once. From that time on his record is the history of the Episcopal Church in Alaska.

This church had three missions in that northern territory before the arrival of Bishop Rowe. Each marked a noble adventure. In 1886, Rev. Octavius Parker had been welcomed by the Ingiliks - a tribe half Indian, half Eskimo, who lived in houses underground - nearly five hundred miles from the mouth of the Yukon in a country then unexplored. There at Anvik he established the first Episcopal mission. Four years later, at Point Hope - the Figaro, or "fore-finger" of the Eskimos - which reaches out into the Arctic Ocean, a mission was opened by Dr. John F. Driggs, whose heroic sac-rifice is almost without parallel. He had been dropped from a passing vessel on that bleak Arctic shore, in the midst of a few hundred Eskimos, harried and corrupted by unscrupulous whalers, unhoused, cut off from the world until the next yearly visit of a revenue cutter. Most of his supplies had been destroyed in a storm, but he managed to build a hut and maintain himself alone. During twenty years he labored for the regeneration of the natives of the region, by instruction and medical treatment, and left his post but twice - the first time after seven years of exile within the Arctic Circle. The third mission, now at Tanana, was taken over from the Church of England which had followed the Hudson Bay Company into the country.

By a tacit convention, the several denominations which conduct missions in Alaska had delimited the spheres of their activity to prevent overlapping. This arrangement prescribed as the Episcopal mission field all the vast interior region then unknown, the great areas drained by the Yukon and the tributary Koyukuk and Tanana rivers. These

are the great arteries of the interior, the only highways of travel, by boat in the short summer and by dog team and reindeer in winter. They had been so used for centuries by the native peoples, whose Shamans had convinced them that far up the mighty river in its unknown length the spirits of their dead had their It was this diocese with which abode. Bishop Rowe had to acquaint himself, and the promptness with which he set himself to the task was characteristic. From Juneau, reached by sea, he gained the headwaters of the Yukon over the trail made famous the following year by the Klondike rush. He was thus on the ground before the influx of settlers, a circumstance which proved of great advantage to the work of the church. At The that time the trail was little known. bishop and one companion traveled by compass, and when the ice-locked river opened, the two started down its current in a boat of their own making, the boards for which they whipsawed out of logs. In this rude craft they were successful in shooting dangerous rapids, and descended the Yukon to its mouth. At the Anvik mission, Bishop Rowe held his first confirmation service in August, 1896, and received a number of Indians into the church.

Sitka, once the Russian capital, was selected as the bishop's see. It was also at that time the seat of American government and the home of the Governor. St. Peters-by-the-Sea, the bishop's church, built on the picturesque Sitka beach, was erected some years later largely from his designs and with his active participation. Even 'the Governor, John G. Brady, contributed his day's labor to the general quota.

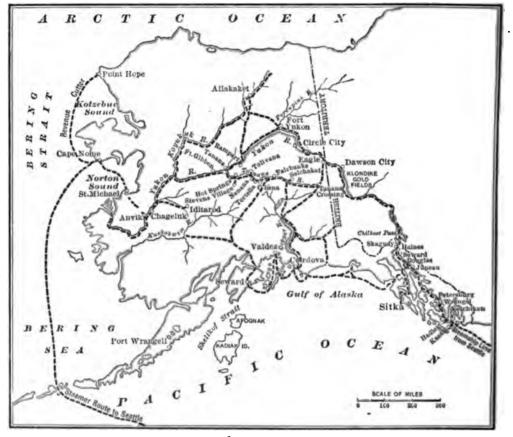
From Sitka Bishop Rowe makes the several trips necessary each year to cover his diocese. When news comes of a gold strike and the immediate establishment of a new camp, he takes steps to go or send there a representative of the church. In 1899, foreseeing the stampede to Nome, he got word to an assistant in the interior who reached the new camp by a winter trail overland, and was joined some weeks later by the bishop. As labor was being paid twenty dollars a day, these two, aided by another missionary, built St. Mary's Church with their own hands.

Traveling nearly eleven months in every year in a country like Alaska keeps one in training. Mountain climbing, snowshoe work, and canoeing care for that. In the intervals, Bishop Rowe keeps fit for the trail by long distance running, hill climbing, and jumping rope. When he starts on a thousand mile jaunt in dead of winter with only one companion, the lives of both may depend upon his fitness. In the interior he is counted a first rate "musher," and is a familiar figure on every trail. Once, however, so the story goes, he met a lone prospector to whom he was unknown, floundering along over lumpy ice with wearied dogs. The bishop, too, had had his difficulties and wondering what lay ahead of him made inquiry of the stranger. "It's hell," the prospector replied, and proceeded to relieve his pent-up feeling with a profane account of just how bad it was, to which the bishop listened quietly. "And how's it been your way, partner?" he concluded. With sincere conviction the churchman responded earnestly, "Just the same."

To gain an idea of the experiences that fall to Bishop Rowe upon his visitations, one of his trips might be followed. Although it is not easy to get from Bishop Rowe details of his achievements, his diary furnishes some bare facts of difficulties encountered between Tanana and Valdez. Leaving Tanana with one companion and a five-dog team, he made for Fairbanks, then the newest mining camp, and pushed on to Valdez, to which town the government trail had not then been built.

"Our sled was loaded with robes, tent, stove, axes, clothing, and food for sixteen days for dogs and selves. . . Wind blew the snow like shot in our faces. I kept ahead of the dogs, leading them, finding the way. We had to cross the wide river; the great hummocks made this an ordeal; had to use the axe and break a way for the dogs and sheed the midst of it all the dogs would be they could not see; their eyes were with the frost; my own were; so I rubbed off the frost and went on. The time came when the dogs would — could — no longer face the storm. I was forced to make a camp. It was not a spot I would choose for the purpose. The bank of the river was precipitous, high, rocky, yet there was wood. I climbed one hundred feet and picked out a spot and made a camp fire. Then returned to the sled, untried to hitch the dogs, but they would not face the storm, so I resigned myself to the situation and remained in camp. It was my birthday, too. I kept busy chopping wood for the fire. . . In carrying a heavy log down the side of the mountain, I tripped, fell many feet, and injured shoulder slightly.

"After another cold and shivering night we found the wind somewhat abated and



A BISHOPRIC 600,000 MILES SQUARE

IN WHICH BISHOP ROWF, BY STEAMBOAT, CANOE, REINDEER, DOGS AND SHOWSHOES TRAVELS EVERY YFAR, IN VISITING HIS MISSIONS, A DISTANCE EQUAL TO THE CIRCUMFERENCE OF THE GLOBE

harnessed dogs, got a 'life line,' went up and tied it to a tree near the fire. By means of this we got up our robes and food sufficient. Here after something to eat we made a bed on the snow. . . . It was a night of 'shivers.' Froze our faces.

". . . After a sleepless night we were up before daybreak. It was still blowing a gale; had some breakfast; without breakfast hitched up the dogs, packed sled, and were traveling before it was very light.

". . . Reached Rampart in time for evening service, after a day's tramp of thirty-two miles — we had service, and 1 preached to a very large congregation.

"Made my preparations for 'hitting the trail' again. Had to provide for a twenty days' journey. This meant 280

THE BISHOP OF THE ARCTIC



BISHOP ROWE'S VESTED CHOIR AT THE ARCTIC CIRCLE EASTER AT ALLAKAKET, 1909

pounds of dried fish for the dogs alone — obliged to get more dogs — nine in all. "Arrived Stevens Village. Ru:iners sent out to inform far away hunters.

"Froze my fingers in unsnarling the dogs.

"Arrived Fort Yukon — three hundred Indians in camp.

"Early in the day while piloting the



ONE OF BISHOP ROWE'S PARISHIONERS "AUNT ELIZA," THE OLDEST INHABITANT OF FORT YUKON

way I encountered bad ice. open water, broke through and got wet. After that I felt my way with axe in hand, snowshoes on feet, until it grew dark. In the darkness I broke through the ice and escaped with some difficulty.

"All night the wolves howling nearby and we had to keep our dogs near the fire, to prevent their being killed. Bitter iron cold shackled the northland. By night the fire roared defiance to a frost which it could not subdue, while dog and man crouched near it for protection from its awful power. When outside of the fire's light, the heavens were ablaze with moving lights — the aurora borealis of the Arctic shone with wonderful brilliance.

"Only the great white desolation, silent, awful, broken by the wail of wolves or the cracking of ice, as though strange spirits were all about you. The days were strange as the nights. Close by the river crept the spruce, and through this there trotted, doglike, packs of wolves, invisible, but none the less real as their howlings indicated.

"Left Circle City for Fairbanks temperature had been 72 degrees below — moderated and was now 50 degrees

"All protested against my proposed trip to Valdez. Distance, five hundre miles, no trail, way uncertain avail



BISHOP ROWE IN THE EPISCOPAL ROBES AND-

myself company of mail carrier - left Fairbanks.

"Did not sleep last night - very cold - shoulder pained - must be 65 de-grees below. A low mist hangs over the snow, a sign of intense cold. Broke camp, dogs unwilling to start - too cold for their feet. Sleds pulled hard - made a camping place late, nothing since breakfast.

"Slept better. Fingers ached - froze them yesterday - hard to persuade dogs to start - whined and held up their feet.

"Seventy degrees below, The same monotonous 'mushing.' Our 'trail breakers' broke through the ice - a narrow escape.

"Dogs very weary, feet bleeding.

"Food getting low, could do without three dogs and save food, so shot them. Hard, but had to be done.

"None of us knew the way. All food gone for dogs and men but my stock. Shared with others.

"Got some ptarmigan and rabbins, helping food supply. "We traveled hard and fast as we

possibly could while strength lasteddown to tea and a biscuit for a meal. The dogs were also suffering, but none the less faithful and willing. "Had some tea. Getting weak. Dog

wild because hungry.

"Came to an Indian camp. They said it was fifteen miles to Copper River. "Found a mail cabin on the Copper

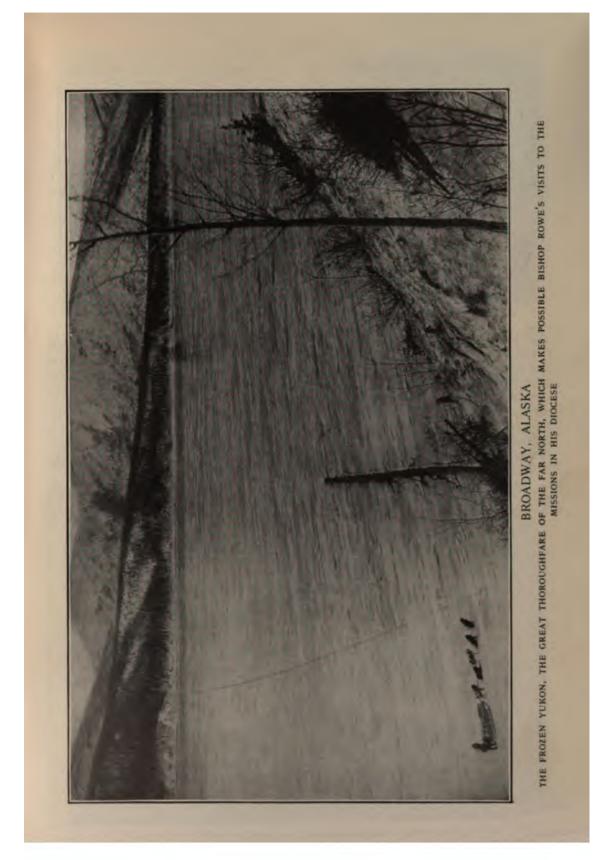
River and food and rest.

"Next day we reached Valdez."

Adventures like this he regards lightly. Every winter brings their repetition. Every year he covers more than twenty thousand miles in one way or another. Once he was paying his yearly visit to St. John's-in-the-Wilderness - the church's most northern mission at Allakaket on the Koyukuk River, where Deaconess Carter, with only a woman associate,



- BISHOP ROWE IN HIS ARCTIC FIELD COSTUME





TRAVELING BY ESKIMO CANOES TO A MISSION ON KOTZEBUE SOUND

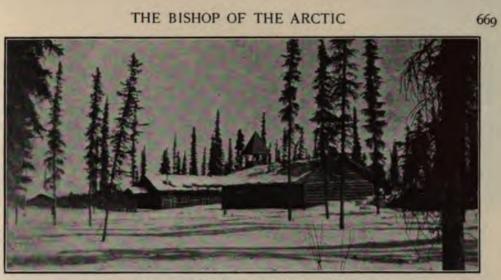
holds an isolated post for which no man offered. In order to minister to some prospectors remote from communication he pushed on to Noland Creek, which, excepting the coast, is the farthest north that white men have ever settled in Alaska. At length arrived there, in the teeth of a blizzard, services were held in a cabin selected because the sick man in it was unwilling to be left out. Fifty-two men, the entire camp, attended, perched in rows on the double tier of bunks.

The bishop's last visit to Point Hope,

on the Arctic Ocean, was made in 1908; that was a typical episcopal year; 121 services were held in the 22,000 miles traversed. Leaving Sitka June 1, he started for the Arctic by way of the Yukon, which he descended as far as Anvik in the *Pelican* — the mission's indispensable launch. With him went Archdeacon Hudson Stuck of the Yukon, his indefatigable lieutenant for the whole length of that mighty river. Conferences vere held with workers at various points, and frequent services for the Indians along the 3,000



BISHOP ROWE'S SLEDGE CROSSING OPEN WATER ON THE YUKON TRAIL. NOTE THE INSIGNIA OF HIS EPISCOPAL OFFICE AT THE REAR



"ST. JOHN'S-IN-THE-WILDERNESS" THE NORTHERNMOST CHURCH IN AMERICA, BUILT LARGELY BY BISHOP ROWE'S OWN HANDS

miles of waterway. At Nome the revenue cutter *Thetis* was overtaken. On her, Point Hope was soon reached, and there he was able to remain while the little vessel paid her annual visit to Point Barrow and returned. In this short interval the bishop determined to build a new church, having found that in the old "igloo" previously used the air "got so bad that the lights went out." So with no other assistance than that of Rev. A. R. Hoare, the missionary in charge, and a few unskilled Eskimos, he built a church "with a cross so high that it will serve as a land-mark for passing whale ships." The transformation in the Eskimos at Point Hope is remarkable. They are the most cleanly, honest, and dependable natives on the North Coast.

The work done in Alaska under Bishop Rowe's direction for the white inhabitants, of whom there are hardly more than 35,000, has been most practical and effective. Five hospitals are supported and as many dispensaries. The well



BISHOP ROWE PREACHING TO THE INDIANS AT A FISHING VILLAGE ON THE BANKS OF THE YUKON RIVER



BISHOP ROWE'S SUMMER CONVEYANCE THE "PELICAN," THE LITTLE RIVER-BOAT ON WHICH HE HAS TRAVELED MANY THOUSANDS OF MILES

equipped hospitals at Ketchikon, Fairbanks, and Valdez are the only institutions of their kind in their respective regions. Besides the Good Samaritan Hospital at Valdez, there is not another for several thousand miles along the coast, and one whom it has nursed can speak feelingly of the urgent need it fills. The Fairbanks *Times* speaks appreciatively of the reading room maintained by St. Matthew's Mission in supplying standard literature, in weekly and periodical form, to a territory of practically unknown extent. Its beneficiaries are found hundreds of miles apart. Similar work is done in all the missions wherever the need demands. One of the most unusual and most successful institutions established by the



BISHOP ROWE HELPS BUILD HIS CHURCHES ST. THOMAS'S, WITHIN THE ARCTIC CIRCLE

church is the "Red Dragon" Club, opened in Cordova by Rev. E. P. Newton in July, 1908. When the Morgan-Guggenheim Syndicate made Cordova the terminal of a line to the interior, a little city sprang up and several thousand men collected there. The practical wisdom of beginning with a club and reading room, rather than with a church, appealed to the bishop. So successful was the venture that in the future a similar plan will be followed elsewhere, and at



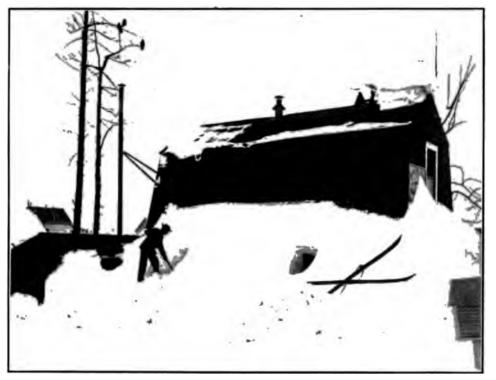
"RIDING CIRCUIT" WITH REINDEER "OLD JOHN," ONE OF THE KOBUK INDIANS, GET-TING THE BISHOP'S TEAM READY FOR THE START FROM THE MISSION

the start a building will be erected that can thus be used seven days in the week. Reading and writing material, a piano, and a pool table attracted the miners and railroad men from less wholesome amusements. When time came for church, tables were pushed back, service was held, and the men remained.

Including the clergy, nurses, teachers and native readers, about fifty workers in Alaska serve under Bishop Rowe. Twenty-four churches are scattered through his huge diocese, and almost twice as many missions are maintained more or less regularly.

But it is the natives' welfare that gives the bishop most concern. For them exclusively two hospitals were established — the only two in Alaska. And for them alone fourteen schools are conducted by the church, two saw-mills are run, and reindeer are being propagated. The Indians of the interior have in Bishop Rowe a sturdy champion. He has but just returned to his bishopric from a visit made in their behalf upon President Taft. His coöperation has been promised, and a bill the preceding year. This was due to the proximity of the white settlement. Game had become scarce, demoralizing influences played havoc among them, and an epidemic of tuberculosis broke out. The latest trip "inside" which the

The latest trip "inside" which the resolute churchman- has made — a dash through country almost unexplored, accompanied only by an Indian (whose life was saved at great risk on the Sahlina River when he fell through a hole in the ice) — was prompted by a desire to con-



REV. E. P. NEWTON, THE RECTOR AT VALDEZ, DIGGING HIS WAY INTO HIS RECTORY AT ONE OF THE MISSIONS FOUNDED BY BISHOP ROWE

has been drawn up by the Alaskan delegate to Congress embodying the bishop's suggestions. He strongly favors a reservation system, modeled somewhat on Father Duncan's mission at Metlakahtla. His desire is to have instruction directed first at sanitary improvement to stay the frightful mortality among the natives. Out of four hundred Indians at Sitka, forty died a year ago, for the most part of tuberculosis. In visiting another station some time since; it was found that 50 per cent. of the people had died during sult with Chief Isaac of the Ketchumstock tribe as to the placing of a mission on the upper Tanana most convenient to the Indians.

The condition of the natives south of the Tanana he reports as pathetic in the extreme. They are poor and neglected, have little clothing and less food, and in many cases are suffering from loathsome disease. Their hunting grounds overrun by the white men, they are pushed back into the fastnesses or else made victimes of debauchery. Although the Governme



THE HOSPITAL AT FAIRBANKS, FOUNDED BY BISHOP ROWE

spends a great deal in attempts at their education, the efforts made to ameliorate their physical condition are almost negligible. Something entirely different is needed, in the bishop's opinion, to help the original possessors of the country, now become like children, hungry, dirty, and diseased. "It came to me," says he, "that I should make it my first concern to go and plead with the President and Congress for remedial laws." This vow he promptly fulfilled. If anything is done for the unfortunate aborigines of Alaska, to him will be the glory.



AND THE READING ROOM OF THE HOSPITAL, WHERE ALL MEN ARE WELCOME



"FRIENDS AND FELLOW-CITIZENS"

OUR POLITICAL ORATORS OF ALL PARTIES, AND THE WAYS THEY USE TO WIN US

BY WILLIAM BAYARD HALE

GAIN sounds the tocsin of conflict. Again rises the voice of the patriot and statesman, calling his neighbors to rally once more for the defence of the Nation, that her pe-roud banner be not dragged in the dust, the ship of state be not dashed to pieces on the rocks, the bulwarks of liberty be not shattered by the subtle wiles of the money oligarchy, the rule-or-ruin mob, the abandoned Republicans, the depraved Democrats, the foes of American labor, the predatory trusts, the lawless labor unions, the cowardly foe of the old soldier and the bandits that batten on the spoils of undeserved office. Once again the Republic is in the midst of those frightful dangers which she encounters every fourth year, and tens of thousands of leather-lunged counselors are preparing to mount stage and cart-tail and point the way to sure salvation.

The campaign now about to be begun is certain to be one of unusual earnestness. Moral forces are alive that were unawakened yesterday; on the other hand, the interests that have dominated in politics for so many years know that they have to face an insurrection certain, sooner or later, to overthrow them; to postpone defeat another four years there is no means to which they would not resort. It is not necessary to deny that there is moral enthusiasm on their side also who stand for the old order and abundant ability to make the best use of the argu-

ments that run to their purpose. It is c e r t a in that there never were so many people deeply interested in political discussion, and it is likely that the summer and early autumn will witness an oratorical tournament never equaled in the country's history.





HARMON

utations will be made. But among the foremost "gladiators" will surely be the score of men pictured on these pages.

President Taft is one of the best living illustrations of what practice in the art of oratory can do for a man without native genius for it. When Mr. Taft began to address his fellow-citizens in public speech, he was about as effective at it as a high-school boy in his debating society. He had no voice, his manner was constrained, he had no confidence, he had nothing to say that anybody cared to listen to, and



CUMMINS

The chief figures in the mêlée may even now be predicted. President Taft or ex-President Roosevelt will carry the Republican banner; if Governor Wilson does not bear the other, then some one in the list below will do so. A hundred men of lesser, but still considerable, note will range themselves on either side; a hundred new rep-

he said it with-

out any enthusi-

asm. Experience

cn the bench does

not equip a pop-

ular orator. At

times his remarks

were halting and

broken, as well as inconsequential. But Mr. Taft

kept at it. As President he has

appeared before

many hundred

audiences of wide-

ly diverse character, and has

addressed them.

He has acquired facility and felicity. Always personally a charming man, he has liberated this personal charm to flow through the channels of public address. His smile is infectious, his chuckle seductive, and the kindliness of the man most winning. The Presi-dent seldom speaks without making some playful allusion to his own gigantic



CLARK

frame. And he has acquired the faculty of positiveness in assertion — which his earlier speeches lacked.

But the President's real development as an orator began with the tour of last autumn in which he undertook to tell the country about the General Arbitration Treaties. His heart was in that; it is doubtful if the President's heart had ever been in anything else as it was in the effort to force the Senate to ratify the treaties he had negotiated with Great Britain and France. He had the right

of it, he was sure in his sense of right, and he began to speak with a confidence, a fire, and an eloquence that put h im at once among the most convincing public speakers of the day.

Already he has traveled more than any other man who has held the presidency, and his re-nomination would mean other and



LA FOLLETTE





JOHNSON



"GEORGE FRED"



POMERENE

still longer journeys. Mr. Taft enjoys travel, and he has come to enjoy speaking. While he does not inflame enthusiasm, he does create friendly feeling; that it is insincere to deny. On the other hand, he is liable to slip somewhere in the delivery of so many off-hand speeches. The Winona speech, prepared "between stations," was a fatal slip. It may have taught him carefulness.

At this writing there is no telling whether or not "T. R." will have any part in the campaign. If he has, it will be in the centre of the stage. Mr. Roosevelt was not a born orator. He has about as many faults of public speech as any one man could have, yet he is, withal, as everyone knows, one of the most effective of speakers. He has a poor voice, and he generally pitches it too high, but he is heard with perfect ease by the largest throngs because of his remarkably clear enunciation. He bites off each word with steel-like jaws. Of late, he has fallen victim to a vicious habit of letting his voice frequently break into a halfarticulate falsetto. This is his way of indicating that he is convulsed with laughter, and it is amusing — the first two or three times one hears it.

Mr. Roosevelt grimaces constantly and gesticulates continually, his gestures con-sisting of the waving of an arm aloft and the bringing of it down with clenched fist. It is tiring to listen to Mr. Roosevelt — not that the attention flags; it does not, the attention is held, but the listener does not listen at ease. Perhaps it is not desirable that he should; it is not Mr. Roosevelt's idea that anybody should be at ease. It does not seem to me, however, that Mr. Roosevelt is a persuasive speaker. His gifts of vituperation are great, and his power of stating a platitude with the zeal with which a prophet might impart a new and profound thought is interesting. He has always displayed a clairvoyant knowledge of what the average man thinks, however, and he always gets an uproarious response; but this is not a tribute to his oratory, it is awarded the man.

It was interesting to observe the impression made by the ex-President in



PENROSE



"JEFF" DAVIS



MARTINE

"FRIENDS AND FELLOW-CITIZENS"

England. On the

three occasions when Mr. Roose-

velt made his

principal ad-

dresses in England

he was at his best

from the stand-

point of reasoned

argument and

dignity of man-

hearers were

frankly disap-

pointed in him.

Lord Curzon, the

only Englishman

of distinction who

spoke at any

length on any of these occasions,

combined ease

and humor with

his

ner; but



HUGHES

power so commandingly as to show off the American to little advantage.

Mr. Roosevelt's campaign speech is a fierce onslaught; true, he is much more addicted to jokes than he used to be, but they are fierce jokes. He never undertakes



FOLK

to deceive an audience; he is not there to persuade his antagonists, but to break their heads. He springs into the limelight with gleaming teeth, one foot on a slain tiger and the other on a hippopotamus, shaking his fist at the assembled armies of the world and calling on the firmament to fall and leave him unterrified. He speaks with the authority of the voice from Sinai. The story of his deeds —

how he captured San Juan Hill, and took Panama, and sent the greatest fleet on the longest cruise - is the Homeric legend of America, and his sentiments are as unchallengeable as the moral law. Most audiences like it immensely. An old German once came away with a look of perplexity in his eye: Ach! er spricht wie ibn der Schnabel gewachsen ist ! He sighed, however, satisfaction at his own untranslatable explanation



BEVERIDGE

- "every bird speaks as its bill has grown."

Mr. Bryan continues to be — whatever you may think of him or his views doubtless the most effective spell-binder "in our midst." He has an unexcelled

presence and a voice unapproached. Perhaps that of George A. Knight, of California, may excel it in volume. At the Chicago, 1904, convention, after Harry Stillwell Edwards of Georgia had been vainly trying to make himself heard over cries of "Louder," Knight opened his mouth and shook the walls and made the windows rattle till listeners in a far-off gallery shouted back "Not so loud!"



BRYAN

THE WORLD'S WORK



Mr. Bryan has never spoken in a building too big for him to fill with his voice; the whole out-of-doors seems not too big, for it is the experience of thousands who have listened to him in the open that the only advantage gained by pressing toward the speaker's stand was that something could be seen of the speaker; he could be heard anywhere on the outskirts of crowds of 20,000, and from roofs and tree-tops so distant that it was impossible to distinguish him. One night out in Indiana during the last week of the 1900 campaign, when Mr. Bryan was making the concluding speech of the day in the county fair-grounds of one of the county-seats, I paced what I concluded to be a half mile from the speaker's stand without passing beyond the zone in which his every word was perfectly clear.

That was, if 1 recollect aright, his seventeenth speech that day. We had started from Indianapolis in the early morning, zig-zagged through the western and northwestern counties and were coming down the middle, with stops at intervals of less than an hour, every stop meaning a speech before a crowd of anywhere between two and ten thousand. As the day drew on we could keep tally of the number of stops we had made by counting the number of shirts hung from the bell-cord running through our special car. There never was such a display of physical strength as Mr. Bryan made during those weeks, delivering dozens of speeches a day with never a sign of fatigue in bearing or voice. Others have done the like, I know — Mr. Roosevelt has made his "whirlwind finishes" among others but no one has ever spoken so often, to so many people, with such complete ease, as the "peerless leader" did in his first two campaigns.

He has never been quite the same since I fancy, however. He is a much older man now, and something of the old fire is gone. Still, he is the most plausible and ingratiaing wizard of the stump. Only the magic is likely to expire as the wizard departs.

With the advent of Woodrow Wilson on the political stage comes a new type of man and a new type of oratory. Mr. Wilson has long been known as an exquisite master of English prose. He speaks as he writes — with a trained and skilful handling of the resources of the language, a sureness, an accuracy, a power, and a delicacy surpassing anything ever before heard on the political platform in America. It was felt by some of his friends that Mr. Wilson's classical habit of language would militate against his success as a politician — it was felt to be a matter of extreme doubt whether he could address the people in a language they would understand or feel the force of. The first appearance of the candidate for the Jersey governorship dissipated these doubts. Mr. Wilson knew how to

"FRIENDS AND FELLOW-CITIZENS"



ROOT



LODGE



COCKS

talk to the people, knew how to win them. He changed his manner very little, never stooping as if he had to, to make the people understand. No matter where or before what sort of audience he spoke, his speeches were on a high plane, but they were so clear, so definite, that every man understood and wondered why he had not thought of that himself.

Governor Wilson is not only the most intellectual speaker that this generation, perhaps any generation, has seen on the stump; he is the most engaging. A friendly smile is almost always on his face - always in beginning, at any rate. His words come with vigor, but with a gentle good-nature, too - not a good-natured tolerance of the ills he is opposing, but a good-natured confidence that they will soon be overthrown. A serene faith in the outcome is one of the characteristics of Wilson's attitude; he is an optimist, and his speeches have the invigorating charm and power of a call to join an army which is marching to glorious and certain victory.

Wilson is a great story-teller — in private he keeps his friends in hourslong gales of laughter; he uses simple words and strong words, but seldom slang. He loves nonsense verse and limer icks, and often reels them off while he is getting acquainted with his audience for he talks with an audience, not to it. Mr. Wilson has a very long jaw and a strongly individual face; some people would call him homely. He was under no illusion about that matter himself; he told the people during his campaign for the governorship that they might as well prepare themselves for a busy governor, for the Lord never intended him to be "Yes," he remarked once; ornamental.

> 'For beauty I am not a star; There are others handsomer, far; But my face — I don't mind it, For I am behind it; 'Tis the people in front that I jar!"

There used to be told in Oxford a story of a clergyman of eloquence so moving that one day, when he preached in the University Church on the flood, members of the congregation raised their umbrellas.



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GÄYNOR



COCKRAN



KERN

THE WORLD'S WORK



GORE

doesn't preach on the flood, but he is the most realistic orator on the political platform. When at his best, he is intensely dramatic, swaying the minds of his audience as John B. Gough used to do. Cockran is a heavy man, of great dignity of manner, not gymnastic like Gough, but intensely energetic. His services would be more fruitful if they were given consistently to either party. As it is, a speech by Bourke Cockran is very much like a piece by the band

Bourke Cockran

- an interesting performance, but entirely without prejudice as to the real convic-tions, if they have any, of the performers. The most dramatic orator, the real tragedian, of the political stage to-day,



PALMER

is Robert Marion La Follette. Accent the "Foll"; the Wisconsin Senator doesn't want to be a Frenchman, though he can't help it. The instinct of the actor is in his blood; he can't speak without a gesture, and he gestures with every part of his body. Mr. La Follette has two brands of speech; one for the Senate, the other for the public. In the capitol he can be quietly impressive, with

voice beautifully modulated and with graceful gestures. On the stump, he must be vociferous and gymnastical. He paces the platform; he waves his hands; he beats the air; he pounds the table. A favorite act is to slap with his right hand the outstretched palm of the left. Some-times he stops speaking and spends a minute or two in pantomime - sometimes e xpressive, sometimes indicative only of the fact that the speaker is very much aroused and must work off his



" JOHN SHARP"

surplus energy. Much of the time his eyes appear to be closed; he grimaces con-stantly. If there is a piece of calisthenics which will help out an idea, La Follette uses it; if he speaks of money, he slaps

his trousers pocket half a dozen times; if he refers to thinking, he takes his head in his hands; if he speaks of investigating, he bores a hole in the air with his forefinger. At the great Carnegie Hall meeting in New York in January, discussing the courts, the Senator exclaimed, "We do not want judges with -" then he stopped and leaned far over to the right with his hand to his ear, as if



DICK

listening to a voice coming up through the floor; and continued, "with their ears to the ground. But neither do we want," and now he went to the other side of the platform and bent down till his head almost touched the floor, "neither do we want judges with their ears to the railroads." The audience had held its breath, now it broke into thunderous applause.

I don't mean to speak of the Wisconsin Progressive leader lightly. When the history of the Progressive movement comes to be written, his will be the foremost figure in it; his industry and his constructive statesmanship will then receive their due meed of praise. To his power on the platform the regeneration of Wisconsin is due. It goes without saying La Follette's subject matter and literary form are beyond criticism.

Senators Lodge and Root are likely to make due appearance during the summer. They serve to adorn large bills and add distinction to decorous gatherings. Neither of them counts much in the real work of persuading voters. They lack the physical qualifications for that: Root's voice is light and unimpressive; Lodge is the better speaker, and may do something to confirm those already grounded in the faith, but both entirely lack knowledge of the art of popular appeal. Penrose is a giant, with a high-pitched voice, a drawl, and a lisp, but he is the possessor of a positive manner, nevertheless, and a pugnacity that makes him capable of effective work when he likes; Penrose is inclined to be indolent, but he will have many incentives to activity this year.

Of other Senators, the Democrats John Sharp Williams, Kern of Indiana, and Pomerene of Ohio, are likely to be in the thick of the fight. Pomerene is, of course, a Harmon man, but he is also an overweaningly ambitious man, and he may be counted on to be as eager in the fray for one candidate as for another. He has a ringing voice and a sturdy right arm. With a sturdier physique, Senator Williams would be in the front rank of campaigners, as he is of Senatorial debaters. Indeed, it would hardly to-day be disputed that Williams is the cock of the Senatorial walk; Heyburn is the only man left who does not tremble at the thought of a passage at arms with the Alabamian, but then Heyburn is a colossus of vanity. Williams's satire is biting, his good-natured humor delicious, his eloquence surpassing. Mr. Kern has developed into an energetic and convincing speaker. Without special graces, he has learned the art of direct and forceful speech. He looks the part of the good old honest farmer, with his war-time whickers.

Bailey is the most plausible member of the Senate, and on the platform he is a wonder of persuasive adeptness. The trouble with Bailey is his perversity and his conceit. Borah, Republican, of Idaho, is an excellent campaigner, robust, ready, genial, and eloquent; without special mannerisms, he is a sound, not a highly original but a dependable, vote-maker.

Senator Gore is a campaigner of most unusual ability, despite the handicap of his blindness — which, indeed, is only noticeable to close observers. He gets about with the facility so marvelous in those who have never had vision, and his posture and manner in speech are not markedly different from those of others. Judge West of Ohio, the favorite "blind orator" of the last generation, used to sit while speaking, and his style was a florid one. Senator Gore is delightfully humorous; usually good-natured, he is a master of satire and irony, clear-headed and strong in power of statement, master of a great deal of rhetorical grace, and with enough sentiment to give warmth to his higher flights of oratory.

Two former Senators who are likely to be in the campaign are Beveridge, and The Indianian is the perfect type Dick. of the college orator; in maturity he does the thing more smoothly and rather more convincingly than of old, but he does it precisely as he learned to do it in his Beveridge regards Sophomore year. himself as an orator. Each speech is an effort. He prepares carefully. He used to commit to memory, and whether or not he does that now, he recites as if he did. Beveridge's sentences are rhetorical; he never says a thing simply if he can say it oratorically; he likes in-

verted phrases, wrong-end-first constructions, alliterations, refrains, and all the rest of it. "Never before has the country faced such a crisis; never before has the great heart of the people throbbed in thrilled threnodies; never the nation glorious been assailed -- " etc. The people like it. Beveridge is a fine-looking fellow with assurance flowing from every feature of his face and every one of his magnificent gestures. Not for him the merry quip; not for him the quiet argument; he is ever the professional orator, self-conscious, serious, and stern, as they trained them in Indiana colleges twenty years ago. Nine people out of ten the country over believe it to be the only real oratory

The House of Representatives furnishes more effective campaigners than come from any other quarter of public life.

J. Beauchamp Clark ought to be able to speak well. He has had practise enough. For years he has been on the Chautauqua circuit, and he has said everything he knows many hundred times. When, how, and wherefore he acquired the curious nasal drawl, the roughthroated, unarticulated grunt of an utterance, which he now employs, is not recorded. Maybe he used it first by way of acquiring popularity with Missouri farmers; it is now his habitual manner — a pure affectation of roughness which fits very well with the affectation of homely language which the Speaker em-"Champ' ploys when he remembers to. Clark has invented and used another mannerism which accentuates the character it pleases him to assume: he purses his lips and then blows through them explosively - I don't know exactly why that performance marks the honest, outspoken man of the people, but it does. Clark has the finest head and one of the most benign and dignified faces in the whole gallery of American public men, but the character which he chooses to enact before the public is that of a flatheaded rustic - for he is careful never to say anything. To most people it appears as contemptible a part as would an imitation of the English cockney. There must, nevertheless, be thousands

who like it, for the Speaker's popularity in the Middle West is unquestionable.

Underwood, the House leader, is less distinguished on the public platform and, indeed, on the floor of the House than in committee room. A. Mitchell Palmer, who undertook to wrest from Colonel Guffy, the Pennsylvania boss, the control of the Democracy of his state, is one of the most fervid orators in Congress. Victor Murdock of Kansas is of the same type — a more popular man than Palmer; red hair and a perpetual smile are pleasanter than a Hapsburg jaw.

Martin Littleton is a bright young man with what old folks would call the gift of gab. He is ready, confident, speaks rapidly, smoothly, and to the point, and when he fires up, which he always does at the proper moment, he moves easily to flights of considerable eloquence. In appearance he is of the type of Bryan, Bailey, and Borah — round-headed, smooth-shaven, robust — and he has the manner common to those men, but lacks, somehow, a little background.

Among governors, Mr. Harmon of Ohio would scarcely claim to be an orator; he has no voice, no manner, and nothing to say — on politics, but he does very well at country picnics, where he talks with the farmers on farming.

Ex-Governor Folk's manner is clear, sharp, and rather business-like. His arm with forefinger extended is going most of the time, high in the air when the sentence is in progress, pointing to the ground in front of him when the conclusion is reached. Mr. Folk has a way of starting, moving, and getting somewhere. And he takes an audience with him.

George Fred Williams of Massachusetts is a master of moral appeal. Clean-cut, a patrician of sensitive nostril and lifted chin, Williams doesn't get very far in an argument which he intends shall be a pure intellectual exercise before a sense of the right and wrong of the matter, as he sees it, comes over him — and then we listen to the enthusiasm of the prophet and preacher. To Williams fell the leadership of the Democratic party in Massachusetts on the death of Governor William Russell,

though he had no time to assert himself before the issue of free silver arose. The Massachusetts delegation went to the Chicago convention in 1896 instructed for the gold standard, but Williams and a majority repudiated their instruction and voted for Bryan and a free silver plat-Williams became the nominee for form. governor, and the succeeding Gold Democrats nominated Dr. William Everett, one of the most interesting of amateur politicians - the dryly humorous headmaster of a boys' school who went to Congress and made Ciceronian orations. In his speech accepting the nomination for governor, Everett made a speech impaling Williams with classical satire and copious Latinity.

He began by announcing that he would read a poem called "The Lost Leader," and commenced:

Just for a handful of silver he left us!

Where but in Boston would Browning be chosen to entertain a nominating convention?

Mr. Justice Hughes will not again be heard on political themes. His clear utterances will be missed. He used to look as homely as Lincoln as he harangued

a crowd from the back of a train, in a silk hat that didn't fit him and a squarecut coat with skirt too long and sleeves too short, and with teeth that were drawn (by artists, not dentists) as often as Roosevelt's. But Hughes could "talk." No one, though, will be so much missed this time as Senator Dolliver will be. Dolliver was just arriving in the rank of really great leaders; the last two years of his life saw him emerge — seasoned old politician that he was, then - into a new character. Ah! poor Dolliver! He will not lead in the fight for Progressive statesmanship. But he will be remembered by those who do. Who is there that, having heard, can forget the mellow whimsicalities of his early days-the plea, for instance, for the American hog, for whom he prophesied the coming of the ge-lorious day when he would make his triumphant way through all the markets of the world with a curl of contentment in his tail and a smile on his oleaginous face!

Alas for Dolliver! As he looks down on what will be going on this summer he can only say — as Judge Hoar said when he was asked if he were going to attend Ben Butler's funeral — "I can't be there, but I approve of it."

THE BUREAU OF MUNICIPAL RESEARCH

WHAT IT HAS DONE FOR BETTER GOVERNMENT IN NEW YORK CITY

BY

HENRY BRUÈRE

(JOINT DIRECTOR WITH WILLIAM H. ALLEN AND F. A. CLEVELAND OF THE NEW YORK BUREAU OF MUNICIPAL RESEARCH)

HE New York Bureau of Municipal Research spends \$90,000 annually from the contributions of citizens in promoting efficient government. If its work has been effective, it is because it does not wage merely a campaign for economy. It has a definite objective in mind, namely, to attain efficient city government. It holds efficient city gov-

ernment the greatest conceivable engine for obtaining coöperative betterment of living conditions, better health, better pleasure, better education; and it considers inefficient or crooked city government the greatest obstacle to community welfare.

When the Bureau was incorporated, in May, 1907, its organizers named the following very definite objects as the purposes of the Bureau:

1. To promote efficient and economical government.

2. To promote the adoption of scientific methods of accounting and of reporting the details of municipal business, with a view to facilitating the work of public officials.

3. To secure constructive publicity in mat-

ters pertaining to municipal problems. 4. To collect, to classify, to analyze, to correlate, to interpret, and to publish facts as to the administration of municipal government.

What has New York done to promote efficient government? How has it gone about it? The story covers only a few years and centres around an unprecedented period of constructive coöperation between public officials and citizens.

In six years New York citizens have given convincing evidence of their interest in the promotion of efficient city government by contributing upward of \$400,000 to support the New York City work of the Bureau of Municipal Research in promoting progressive and efficient administration of public business.

In addition to the \$400,000 for New York City work, \$200,000 has been provided for training men for service in governmental fields; a fund of \$30,000 has been established by ex-Comptroller Metz to assist the cities of the country outside of New York in adopting efficiency methods; and \$300,000 has been contributed for municipal research work in Chicago, Cincinnati, Philadelphia, Hoboken, St. Louis, and Memphis by the citizens of those communities. The determination of citizens to energize and modernize city government has never before been given such practical expression.

An insignificant part of the great fund contributed for this work has been expended in calling attention to official wrongdoing. By far the greater portion of it has been devoted to the employment of experts who have been assigned to coöperate with progressive officials in eliminating waste and establishing order in city management.

Results obtained in New York, where the work has been longest in progress are typical of those achieved in other cities. Most far-reaching among progressive steps *aken has been the clarification of the

city's budget and its conversion from an instrument giving license to official extravagance and waste into an instrument expressing a city programme of service and placing upon officials the obligation of demonstrating results for money expended in accordance with precise and unequivocal terms of appropriation.

The new conception of the city budget is succinctly stated in an analysis of the departmental estimates of the city of Philadelphia, prepared cooperatively by the Philadelphia and the New York Bureaus of Municipal Research for Mayor Blankenberg. This document, which will serve as a model form of budget for American cities of whatever size, states the main purposes of the city budget to be: To set forth a community service programme to citizens and officials alike; to compel consideration by appropriating bodies of the budget as a whole, in place of consideration of isolated and unrelated appropriation items; to lay the basis for citizen and executive control over departmental activities, and to furnish the means for checking expenditures against definite authorizations to expend.

Besides instituting a budget-making stem New York holds a yearly system budget exhibit to show just what is being done. First a private undertaking, for the past two years it has been made official. This exhibit conveys to a citizen in attractive and easily understood form a concrete idea of what his government is doing — information which no amount of official documents could succeed in communicating to him. Hundreds of thousands of people visit the exhibit; study charts of organization, announcements of work intended, reports of results accomplished, tables of expenditures and estimates; and examine the instruments employed by departments in performing their work-learning, in short, what it is that their government undertakes in their behalf. During the month in which the exhibit is held, heads of departments daily address large audiences regarding the work with which they are charged, and newspapers, often interested merely in governmental scandal or official personalities, print hundreds of columns of news regarding the concrete

problems with which these officials have to do. The budget exhibit is the most effective instrument anywhere devised for democratizing information on city business.

In six years New York City has closed a wide gap formerly existing between governmental business methods and the methods of efficient private business. lts accounting methods in 1911 are as efficient and modern as those of any great privately managed undertaking. Before reorganization, however, the city had no means of learning its assets nor did it ever know what were its existing liabilities. Money once authorized was money forever lost sight of, whether expended or not. As a by-product of accounting reorganization, the comptroller recently "discovered \$10,000,000 in unexpended balances of ancient appropriations, against which there were no outstanding liabilities, yet balances had been carried for years as definite commitments for which city cash was held in reserve. For example, the city has been paying interest on \$146,000, the cash balance of a sum set aside in 1894 to buy parks. In eighteen years the city has paid out in interest on this money needlessly borrowed upward of one-half of the amount of the principal. In the future, this condition cannot arise again, because, automatically, unexpended appropriations will be closed out at the end of the year when all liabilities, under the reorganized methods, will be shown against them on the city's books of accounts.

From reorganizing the methods of the water register's bureau, which now collects \$13,000,000 annually from the sale of water, \$2,000,000 a year has been added to the city's income.

Despite the fact that New York City buys \$20,000,000 of supplies a year, tradesmen of standing did not seek its business because shiftless city purchasing methods invited exploitation, and because the city neglected to pay its bills often until months after goods were consumed. By bringing purchases under control at the moment that orders are issued to vendors instead of only when bills are submitted, the city has been enabled to adopt an auditing system which compels department heads to forward claims for prompt settlement.

To make the honest tradesman's position as advantageous as that of a political contractor, New York is substituting definite, precise specifications for no specifications or preferential description of goods required. Since 1910 an official standardization commission, equipped with a technical staff and a testing laboratory, has been studying the city's supply needs, determining those best suited to its uses and preparing precise specifications which will indicate what the city wants in a definite and understandable manner to vendors, and enable purchasing agents and auditors to check with precision goods delivered against goods asked for.

Standardization of supplies helps officials in positions of control to prevent the purchase of extravagant or unnecessary items and to require, for example, the purchase of coal by heating units content instead of by weight, and to prevent one department from buying tons of meat cut ready "for the table" while another practices the wise economy of buying large quantities in carcass form.

Cost accounting, efficiency records, standardization of salaries so that compensation will match work done and not respond to political pull and favoritism, are some of the many other constructive efforts now being put forth by New York City officials in coöperation with citizens organized to promote efficiency.

As a result of six years' intensive, nonpartisan work, new standards have been erected in New York City by which official performance is judged. Borough President McAneny, succeeding John F. Ahearn as president of the Borough of Manhattan, is securing through efficient management double one results achieved under Mr. Ahearn at less expenditure. Yet the general public is more sensitive to the slighteSt evidence of bad service in any of the bureaus under Mr. McAneny's jurisdiction than they ever were to the grossly unsatisfactory service given by Non-Ahearn.

While New York has been systematized its business, it has been broadening social programme. During the last years New York City's Health Department, with citizen cooperation, has launched and put into execution an active programme of tuberculosis prevention; has organized a bureau of child hygiene for promoting the health of infants and school children which serves as a model for the country. During the time that Comptroller Prendergast has been pushing to completion the business reorganization of the finances of the city of New York, he has conducted an extensive inquiry into the problems of dependency among New York City's children. Learning that the city, through private agencies to which it makes regular payments, cares for 20,000 children committed for delinquency or dependency, he set out to find whether this dependency is inevitable or may be forestalled by proper governmental action. His concern for economy, therefore, has not only related to economy in expenditure, but has directed itself toward preventing the costly causes of family breakups and poverty leading to juvenile dependency, and toward finding out how the coöperative strength of the city government can prevent misery and destitution.

At last New York City is conceiving of health work as an aggressive, persistent effort to save life and to give health to its citizens. But not until 1911 did the health department apply to New York City's health problem the simple fact that pure milk combined with the teaching of mothers easily prevents infant slaughter in the summer months. Last year, by providing milk stations where infants can be brought for examination, where mothers can be taught to care for them, and where suitable pure milk can be provided, the health commissioner claims a saving of 1,100 infant lives in six months. By not taking these simple measures years ago, untold thousands of lives have been needlessly lost. Other branches of health department work are progressively aiming toward prevention. Prevention implies a community standard of health to be achieved or protected.

With regard to the increasing enthusiasm of citizens to promote governmental efficiency, Mr. R. W. Fulton Cutting, New York's most conspicuous worker for good government, founder of the Bureau of Municipal Research, in addressing recently an audience of New York City's leading business and financial men, said:

We are living in a generous age. Never before, perhaps, in history, has the government so largely exercised its own resources and employed its own powers to grapple with our great problems, these great social problems that concern us. The fraternal spirit is in the air, and we must not dare to manacle that spirit by any unwise consideration of the inconsiderate tax-payer. We want a great deal better education than we have. We want better service in our municipal hospitals. We want better houses, better methods in our battle with tuberculosis.

New York's civic wants are the wants of practically every large city in America. New York's leadership affects in greater or less degree every one of these cities. It has intimately affected Philadelphia, Cincinnati, and Chicago, where city officials are adopting efficiency methods and citizens are supporting active bureaus of municipal research or efficiency.

But even with the great progress that has been achieved, the work has only been begun. No future administration of New York City will find it desirable or profitable to undo the constructive work of the past two years. But until new ideals and standards are irrevocably fastened on the city government, continuous interest and active coöperation of citizens to compel the continuance of progress will be required in New York, as in every other American city. Costly delay in achieving governmental improvement now results from the isolation of effort in different Work done for four or five cities cities. by local bureaus of municipal research should be done for all the cities of the nation by a National Bureau of Municipal Research. By means of a national agency, publicly or privately supported, equipped to give information of best practices evolved in any city, and to help in systematizing and energizing city government, America should be able, in ten years, to convert its municipal government from a national embarrassment into its most conspicuous national achievement.

WHAT SHALL WE DO WITH OUR BANKS?

WHAT A COMMERCIAL BANK SHOULD BE. THE ALDRICH BANK PLAN THE MONEY TRUST AND THE REMEDY

N THE panic years, 1907 and 1908, thousands of business men all over the country came face to face with a new and startling commercial peril. The heart of the business world, the banks, failed in its function. Men who, all through their business lives, had carried on their activities freely and without reserve on their credits at the banks, found themselves suddenly paralyzed.

From that day to this, a hundred prescriptions, nostrums, and panaceas have been discovered and invented to prevent a recurrence of the malady. Worst of all, many of the best and strongest of the leaders of business have undertaken to eliminate as far as possible the credit function of their banks. Several hundreds of millions of dollars have been raised by manufacturers and merchants by the sale of permanent bonds and stocks, so that they will never again be caught in a crisis dependent upon money borrowed from the banks.

Beyond this heroic expedient of substitution, real efforts are making to mend the offending organ itself. The Aldrich Plan, unfortunately so called, is the most complete alleged panacea so far adduced. Its purpose, in a phrase, is to fix a rate of discount and enable the associated banks to keep the rate down to that point and pour out money to prevent another case of heart failure by printing and circulating fiat money whenever it is needed badly enough.

Every man in business faces this same danger and this same problem. All men know that something must be done.

What must we do to insure the business world against a second and a worse collapse?

The first step, undoubtedly, is to correct some of the serious tendencies in the banking world itself, revealed in full in 1907. Therefore, the first thing to discover is what a commerical bank ought to do, how it ought to do it, and the steps it may take to that end.

The first article on this subject, therefore, is a revised article written by Mr. Joseph B. Martindale, for the Bankers' Convention of 1911. It is the opinion of the president of one of our most successful commercial banks as to what such a bank should be and do to discharge its obligations to the people whose deposits make it a bank.

WHAT A COMMERCIAL BANK SHOULD BE

BY

JOSEPH B. MARTINDALE (PRESIDENT OF THE CHEMICAL NATIONAL BANK, NEW YORK)

LL my business life has been spent with a purely commercial bank, so l, naturally, look upon banking from that standpoint. The bank with which l have had the honor of being connected for many years numbers among

its depositors individuals, firms, and corporations in practically every line of mercantile and commercial life, and sum dealers are located in every important distributing centre of this country are reason of this, we believe we are position to form an estimate of quirements of the mercantile interests of the country, and we endeavor to meet them in a spirit of fairness and liberality.

As most of the loans and discounts of a bank of this character are made simply on the promise of the borrower to pay, on his unsecured note, it is vitally essential that the management have a proper organizatior. to watch that credit.

The affairs of a bank should not be permitted to rest in the hands of one or two men. In our institution, the more knowledge the other officers and senior clerks have of the bank's affairs, the better it pleases our management and the better the results attained thereby for the bank. Experience has taught me that a broad policy of educating your best men and developing them gradually to accept greater responsibilities brings good results in the present time and insures for the institution a good equipment for the future. I have watched this policy of development very closely with a great deal of satisfaction, and, little by little, our men are growing up to accept and handle responsibilities satisfactorily, which means much for the continuation of the success of the institution.

It is, also, of the greatest importance to commercial banks that their most vital department - the credit departmentshould be very efficient indeed. Men should be selected when they are young fellows for appointment in the credit department, should be schooled and drilled, and as they develop they should relieve the officers of the institution of a great deal The officer whose final "yes" of detail. or "no" means a profit or a loss for the bank should not be tied down to different analyses, which can be handled by younger men when they have had a sufficient amount of instruction and training. Some men have a natural aptitude for studying and analyzing credits both from a theoretical and practical standpoint, just as other men have natural aptitudes for the sciences and professions.

After some years of experience, I am free to say that the personal equation has a great influence upon an officer of an institution in making his decision, and determining whether to say "yes" or "no" to a proposition. There is something about every man's personality that affects the man with whom he comes in contact, and no one, in my opinion, no matter how strong his own personality may be, is free from this influence to a greater or less extent. Sometimes we are woefully deceived in personalities, and it is well always (and we have practised it for a long time past) to have the credit department analyze carefully from a purely impersonal and cold-blooded standpoint the statements filed, eliminating entirely the personal element.

Some of the best talkers and some of the most attractive personalities are the poorest business men; and against these men the impersonal analysis is the best protection.

In making investments for one's bank, or loans for one's institution, we all should realize that we are simply the trustees of other people's money, and, such being the case, we cannot take too much care in handling these funds. lf it were our own money, it would be entirely different, and we might, out of sympathy for a fellow, or because we liked his attractive personality, indulge ourselves in this way, but, as we all are simply holding in trust money deposited with us by our dealers, and the money invested by our stockholders, we must, in order to be true to that trust, use every precaution and every device and system that has practically demonstrated itself to be a safeguard.

A number of incidents have come under my own observation in recent years, where matters which looked trifling (but which were found to be very important later on) have caused us to exercise caution, and thereby avoid losses. To be practical, rather than to generalize, I have always claimed that, under normal business conditions a stated amount of capital (borrowed as well as invested) should allow a concern in any line of business to carry a certain amount of merchandise. This merchandise later is converted into bills and accounts receivable; later on into cash; and upon these transactions, subject to the charges of conducting the

business, there should be realized a certain amount of net profit. All of these items in a well-organized and well conducted business should be in relative proportion, one to the other. And if the best results are to be attained, the management of any concern will see to it that each dollar of its capital carries its proportion of merchandise, and will also see to it that the merchandise is moved rapidly and converted into a bill or account receivable; and that its outstanding debts are promptly collected, and that its cash is used to reduce materially, or entirely liquidate, its indebtedness, thereby saving interest and expense. We have in a number of instances followed this natural sequence in business, and have found any number of instances where each dollar of capital (invested or borrowed) was not performing its full duty, and following the matter still further, we found it due to either extraordinary expenses, or losses, or due to indolence and a lack of an aggressive policy in handling the affairs of the concern. These are "ear-marks" which will denote a condition of this kind, and we believe that it is our duty to examine these conditions thoroughly.

As an illustration of this, some years ago, a certain firm reported in their statement an invested capital almost equal to the amount of its annual sales. At the same time, their statement showed a substantial liability for borrowed money. It seemed incredible that a working capital invested and borrowed of more than the amount of the annual sales could be correct, but that is what this report showed. Upon closer analysis and further information, it was found that in the accounts receivable of the firm, there were many old accounts running years back, which they were carrying as good accounts, and also substantial sums due the firm from the partners, which were, in other words, overdrafts. When the statement was all boiled down, it was found that their actual capital was less than one-half that reported in their statement. These are the "ear-marks" which, upon close observation and the knowledge of credit, prove invaluable to one's institution

It is vitally important in examining

and passing upon a statement, that one should be thoroughly familiar with the conditions surrounding the business during the year. Conditions may have made it impossible for any concern to make money, and where a concern reports a gain in its capital, one owes it to himself and to his institution to inquire thoroughly and closely as to the causes which produced such a result when all the conditions were adverse.

As an example, we have the accounts of a number of houses in the same interior city in identically the same line of business, and while the amount of their capital varies (and, consequently, their volume of business), we can each year, by working out the percentages, see which concern is obtaining the best results upon its volume of business and the amount of its capital.

It was the practice of banks years ago to loan money without receiving statements, whereas now the custom of filing statements is almost universal.

Some people may think this is inquisitorial, but where a bank is loaning money upon the unsecured obligation of any concern, it is perfectly within the right of the bank officer to request (not out of curiosity or in an arbitrary spirit) the fullest details of the concern's affairs. This information, of course, is absolutely confidential, and no bank officer, who realizes the confidential relations that exist between a depositor and a bank, will ever divulge to any one such information furnished him in the strictest confidence.

Furthermore I have always believed that an independent audit by a firm of certified public accountants is desirable. And from the standpoints both of the borrower and the lender it is wise at least once a year to have the affairs of a firm or corporation examined and audited by a high-class firm of auditors.

A striking illustration of this was brought to my attention some years ago and while there was no loss entailed to the creditors, the outcome was very disastrous to the firm itself. An old-established firm of excellent standing and reputation carried two bank accounts and in addition sold its paper in the open market through brokers. It rendered statements annually to its banks and to the brokers. The firm through whom it sold its paper, in verifying the statement (as is the custom), found that two items, the amount of cash on hand, and the amount of bills payable for borrowed money, did not agree with the facts as shown by the banks' records. This discrepancy was called to the attention of the senior member of the firm, and his explanation was as follows:

He formerly had been bookkeeper and cashier for a number of years for a firm which preceded his own firm, and it had always been the custom of the old firm in rendering a statement to its banks to deduct from the amount of the bills payable for borrowed money a large per-centage of the cash they had on hand. In other words, the old firm took the position that, having a large amount of cash on hand and in bank, they (the firm) were justified in applying a large percentage (about 90 per cent.) of the cash on hand as an offset to the amount of money they were owing at the time they made their statement. This, of course, was entirely wrong, though it was not done with any object to deceive either the banks or the note-brokers. But after it became known, the firm could not sell its paper in the open market. The result Though the creditors was liquidation. were all paid in full, much of the business of the firm drifted into other hands. This incident not only proves conclusively to the mind of the banker the necessity for an exact statement of the actual condition of the business, but it also is a strong argument for an independent audit of accounts.

An independent audit conveys to the lender of money the knowledge that the affairs of the firm or corporation, whose paper he is considering, have been examined by a disinterested party of experience and standing, and that, as a result, the figures submitted are unbiased. This custom is becoming, one might say, universal. We now have any number of statements prepared by accountants each year, and we know of many instances where the monthly trial balances are prepared by accountants, who spend from a day to three days each month in going over the previous month's business. At the end of the firm's or corporation's fiscal year, these accountants have an inventory prepared under their own supervision, value the stock of merchandise themselves, audit the books thoroughly for the full year, and prepare an unprejudiced statement of the concern's affairs.

I think it is advisable for every large bank to have one or more of the members of its credit department a thoroughly equipped auditor. In a number of instances we have been called upon to go over the books of some of our clients and have sent one of our own employees to do so, with satisfactory results.

On the other hand it goes without saying that there are cases where some of the very best concerns of this country have never made, and will never make, detailed statements of their affairs. These are the exceptions, however, and these exceptions should not be used as an argument against the desirability of obtaining very close data regarding all the necessary items that go to make up a complete statement of a firm or corporation.

We have always taken the stand that, where a concern is selling its paper through brokers, or borrowing of its banks, it should settle its merchandise obligations in the shortest possible time, and obtain the very best biscounts for so doing. - It certainly is not good business procedure for a firm to borrow money and then allow its bills to run to maturity, and in some instances past maturity. It has been our practice for many years to make trade investigations and revise our reports every six months or every year, at least; and if we learn, as the result of these inquiries, that our borrowers are not taking ad-vantage of the best trade di counts, we bring it to their attention immediately.

In safe-guarding investments it is desirable that banks in the same city and neighboring cities should exchange information to the fullest extent. There have been very few instances where we have had any occasion to regret that we have been perfectly frank and open in

answering the inquiries we receive daily and almost hourly from our friends in New York and elsewhere, giving them the result of our experience in handling any of our accounts. This is of vital importance to all concerned, and it is our earnest hope that this free interchange of opinions will continue to expand.

I think that credit is too easily obtained in this country, for, while I appreciate that the development and expansion of the country depends on the free extension of credit, my observation has taught me to believe that one of the cheapest instruments of commerce in the United States to-day is credit. We are all apt to grant credit too liberally. This applies to the banks as well as to our friends, the note brokers, but I am constrained to call attention to the fact that many small houses are borrowing money in the open market to-day through brokers, who, by reason of the limited amount of their capital and volume of business, are not warranted in so doing. The danger to the man with a moderate capital is that he regards this money which he has borrowed as permanent working capital, which encourages him to inflate his business beyond prudent and safe lines, and. suddenly, when disturbances in the business world occur, or panic arises, he finds himself far from shore, with his obligations for borrowed money maturing and with no facilities to meet them. It always occurs at such times that his collections are slow, and, naturally, he finds himself in a quandary. We have seen so many instances of this nature in our own experience that we cannot too strongly urge the necessity for care and conservatism. I would suggest also that the banks and the note brokers work closely together, for equal benefits are to be derived in a free interchange of views, experiences, and ideas. We have found it so in our own case, and we believe that this relation is becoming closer each year.

In investing the funds of a bank, one's first thought is safety, but it is equally important to invest the funds in flexible assets, and, in my opinion, there is no class of investments superior to a merchant's note of undoubted standing and responsibility, The panic of 1907 and its aftermath, with the small percentage of commercial failures and the gradual but steady liquidation which has taken place from that time up to the present time, prove conclusively that this class of investments, if examined thoroughlyand selected carefully, is an ideal one.

I do not mean by this that it is possible to invest your funds for all time in commercial paper without sometime facing a loss, but the experience of the last three years and the information derived from a study of the statements received during that period show how gradually but steadily our manufacturers and merchants have been able to reduce their liabilities through corresponding reductions either in the amount of their merchandise or in the amount of their bills and accounts receivable, without serious result to themselves or to their creditors. Looking at the matter from the standpoint of a commercial banker, I think you will all agree with me that a short-time obligation is preferable to a long-time obligation.

Bearing upon this matter of flexibility, I am constrained to mention the fact that, from the standpoint of good banking, it is not in the province of any bank to furnish permanent working capital for any one of its depositors. A bank whose liabilities are all payable on demand should observe closely the well-established rule that its borrowers should at sometime during each twelve months liquidate their indebtedness to the bank for a reasonable period of time. In my opinion, this is neither unjust nor arbitrary, and is dictated by well demonstrated and sound banking and business logic.

I am constrained to mention briefly how important the matter of the investment of a bank's funds in commercial paper is to the business interests of this country, and how vital it is to the development of the country. Such a large percentage of our commercial business is conducted upon borrowed capital that, if our country is to reach its greatest development, it is essential that banks in all parts of the country should be in a position to handle the means for expansion understandingly and safely.

HOW TO GET RID OF FLIES

THE WAY THEY "SWAT" THEM IN TOPEKA AND ORDER OUT THE BOY SCOUTS TO SLAUGHTER THEM — HOW THEY TRAP THEM IN WILMINGTON

BY

FRANK PARKER STOCKBRIDGE

HE war on the house fly will share with the Presidential campaign the interest and activities of the American people for the next few months.

Somewhere in the neighborhood of a billion flies were killed in the various campaigns of 1911 and filthy breeding places were cleaned up that, if left alone, would have insured the propagation of additional uncounted billions. The summer of 1912 will not see the extermination of the species. But if the plans of national, state, and local civic organizations and health departments are only half carried out, the outlook for the fly crop of 1913 will be very much less encouraging — to the fly.

It has taken a surprisingly short time for the public to grasp the idea that the fly is the most dangerous wild animal of the North American continent. It has taken a still shorter time for this conception of the fly as an important factor in the national death rate to translate itself into effective action. A dozen years ago only a few scientists recognized the fly as a disease carrier. Its habits and life history were almost unknown. The question, "Where do all the flies come from?" was regarded as an unimportant and somewhat humorous riddle, like "Where do all the pins go?" About the beginning of the twentieth century scientists began to ask the question seriously.

What the inquirers found startled the public. Early investigations under the direction of Edward Hatch, Jr., then connected with the Merchants' Association of New York, proved that one of the fly's favorite breeding places was in the sewage and filth deposited along the river front by the tide. Dr. D. D. Jackson found

the germs of typhoid and other diseases on the feet and bodies of practically every fly trapped on the recreation piers. Dr. L. O. Howard, Chief of the Bureau of Entomology of the United States Department of Agriculture, directed investigations which proved the affinity of the fly with filth — that it prefers as its habitat and the nursery for its young the filthy stable or outhouse, the garbage can, or the dirty corner under the kitchen sink. Dr. Howard proposed the name "typhoid fly" — a suggestion that caught the popular fancy and aided in fixing the insect's proper status. Then Dr. S. J. Crumbine, Secretary of the Kansas State Board of Health, came along with his epigrammatic injunction, "Swat the fly!" and the campaign was on.

In the spring of 1911 one of the Boy Scouts at Weir, Kans., suggested that his organization might be of service in distributing some of Doctor Crumbine's This poster, by the way, has fly posters. been found one of the most effective means of educating the public to the danger of the fly. The border design, originated by the Florida State Board of Health and adopted by many others, depicts the progress of the fly from all sorts of filthy places to the dinner-table, the cream-pitcher, the sick-room and the baby's nursing-bottle, while the "House Fly Catechism" that goes with it is admirably calculated to arouse hostile emotions toward the fly.

Doctor Crumbine was quick to see possibilities in the Boy Scouts. He suggested a plan for a general town clean-up in Weir, to be undertaken and managed entirely by them. Then, through the Rev. Walter Burr, of Olathe, Scout Master for that district, he enlisted the Scout organizations throughout the state.



ONE OF THE MOST EFFECTIVE MEANS OF EDUCATING THE PUBLIC A REALISTIC ILLUSTRATION OF THE PROGRESS OF THE FLY FROM WIS

A REALISTIC ILLUSTRATION OF THE PROGRESS OF THE FLY FROM (13 DINNER TABLE TO OURS

The plan adopted by the Boy Scouts of Weir and followed elsewhere was simple and effective. The boys divided the city into districts and themselves into squads, each covering a district. Then, upon a given day, after wide publicity through the local papers, they set about cleaning up the town. The city authori-ties had given them permission to haul away the rubbish and garbage. They went at it systematically. There was the rake brigade, the gunny sack brigade, and the hauling brigade, with a corps of officers to see that things worked smoothly. Their preliminary "scouting" had shown them just where to go - and they cleaned the town. In the evening a dinner was served to the Scouts by the town fathers and mothers and every indication pointed to a very thorough arousing of the public conscience on the fly question.

The Boy Scouts were not content to let the matter rest there. On their own initiative they bought wire screening, persuaded a local druggist to give them some wooden yard sticks that he had been using for advertising purposes, and with these materials constructed "swatters" which they distributed without charge, two to every house in the city. Then they went to the Commercial Club and obtained funds for building a large number of fly traps, which were placed about the streets.

Even then the Scouts were not satisfied. Doctor Crumbine in his tentative programme had suggested that they might try to get Weir to adopt the State Health Board's model anti-fly ordinance, which requires the removal of all refuse at least once every ten days from April to November, and that every repository of filth in which the flies might breed be made flyproof. The Doy Scouts took this suggestion as seriously as any of the others. They wrote "compositions" telling why the ordinance should be adopted, then appeared before the city council and The council acted read their arguments. favorably without delay. The city of Weir now boasts itself the cleanest city in America, but Olathe and many other Kansas municipalities are not far behind it, thanks to the Boy Scouts, and the youngsters of Weir have planned an even more thorough-going campaign for 1912.

One of the most successful anti-fly campaigns of 1911 was that conducted in Washington, D. C., under the direction of a leading newspaper, the *Evening Star*, with the coöperation of the local Health Department, the Associated Charities, and a few public-spirited business men. More than five thousand boys and girls took part in a two-weeks' fly-catching campaign which resulted in the destruction of more than seven million flies and in developing many valuable methods and devices for their extermination. The immediate stimulus was the prize-money offered by the *Star* — \$100 in all, ranging from a first prize of \$25 down to twenty prizes of \$1 each.

Paper boxes in which to place the dead flies were furnished free by a local box maker. The Associated Charities opened its branch offices as receiving stations. A local transfer company gave the use of a wagon for bringing boxes of flies to the Health Department, where each contestant's daily catch was credited to the youthful sportsman whose name appeared on the box. The flies were counted by measure - 1,600 to a gill. Flies could be killed for contest purposes in any manner except by sticky fly paper. The conditions and suggestions as to how to make large catches were published daily in the Star for a week before the opening of the contest on July 24th. The scores of the ten highest competitors were published daily, with notes of interest from the children as to the methods they found successful.

The power of coöperative effort, the value of organized and systematic methods, and the advantage of a fact ly start were all demonstrated in the success of Layton H. Burdette, the thirteen year old boy who won the first prize of \$25 with a total catch of 343,800 flies. Young Burdette had laid his plans carefully. He formed a company of twenty-five young adventurers to go after the first prize on a profit-sharing basis. The Burdette Fly Company, operating in the section known as George. Swn, distanced all competitors by almost 150,000 flies.

Traps, "swatters," and poisons were all used by young Burdette and his associates. One squad took charge of the traps and another of the poison devices, while all were armed with "swatters" which they found, on the whole, the most effective means of bringing down the game. Nor were their traps and poison dishes placed haphazard. Proprietors of meat markets, grocery stores, fruit stands, candy shops, and other places to which flies are naturally attracted, readily gave permission to the young adventurers to place their traps on the premises. The most efficient trap proved to be one of young Burdette's own invention. It consisted of a simple cone of wire gauze tacked to a wooden base containing a hole about three inches in diameter, the whole mounted on supports that raised the trap a half an inch above the surface on which it was placed. The lower part of the cone was covered with black cloth. There was a poisoned bait and the flies, entering, climbed upward toward the Very few flies once in a Burlight. dette trap escaped. The boys watched and tended their traps as carefully as if they were Hudson Bay fur-hunters. Many of the other contestants used boiling water to kill the trapped flies, but the Burdette Fly Company discovered that a wet fly does not occupy as much space as a dry one — and the flies were counted by bulk measure. So they used sulphur fumes to put their prey in condition for market.

Various forms of bait were tested. The Agricultural Department recommended saturated with milk. Doctor bread Murray suggested sweetened water in-stead of the milk and this was demonstrated to be more efficient. An ordinary flour and water paste was used with success by many of the contestants, and one small colored boy found a dead crab to be particularly attractive to the flies. The best place to set a trap was found to be neither in the sunshine nor in a deep shadow, but in a shady place close to bright sunshine. One boy invented an elaborate trap that electrocuted every fly approaching the bait.

Besides ridding the city of some

7,000,000 flies, the contest gave the city Health Department a valuable key to the sections which required special attention from a sanitary viewpoint. Records of the contestants were kept on cards, which were classified by districts, those in which the most flies were caught being the neighborhoods where filth was most likely to be found — for the house fly breeds only in filth and, unless driven by the wind, seldom travels more than 1,500 feet from the place where it was hatched.

This year the Star opened its campaign in February with 150 children enlisted. The necessity for making the campaign complete to the point of utter extermination was impressed on Washingtonians by statistics published during the contest by Doctor Howard of the Bureau of Entomology. He pointed out that in the climate of Washington twelve generations of flies are produced in a single summer. As one fly will lay 120 eggs, the result, if all of these should hatch and reproduce their kind in like ratio, would be appalling. The progression carried out by raising 120 to the twelfth power gives a total possible progeny from a single fly of 1,096,181,249,310,720,000,000,000,000. And as each female fly usually lays four batches of eggs, their unchecked development through twelve generations would make a mass of flies that would measure 268,778,165,861 cubic miles, or considerably more than the total mass of the earth. Such figures as these are calculated to emphasize the necessity of not stopping when only 7,000,000 flies have been killed. As a matter of actual experience and observation it is estimated that from each pair of flies surviving the winter some 8,000,000 living insects are propagated during the summer.

Some of the most effective campaigns against the fly have been conducted by women's organizations. The Women's Municipal League of Boston started in 1911 a campaign, largely educational, which gives a promise of eventual good results. Under the direction of Mrs. Robert S. Bradley, Chairman of the Sanitation Department, a large poster was prepared illustrating the life of the fly, telling how it is propagated and how

THE WORLD'S WORK

Please kill that Fly!

Whv? Because:--1. Flies breed in manure and other filth. Flies walk and feed on excreta and sputa from people ill with typhoid fever, tuberculosis, diarrhoeal affections, and many other diseases. 3. One fly can carry and may deposit on our food 6,000,000 bacteria. 4. One fly in one summer may produce normally 195,312,500,000,000,000 descendants. 5. A fly is an enemy to health, -- the health of our children, the health of our community! A fly cannot develop from the egg in less than 8 days; therefore, if we clean up everything thoroughly every week, and keep all manure screened, there need be no flies.

Will you help in the campaign against this pest?

Women's Municipal League of Boston.

THE BOSTON METHOD CARRIED ON BY THE WOMEN'S MUNICIPAL LEAGUE, WHICH, THOUGH NO VERY SPECTACULAR, IS NONE THE LESS EFFECTIVE NOT

it carries disease, with brief instructions for getting rid of it. These instructions, prepared by Prof. C. T. Brues of Harvard University, are so concise and complete that they are worth reproducing:

HOW TO GET RID OF HOUSE FLIES

All garbage and horse manure from stables should be always kept covered and removed once each week in summer, and all houses, yards and alleys kept free from filth.

Persuade your neighbors to take care of their refuse.

To thus deprive flies of their breeding places is the best way to get rid of them.

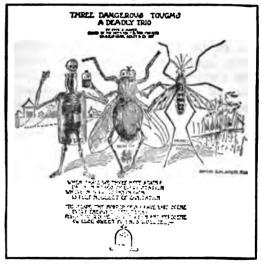
All houses and stores where food is exposed for sale should be thoroughly protected by screens, and any stray flies should be caught upon sticky fly paper, trapped, or poisoned.

The careless and dirty storekeeper must be controlled by public opinion; otherwise he will allow flies to infect the food he sells and continue to distribute disease germs among hiscustomers."

Several thousands of these posters were placed in various parts of the city. Members of the League sited the public and private stables and urged the use of disinfectants to prevent flies from breeding in the refuse. Most of the stable owners agreed to cooperate and experiments were made with various disinfecting compounds. Those having pyroligneous acid as a base

were found to be the most efficient. The League found also that condensed milk with tomato ketchup made an efficient bait for fly-traps. Small hand bills and pamphlets were distributed in large quantities and a very appreciable diminution in the number of flies was noted before the end of the summer. No effort has been made in Boston to inaugurate a "swatting" campaign, but the Women's League is continuing its work in 1912 on the same plan of destroying the breeding grounds of the insect. "One who permits flies to breed on his premises is to that extent himself a dangerous member of society," is the phrase by which the League is trying to arouse Boston to united action.

The Women's Civic League of Baltimore also conducted, in 1911, an effective anti-fly campaign, with the coöperation of the Baltimore Sun. Prizes were offered to children for killing flies, and ten cents a quart was paid for all flies brought in. Fly traps were distributed to the con-testants. The Boy Scouts of Baltimore, like those of Kansas, went into the work enthusiastically. The Children's Playground Association and the Infant Mortality Association gave assistance. The Police and Health Departments also coöperated. The contest lasted fifteen days from the latter part of July to early



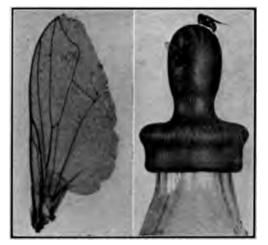
HOW THEY DO IT IN THE SOUTH THE GRAPHIC WARNING OF THE MISSISSIPPI HEALTH BOARD

August, and something more than 8,000,000 flies were killed. The actual count was 640 quarts, or about eight barrels of flies, which measure approximately 12,800 to the quart. After the contest was officially closed many of the children kept their fly traps in commission — including the ingenious young lady of eight who reported that her baby sister was the best bait for flies she had found.

Perhaps the most effective of the antifly campaigns of 1911 was that in Wilmington, N. C., conducted by Dr. Charles T. Nesbitt, Health Officer of that city. Certainly it is the most complete campaign that has been carried on entirely at public expense. Typhoid fever has long been epidemic in Wilmington. Doctor Nesbitt observed that the annual outbreak of the disease coincided very closely with the maturity of the first spring crop of flies. The city was full of breeding places for the insects. The sanitary conditions under which a large proportion of the population lived were of the most appallingly primitive nature. A quick survey showed that there was too much filth to be carted away at any reasonable expense. Doctor Nesbitt decided to disinfect the entire town and keep it so thoroughly disinfected that the flies would become discouraged and give up the attempt to propagate their kind. A suitable and cheap disinfectant was found in pyroligneous acid, a by-product of the distillation of turpentine.

Doctor Nesbitt began, not merely a war on the fly, but a general massacre. Carts, containing barrels of pyroligneous acid stationed at street corners, furnished bases of operation for men armed with sprinkling cans who poured the acid over practically every square inch of Wilmington. There were the usual objections from "conservative" citizens who maintained the right of the individual to do as he pleased on his own premises, but the work went on and between June 8th and July 17th the entire city had been sprinkled four times. The interesting and instructive lesson from this clean-up is found in the daily record of typhoid cases. Beginning with one case reported on June 1st, it reached a maximum on June 15th of ten cases reported in a single day. After June 23rd, four days after the second disinfection was completed, the number of new cases reported began to diminish until only five new cases in all appeared after July 10th, although the fourth disinfection of the town had not then been begun.

I have described the Kansas, Washington, Boston, Baltimore, and Wilmington campaigns at some length because they are typical of methods of fly-fighting that have proved more or less successful. There are very few states and cities, however, in which some effort has not been directed against the fly. In most cases this has been through publications, placards, and similar educational means.



MODERN SLAUGHTER OF THE INNOCENTS A MAGNIFIED WING SHOWING SPECKS OF DIRT WHICH THE FLY SHEDS OVER THE NIPPLE OF THE BABY'S BOTTLE

One of the most valuable of these publications is a leaflet prepared by Dr. W. E. Britton of the Connecticut Agricultural Experiment Station. Doctor Britton, incidentally, made an investigation in 1909 into the source of flies in certain Connecticut towns and traced them to the carloads of stable manure which are shipped to farmers from New York City. In four ounces of this refuse he found more than seven hundred fly maggots. For destroying flies, Doctor Britton recommends found an attractive and effective poison. The burning in a closed room of pyrethrum or "Persian insect powder," provided it is pure and fresh, as well as traps, sticky fly paper, and wire "swatters," are also recommended.

In Delaware, although the state authorities have ignored the fly pest, an antifly campaign was inaugurated in the city of Wilmington in the summer of 1911. A very efficient educational campaign has been conducted by the Indiana State Board of Health. Anti-fly publicity matter has been furnished to the newspapers; posters have been widely distributed; the traveling exhibit of the department carries special anti-fly cartoons, charts,



WASHINGTON'S CHAMPION FLY KILLER LAYTON H. BURDETTE WHO, BY MEANS OF HIS FLY TRAP AND OTHER METHODS, CAUGHT 343,000 FLIES AND WON THE \$25 CONTEST PRIZE OFFERED IN 1911 BY THE WASHINGTON "STAR"

and banners; and lecturers that accompany the exhibit give stereopticon and movingpicture entertainments in which the fly menace is emphasized. An anti-fly health ordinance promulgated by the department has been adopted in many municipalities. It provides for a fine of from five to fifty dollars for any person maintaining on his premises any filth in which flies may breed. Both the Illinois State Health Department and the Health Department of Chicago have issued pamphlets on the fly. Pamphlets are also circulated by the Iowa State Board of Health, the Maryland Agricultural Experiment Station, and the North Dakota, New York, Ohio, Pennsylvania, South Carolina, Texas, Virginia, Vermont, Wisconsin, and California State Health Departments. In Idaho, James H. Wallis, State Dairy, Food, and Sanitary Inspector, has been active in distributing pamphlets and posters and in urging local authorities to clean up. A clever and effective circular is Mr. Wallis's widely-circulated pamphlet, "The Auto-biography of a Fly." The Michigan Department of Health posts a striking placard in hotels, restaurants, and other public places. The headline, "Flies Poison Food," can be read across a large room. The Maine State Board of Health is circulating an anti-fly circular among school children. The Minnesota Health Department maintains a traveling exhibit which keeps up a continuous anti-fly propaganda. The Mississippi Health propaganda. Board puts its warning against the fly in the form of a cartoon entitled, "Three Dangerous Toughs," the other two being the mosquito and the whisky bottle. In Oregon the Board of Health began an extensive anti-fly campaign in 1911. arranging illustrated lectures in various cities and enlisting women's clubs, consumers' leagues, and other civic organizations, with the result of arousing a great deal of public interest. The North Carolina Board of Health circulates a con-densed "Fly Catechism" which originated with the Indianapolis Health Department.

"Either man must kill the fly or the fly will kill the man," is the warning of the Utah Board of Health. The Vermont Board of Health, working through local officers, requires the enforcement of sanitary anti-fly measures.

Asheville, N. C., has a Board of Health which claims in its publications that the fly has been practically exterminated through the enforcement of its anti-fly ordinance, the first adopted in any city. The Health Department of the North Carolina Federation of Women's Clubs is carrying on a state-wide anti-fly campaign at its own expense.

Berkeley, Cal. has been largely freed of flies through campaigns conducted by Dr. W. B. Herms, of the University of California.

One of the most effective anti-fly campaigns was conducted in Worcester, Mass., from June 22 to July 12, 1911. Ten barrels of flies were killed. The winner of the \$100 prize, a boy of twelve, turned in 95 quarts, approximately 1,219,000 flies, captured in traps of his own construction. The interest of Worcester has been largely stimulated by Dr. Clifton F. Hodge, Professor of Biology at Clark habits of the fly and the effort to enforce ordinances requiring food supplies to be kept covered.

Besides the newspapers already mentioned, many others have taken an active part in local fly campaigns. Coöperating with the Minneapolis Health Department, the *Tribune* of that city inaugurated very successful anti-fly movements in 1910 and 1911. The newspaper offered prizes ranging from \$50 to \$100 for dead flies, and in the two seasons about 12,000,-000 were destroyed. A similar campaign is being planned for 1912. It was found



COUNTING FLIES

DR. ARTHUR L. MURRAY OF THE HEALTH DEPARTMENT MEASURING THEM, 1,600 TO THE GILL, FOR THE "STAR'S" CONTEST WHICH RID WASHINGTON OF 7,000,000 FLIES

University, who has devised a number of simple but effective fly traps. His experiments have apparently demonstrated the possibility of completely exterminating the fly by traps and the screening or disinfecting of all places where they might breed. The Cleveland Board of Health conducted an extensive campaign of publicity against the fly in 1911, and the New York City Health Department has for several years carried on a continuous campaign of education through public lectures, posters, and exhibitions of moving pictures and lantern slides showing the in Minneapolis that traps were more effective than either poison or "swatters."

The San Antonio Express conducted a fly-killing competition early in 1911. A million and a quarter flies were killed by contestants for a \$10 prize, the winner bagging 484,320. The Houston Post, the Manchester (N. H.) Union, the Kansas City Star, the Milwaukee Sentinel, and the Charleston (W. Va.) Gazette, have also carried on active anti-fly campaigns in their own communities. Screening of all business places and large public set at the curb in the business





By special permission of the National Geographic Magazine Copyright, 1920 MALE HOUSE FLY RESTING ON GLASS AND SEEN FROM BELOW SHOWING THE SIX MUSCULAR LEGS, AT THE END OF EACH OF WHICH ARE TWO CLAWS AND TWO STICKY PADS TO WHICH GERMS AND SPORES ADHERE AND ARE THUS CARRIED FROM PLACE TO PLACE

almost completely rid the city of Blue Earth, Minn. of flies in 1911.

The fly nuisance, however, is by no means a distinctly urban one. There is hardly a corner of the country that is free from it. In eastern Washington, where a general typhoid campaign in North Yakima included a very complete anti-fly crusade, some very large catches were made on ranches remote from the city. In connection with a general clean-up, large fly traps were found to be very efficient and many ranchers used can be done. The meat hung in the sun provides a splendid place for the fly to lay its eggs and becomes infested with maggots before it can dry.

Local campaigns against the fly are only incidents in a national warfare, of which the educational phase is well under way. The United States Department of Agriculture, through its Farmers' Bulletins and other publications, is bringing the peril of the fly home to millions. The American Civic Association, through its fly committee, headed by Mr. Edward



MORE DEADLY THAN BULLETS THE HOUSE FLY WITH A CAPACITY FOR CARRYING 6,000,000 BACTERIA AT ONCE FROM PUTRIFYING MATTER TO THE FOOD ON THE TABLE, DESTROYS EVERY YEAR MORE PEOPLE THAN ARE KILLED IN BATTLE

them. "It is no exaggeration," says Dr. Eugene R. Kelley, Health Commissioner of Washington, "to say that even on the ranches they collected often as high as a bushel and a half of flies in three or four days." Not many years ago one could camp almost anywhere in the West or Southwest, without being bothered by flies. The white pioneer, like the Indian before him, found no difficulty in preserving meat by drying it in the sun the "jerked beef" of the frontier. To-day there are very few sections where this Hatch, Jr., is coöperating with "literature" and the personal efforts of its thousands of members in encouraging local campaigns. Possibly the most valuable service that Mr. Hatch, a pioneer in the movement, has rendered since his original study of the fly as a carrier of disease, is the "Fly Pest" moving picture film. This remarkable film, made in England at Mr. Hatch's direction, shows the development of the fly from the egg to maturity and conveys the lesson of its danger and general nastiness in a manner



ONE FLY ON A LUMP OF SUGAR WHICH IN A SINGLE SEASON PRODUCES TWELVE GEN-ERATIONS OF WHICH 8,000,000 FLIES NORMALLY SURVIVE

so graphic that it reaches the understanding even of the smallest children. It has been shown in about 2,100 moving picture theatres to audiences totalling more than 1,250,000 persons. It is in use by a dozen or more state and local boards of health and educational institutions and can be bought or rented at a very low rate by any one interested.

very low rate by any one interested. The indictment of the fly is not a difficult one to draw up nor is it necessary to resort to technicalities to obtain a conviction. And it ought to be obvious that the toleration of the fly in any community is an indictment of its people proof positive of a low order of general intelligence and civic spirit.

The crusade — for in the truest sense of the word this battle with the fly is a holy war — has been well begun. I have tried to make it clear that it is not impossible nor even very difficult to exterminate the fly. All that is necessary is to "clean up."

It is not necessary to wait until the automobile shall have completely displaced the horse if only a little care is exercised wherever horses are kept, for they provide the principal breeding places for the fly. Screening and disinfectants — pyroligneous acid, kerosene, chloride of lime — used liberally around stables will go far to exterminate the fly. Sewerage systems so arranged that the sewage is not exposed to the open air, and in their absence the screening and disinfection of all receptacles of filth and offal will go still farther. And when we add to these the burning of all garbage and similar refuse, the maintenance of sanitary conditions in kitchens, bakeshops, markets, and places where food is kept generally, and when we have trained the children to fear the fly as they would a rattlesnake, the battle will have been won.

All that is required is initiative — there is no obstacle in the way but indifference. The fly, almost alone among the public enemies, has no friends. There are no 'interests" back of the house fly. He is not useful even for fish bait. One may totally reject the germ theory of disease and still agree that the fly is a pest and should be destroyed. Flies are not kept as pets, so there is no sentimental outcry against their wholesale destruction. Even the S. P. C. A. regards them as outlaws. And the experience of 1911 has demonstrated not only that a very small prize will insure the death of a very large number of flies but that the new patriotism which the work calls forth is in itself a sufficient inspiration and stimulus.

As a nation we have always been partial to "slogans." Doctor Crumbine has given us a new one that is fast becoming a national battle-cry:

"Swat the fly!"



THE BREEDING PLACE OF FLIES EGGS HATCHING ON A PILE OF FILTH, THE BLIMMIN TION OF WHICH FROM CITY STREETS, FROM BLES, BACK YARDS, ETC., WOULD ENTINE DO AWAY WITH THE FLY PEST



MISS FELICE LYNE THE YOUNG AMERICAN SOPRANO, WHOSE REMARKABLE TRIUMPH AS GILDA IN "RIGOLETTO" IN THE HAMMERSTEIN OPERA HOUSE IN LONDON WAS FOLLOWED, ON FEBRUARY 4TH, BY AN EVEN GREATER SUCCESS IN THE ALBERT HALL

A PRIMA DONNA AT TWENTY

A NEW GREAT AMERICAN SINGER — HER TRIUMPHS ABROAD AND AT HOME — THE SIGNIFICANCE OF HER SUCCESS

NM OST New York opera goers remember that they heard a little girl singing the part of Lisbeth two years ago in "Hans the Flute-player," and most of them will recall with pleasure that they remarked to their husbands or to their daughters or to whomever it was they happened to have been sitting with, "A remarkable, strong, true voice to come from such a little body," or they will distinctly recall exclaiming "A real artist, and pretty and slender at the same time!" But one ventures to guess that not many of them remembered, after they left the opera house, that the little singer's name was Felice Lyne.

Be that as it may, however, there is no good American now who is guilty of such ignorance; for when, early in the winter, Miss Lyne made her début in the intricate rôle of Gilda in Rigoletto, and set all London talking, the news was speedily flashed to this country too, and set all New York talking, and all Boston and Chicago and San Francisco. Everybody on this side of the water was glad that it was given to an American to save Mr. Hammerstein's invasion of London from failure — for it was generally believed that a real miracle was necessary to save it.

Miss Lyne's successes have not been confined to the Hammerstein Opera House. On February 4th, she sang in the Albert Hall, and in this larger atmosphere the little American won an even greater triumph than had come her way before. A huge audience gave her twelve recalls; and the occurrence was recorded as one of the very greatest successes in the history of that famous concert hall.

Miss Lyne was born just twenty years ago in Missouri. Her parents are now living very simply and plainly in Allentown, Pa.

Five years ago, when she was fifteen

years old, she began to sing a few simple ballads. The next year she began training her voice, and by September, 1907, she was in Paris, where she stayed three years. Her rendering of Lisbeth in "Hans the Flute Player," in New York, was her first real work on the stage, and with this experience she returned to Paris to perfect herself in the prima donna rôles, in which she captivated the London opera goers. Her voice is rich and full-toned, and her small stature — she weighs only a hundred pounds — especially adapts her for most of her characters.

Perhaps the most remarkable thing about her success is the tremendous amount of work that she has done in the four years from the time she first arrived in Paris. To become familiar with instrumental music, to learn the French and Italian languages, and to perfect fifteen prima donna parts while mastering one of the most difficult arts in the world, is a tremendous task, for the most robust woman, and a marvel for a girl to accomplish between sixteen and twenty years of age.

Miss Lyne's success comes at an opportune moment to swell the steadily growing list of American singers of the first rank. Madame Eames, of Philadelphia, was one of the first American women to take her place among the internationally recognized interpreters of the world's great Madame Nordica, of Maine, music. joined her in this group of famous singers. Madame Schumann-Heink became American by adoption - and named one of her sons George Washington in token of her naturalization. Mr. Richard Martin, of Kentucky, is included in the brief list of the greatest living tenors. Miss Lyne, of Missouri, is the last to join the pany of these great voices. Her succe is another bit of evidence of a real gro in American appreciation of music -

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CHINA AS A REPUBLIC

THE MOST MOMENTOUS PROBLEM IN GOVERNMENT NOW FACED BY ANY PEOPLE — THE GREAT FORCES THAT PULL BACK AND THAT PUSH FORWARD

BY

PROFESSOR T. IYENAGA

PROFESSORIAL LECTURER IN POLITICAL SCIENCE, UNIVERSITY OF CHICAGO, A LEARNED AND SYMPATHETIC STUDENT OF ORIENTAL APPAIRS

BEFORE a stable government is established in China, many expected, many more unexpected, events must occur. No wise prophet, therefore, will risk his reputation by prediction about China.

reputation by prediction about China. There are, of course, in the midst of the capricious turns of the kaleidoscope of fortune, certain fundamental principles governing the growth of political institutions, from which China cannot free herself if she would. With these principles as his guide, and with a strictly neutral attitude toward Imperialists and Republicans, the writer makes here a modest attempt to weigh the impending question: Is China ready for a republic?

Although China has been under a monarchical form of government since the beginning of its history, that government is very different from a consistent, continuous monarchy, like, for instance, that of Japan. Over Japan there has reigned a House unbroken in its lineage since the foundation of the nation. And the people in all times have given to the ruling House the most unswerving allegiance. China, on the other hand, has had many changes of dynasties. The House of Chou reigned 800 years, that of Han 400, that of Tang 300, that of Sung 300, that of Yuan 80, that of Ming 300. The House of Ching — the present dynasty - has already reigned for 267 years. These changes of dynasties were accepted, or acquiesced in, by the people on the ground that the rulers were ordained by Heaven, that the outgoing House had, by its misrule, forfeited its sovereign rights, and that the incoming House, by dint of wisdom, knowledge, and power gained the title of the "Son of Heaven."

The first three great monarchs of China were Yao, Choen, and Yu. They were the philosopher kings, upon whose model is cast the political system of Confucius. They are the fixed stars by which all the succeeding generations of Chinese statesmen have guided the ship of state. When Wu Ting Fang and his associates demand the abdication of the boy Emperor Pu-yi, whatever new and radical ideas they may have in their heads, they cannot help harking back to the example of those ancient sage emperors.

When the Emperor Yao's reign was nearing its close, he named as his successor not his son, but Choen, another sage. Choen at first declined to accept the offer. But when he saw the lords and commons shouting their acclamations, not to the son of Yao but to himself, Choen finally ascended the throne, exclaiming, "It is Heaven who appoints me."

The Emperor Choen followed the same course, and bequeathed the crown to Yu, another sage. The nomination of a king by the acclamation of the people, is, in principle, not many miles apart from that of the election of a president by the votes of the people. In later history hereditary succession became the rule, and the mode of nominating an emperor by public acclamation was seldom resorted to. But the principle that the king is for the people, that his tenure of office rests upon the performance of the kingly virtues with which he has been commissioned by Heaven to rule, and that he who oppresses by tyranny brings down upon himself the penalty of dethronement or death - all this was never lost sight of. For this reason "China has, not inaptly, been described as a democracy living under a theocracy." In such a country, it might

be urged that the replacement of a Monarchy with a Republic is not an impossible task.

No class of hereditary aristocracy, as that of England or Japan, existed in China, with the exceptions of a few princes of the Imperial blood, the descendants of Confucius, and those of the statesmen who crushed the Taiping Rebellion. The rulers, the so-called mandarins, from the highest to the humblest district officers, are democratic in origin. They too have had to pass that portal of competitive examination which is equally open to all. In fact, the great sustain-ing principle of the Chinese State is singularly like that of the American democracy. There is no position under "the Son of Heaven" to which men of democracy. the humblest origin may not aspire, or which from time to time they have not reached.

The extraordinary duration and stability of the Chinese nation must have depended largely upon its remarkable self-governing capacity. The germ cell of China's political organism is the family. Upon this base is built up the edifice of the State. As each family is governed in accordance with its own immemorial customs, so each village, a composite of families, is governed likewise by its headman and elders. A number of villages and towns grouped together make a district, which is the unit of the Chinese administrative system. At its head is the *Chib-hsien*, or district magistrate, who combines in his person various functionaries of a modern municipality. But most of the business of the district is conducted by its elders and headmen nominated by the Chib-hsien. A group of districts forms a prefecture, whose head is the Chi-fu, or prefect. All these administrative divisions combined constitute a province, which is under a governor. Some provinces are grouped together under a governor-general or viceroy. But every village, every district, every province, every viceroyalty, is self-contained and autonomous.

Over this structure of state is superimposed the Imperial Government of Peking. Its motto, however, has been, "let well enough alone." It was satisfied when the contributions allotted to each province were forthcoming, when peace and order reigned within them. So it will be observed that the chief difference between the Chinese system of local government and that of the United States is that in China all local officers, from the *Chib-bsien* to the viceroy, are appointed, and degraded, directly or indirectly, by the Throne, not by the people. Even this distinction, however, loses its sharpness when it is remembered that public opinion in China, rudely expressed as it was, often forced the Throne to remove and replace the unpopular official.

Another fact that illustrates the striking development of the Chinese self-governing instinct is in their power of combination, seen in the organization of their secret societies. China is honeycombed with these secret societies. The seventeen most prominent ones have a membership of more than six more than six millions. And if the article written by a revolutionist, published in the Chugai Shogyo of Japan, November, 1911, can be relied upon, it seems that it has been through the agency of these societies that the present revolution was begun and has been engineered. And herein is the very explanation of the marvelous swiftness of the movement which has surprised the Western critics. The plans of the conflagration had already been mapped out. It needed but a match to set the fire ablaze.

Another element in the social and commercial life that demonstrates the cohesive power of the Chinese is their guild system. It is this that upholds their commercial integrity. These guilds, long before the advent of postal and banking systems, had carried on the operations of letter exchange, money orders, and banking.

Briefly then, it seems likely that China, because of her talent and experience in self-government, would have no trouble in setting up republican government in her separate states. "The real difficulty begins," as Archibald Colouhoun, in Fortnightly Review of December, 19 points out, "when we try to prothe connecting link to federate these states into a homogeneous whole."

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When we turn to the other side of the question, however, we at once discover that all is by no means smooth sailing. The leaders of the revolution are indeed confronted with tremendous problems:

1. Can the monarchical idea in China be wiped out of existence or replaced by the republican idea without disrupting the nation?

For centuries the monarchical idea has been the dominant principle of China. Although it is true that China's imperial idea was to a certain extent colored with the democratic, it is a hundred times truer that the Chinese emperor was not looked upon by the people from the same standpoint as a president would be. The emperor was regarded as semi-divine, the "Son of Heaven," representing the Deity and ruling the people in His behalf. He was the Patriarch of the great patriarchal state; the Father and High Priest of the people. In short, the "Son of Heaven" "was the focussing point in the social, religious, and political life of China."

In a delightful grove in the south-eastern quarter of the Chinese city of Peking there is an altar, the most remarkable of its kind in the world. It is the sacred "Altar of Heaven." It has no shrine, no pagoda on the top of it, its colonnade is formed by the cedars and cypresses of the grove which surrounds it; and the dome of this spotless white marble pedestal is the blue sky. In the centre of this roofless rotunda there is one marble slab which is regarded as the centre of the universe. It was on this central disk that the emperor has been wont to prostrate himself to worship the Invisible Deity under the blue arch of heaven, and to pray for the welfare of his people. It was the most solemn and impressive ceremonial known in China. It was symbolical of the trust that the "Son of Heaven" has received from On High to rule his people as a father rules his children.

China is not, as a matter of fact, a relius nation. Nevertheless, it is worthy

of note that for all her materialism she has founded her whole philosophy of life on an ethical or moral basis. And the corner stone of the foundation was the imperial idea. Upon it rests Confucianism, upon which China in turn has rested for ages. The five relationships of Con-fucius — the "highest good" of China's ethics - i. e., sovereign and subject, father and son, husband and wife, elder and junior, and the relation existing between friends — put the monarchical idea over all. The moral forces that governed Chinese society, ensuring peace and order, were filial piety, loyalty to the sovereign, reverence for the past, respect for age and seniority, and faithfulness to one's friends. When we scrutinize these principles and compare them with the Western democratic principles, it becomes immediately apparent that most of them are poles apart from those of the West. Can a national organism throw away in a day the vital principles by which it has lived for centuries, and at the same instant replace them with those that are alien? Can a nation stand such a cataclysm without disruption?

Furthermore, "the root idea of democratic government is that of individual responsibility and liberty"; but individualism is a theory which is entirely foreign to the Chinese. The unit of Chinese society is not the individual, but the family, and it is to be remembered that the Chinese family includes the dead as well as the living. It is built upon, and sustained by, ancestor worship. Can the theories of individualism grow in such a soil within a night? I have said that Chinese society is democratic; but China has not been democratic in a political Her polity has been monarchical. sense. and well has it fitted to the genius of the nation.

Would not disintegration set in if the chain that links China into a whole were broken? The London Saturday Review of December 19, 1911, asks these pertinent questions: "Is it conceivable that Mongolia, Tibet, and Turkestan — to say nothing of Manchuria would remain members of a state which had lost the emblem of cohesion implied

in the imperial concept? Or are the 'United States of China' to consist of the eighteen provinces only, and the great dependencies to be held to their allegiance by force if they demur? But is it likely that even the eighteen provinces would cohere in the absence of the traditional link? The Cantonese might accept Sun Yat-sen as president of a republic, but would the provinces north of the Yangtsze agree?" In face of the common enemy, the Manchus, and to effect their downfall, the leaders of the North and South might hit on a compromise. But how long would such a patch-work last? These questions are not easy of solution for the republicans.

2. The second problem that confronts the leaders of the revolution is this: Is China fitted to become a republic?

Montesquieu's axiom that a big country is not fit for a republic is inapplicable at the present day to such a country as the United States, because the phenomenal development of the means of communication has abridged space and time. But the axiom might easily be applied in the case of China. The eighteen provinces alone are enormous, and the means of communication are extremely poor. The total mileage of the railroads already built within the eighteen provinces does not exceed 2,700. This is only half of the railroad mileage of Japan, a country that is not larger than one of the Chinese prov-inces, Sze-Chuen. The state of Illinois, one fourth the size of Sze-chuen, has five times as many railroads as the entire China proper. It takes from thirty to forty days to reach Chengtu from Hankow. A candidate for the presidency of China might require at least three years for a campaign tour, if he cared to visit every important town of the country.

Again, there is a great difference in speech, characteristics, even customs and manners, among the Chinese of different localities. So numerous and different are the languages and dialects spoken within the confines of the Middle Kingdom that, as has been humorously said, they can furnish a new tongue for every day of the year. A Cantonese cannot understand a Pekingese. To be intelligible to one another they must use the Mandarin dialect or some foreign tongue that is known to both. Nor are they any too "To a native friendly with one another. of Chihli a Cantonese is more a foreigner than a Manchu." This illustrates how extremely provincial the Chinese are. And there are such contradictions and inconsistencies in the institutions of dif-. ferent sections of China that a wit has said, "One never can tell the truth about China without telling a lie at the same This lack of homogeneity in time." speech, character, and institutions among the Chinese, is not necessarily an impassable barrier to the adoption of a republic, but must inevitably act as a great drawback.

3. The third great problem is this: Are the Chinese prepared to operate a republic?

Let us see to what extent China is provided with some of the indispensable requisites for the successful working of a republican form of government.

One of the requisites is a universal Within the past decade popular press. newspapers in China have increased with amazing rapidity. In Peking alone, which had no papers except the Official Gazette in 1902, there are to-day sixteen dailles. Most surprising of all, one of the papers is edited by a woman! The total number of dailies, periodicals, and magazines published in the entire empire is 314. Since the opening of local assemblies and the Tzu Cheng Yuan (or Senate), speeches also have begun to be heard in the land of Confucius, where public speaking was heretofore looked upon as a sure sign of madness, or was considered at the least bad manners. But, after all, these are only voices crying in the wilder-The Chinese press, however strikness. ing its growth, sinks into insignificance when compared with the 20,500 dailies, weeklies, and monthlies of the United States. China is far from being ade-quately equipped with the organs of public opinion necessary to run the machinery of a republican government for her people, which are five times as numer ous as America's.

Another difficulty in the path of

republicans is the extreme poverty of the Chinese masses. It is not a pleasant task for a Japanese, whose country itself is hard pressed by lack of wealth, to point out the poverty of the Chinese. lt nevertheless, true that China's is. millions are to-day barely keeping themselves alive. The average wage of a day laborer is from five to ten cents of American money. And fortunate would it be if all China's workers could get this pittance. The brilliant author of "Chinese Characteristics" is not indulging in witticism when he says, "A Chinaman with two American dimes per day coming in will be well fed, well clothed, well housed, will smoke more opium than is good for him, and will be able to indulge in theatre-going and other social extravagances to his heart's content.'

The Chinese are a hard working people, skilled in the arts and crafts, and endowed with remarkable commercial abilities. Why, then, is this gifted people condemned to live so close to the edge of mere subsistence? Their family system has truly been a snare. The author of "The Changing Chinese" rightly finds in it the cause of China's poverty. And he sees no hope for the speedy amelioration of conditions. "Misunderstanding the true cause of our (Western) success," writes Professor Ross, "their naïve intellectuals, who have traveled or studied abroad, often imagine that a wholesale adoption of Western methods and institutions would, almost at once, lift their countrymen to the plane of wealth, power, and popular intelligence, occupied by the leading peoples of the West. Now, the fact is that if, by the waving of a wand, all Chinese could be turned into eager progressives willing to borrow every good thing, it would still be long before the individual Chinaman could attain the efficiency, comfort, and social and political value of the West European or American. It may easily take the rest of this century to overcome ancestor worship, early marriage, the passion for big families, and the inferior position of the wife." This able writer may have taken a too distant view, but it is certain that ruch time is needed to bring about that

material well-being of the Chinese which will place the individual in a position fit to exercise the responsibilities imposed on him by a republican government. It might, then, be interesting to see what proportion of the people has received modern training.

The latest statistics compiled by the Ministry of Education of China give 1,626,720 as the number of students in 52,650 Government schools of the empire, besides 102,000 in christian schools. These include the students of common schools. From other sources it is learned that the Chinese students studying last year in Europe numbered about 500, those in the United States 717, and those in Japan about 1,500, giving a total of 2,717. The number of Chinese students in Japan has recently decreased considerably, for there were at one time more than 8,000. Estimating most liberally, we may say that those who have studied abroad within the last ten years number about a quarter of a million, and those who have studied at home and finished their modern education two millions more. As there are, however, many who have gained the new knowledge through translated books, and especially through the influence of several thousands of missionaries during many years past, it is fair to count the so-called middle or educated class, capable of running a republic, as numbering five millions. And as Archibald Colquhoun puts it: "The proportion of foreign-trained and educated is a mere drop in the bucket in the four hundred millions of China's estimated population." Can that drop leaven the whole mass? Can a republic be run by a people of whom but 1 per cent. is educated in the art of its government?

The writer is not asserting that the Chinese are an ignorant, illiterate people. Far from it. They have developed a wonderful literature of their own, and the standard of their literacy is not below that of some modern nations. What he would emphasize here is the small proportion of those who are versed in the new learning; and that this is the only portion which is of any avail in the working of a republican form of government. Knowledge of the old literature counts

for nothing in the present instance; but will rather militate against the diffusion of republican ideas.

1 am one of those who have a firm faith in China's future. As her past has been glorious, so we expect her future to be no less great. When we look back upon the past of this hoary empire, there is majesty in it that commands respect. China saw her foundation stone laid before the pyramids were built. She had already developed her own civilization, her admirable ethics, her voluminous literature, her practical art, with a modicum of science, when the ancestors of modern Anglo-Saxons were roving with painted faces in the woods and swamps of Scandinavia. Years ago China blessed with the fruits of her civilization the inhabitants of the neighboring lands and islands. Her mighty sceptre often held sway over almost the whole of Asia, and extended its authority even to the banks of the Danube. To her, emissaries of European monarchs have often done the homage of Kow-tow; at her feet the Slavs, ancestors of modern Russians, have knelt as they offered tribute. During her long life China has witnessed kingdoms and empires rise and fall; nation upon nation come into being, wax, and wane, then disappear. And still she stands. True, she has seen many revolutions and changes of dynasties, and has sometimes bowed to the yoke of the foreigner, but invariably has she absorbed the foreign elements into her own civilization, and obliged them to observe her traditions. Will history repeat itself? Or will China succumb this time to the impact of ideas so alien, of outside influences so overmastering? The answer to this question depends upon the time given for the readjustment of China's institutions, and upon the wisdom with which it is utilized.

China ought to have proceeded slowly and cautiously. Especially as concerns the change of political institutions. Nothing is more regrettable than that the blindness and incompetence of the Manchu rulers should have driven the steady, conservative people, in order to effect the overthrow of an alien rule, to adopt the extreme measure of trying the most

hazardous experiment, one which, if it fails, will lead the country to disruption. to anarchy, or to foreign intervention. When we consider how short has been the time given for constitutional development in China, we are justified in having grave doubts as to the success of a republican régime. In Japan, similar in culture and tradition to China, constitutional government was the free grant of the emperor after a long period of national preparation. Fully twenty years were devoted to making ready for the new political institutions. And the success that has been attained is largely due to the steadying influence of the Throne. In China not only is that centripetal power now lost, but the history of constitution making has the span of only six years. It was at the close of the Russo-Japanese War that the definite movement toward a constitution began. In December, 1905, a commission was sent abroad to study the workings of constitutional governments. On its return it reported in favor of granting a constitution. This was approved by the Empress Dowager. How sound was that remarkable ruler in her political perception, is proved by the part of the edict which said: "At present no definite plan has been decided upon, and the people are not educated enough for a constitution; if we adopt one hastily and regardless of the circumstances, it will be nothing more than a paper constitution." So she outlined the necessary steps which must precede constitutional government. In 1906, Yuan Shih-kai gave the representative idea its first test by organizing a municipal government in Tientsin. On this model, provincial assemblies were formed, and have been sitting since 1909.

In the meantime the question of a National Assembly was greatly agitated until the edict of August, 1908, fixed 1917 as the time for the first summoning of a parliament. The programme of preparation for a constitutional régime outlined by the Empress Dowager was announced to consist in a reform of the official system, careful and minute revision of the laws, the promotion of universal education regulation of the finances and sources revenue, reform of the currency, reorganization of the army, and the establishment of an efficient police system throughout the empire. Only after these reforms, so indispensable for the successful working of a constitutional government, had been fairly well established, should the new régime have been inaugurated. But most of these great reforms remained on paper; none was executed in earnest. What only was heeded was the agitation for the speedy opening of the Parliament, and the short period of nine years of preparation was in 1910 further shortened to three. As the embryo of the future national assembly, the Tzu Cheng Yuan, composed of 200 members, was organized and convened in October, 1910. When it met last year for the second time, while its members busied themselves in foolish debate, the fire of revolution broke out at Wuchang.

Such is the short story of constitutionmaking in China. No one who believes in the evolution of political institutions will ever be so rash as to affirm that the 'Chinese are prepared for a republic. Even were it to be tried, as is likely, to imagine that it would be operated in China as it is in America would be to allow oneself to indulge in the most impossible of dreams.

After all the foregoing considerations, we are led to the conclusion that theoretically a limited monarchy, with a strong central government, capable of guiding the people, would have been the best for China. But unfortunately the day for an academic discussion is past. We are face to face with practical politics. Assuming a preference for monarchy in the abstract, what alternative but the trial of a republic was there to a dynasty whose authority had ceased to be? The downfall of the Ta'Ching Dynasty was for some time a foregone conclusion. lts fate was decided when it recalled Yuan Shih-kai from exile, or, even earlier, at the death of the Empress Dowager, who seemed to have had a faint intimation of "after me the deluge." The fall of the Manchus is the fault of no one but of themselves. Had they been able to put formard another ruler of the capacity and

energy of the Empress Dowager, the old régime might have had a longer lease of life. But after her death, not only was there no one to succeed her, but the Manchus completely forgot the cause of their power. It was by military ascendancy that they were able to conquer the Middle Kingdom 300 years ago; and it was by military prestige that a small number of Manchus had been able to exact since then the loyalty of 400,000,000 Chinese. By all means, then, ought the Manchus to have upheld their authority. Their death-knell was sounded when they, through the mouth of the boy emperor, went begging before the people for the forgiveness of their past sins, and when, by their making of Yuan Shih-kai, a Chinese, the master of the situation, and investing him with the supreme command of military forces, they confessed that there was none among them who could rescue their House from falling.

If the Manchu régime is extinct, what Whatever the future, there is yet next? no Chinese Napoleon, strong and daring enough to replace the fallen dynasty. The exit to the dilemma is, in consequence, only to be found in the trial of a republic. After all, however, for China it matters not what kind of label she shall put on her form of government. The truth remains - China cannot be metamorphosed by a miracle within a twinkling of It is against the law of evolution. the eve. A constitutional nation may not be born Were this not true, the pages in a day. of history must be blank and science a lie. We would better close our schools. We would better bury our scientists alive, as did the first Unifier of China, the Builder of her Great Wall, with his 3,000 sages.

In the case of China, just as a republic is not necessarily the panacea for all evils, so is an imbecile monarchy to be condemned. The imperious need for her is the establishment of a strong central government, whether republican or monarchical, which will, with ruthless hand, give peace, order, and unity to the distracted country. Can a republic succeed in doing this, and so justify its existence?

OUR STUPENDOUS YEARLY WASTE

SECOND ARTICLE

THE DEATH TOLL OF INDUSTRY

THE TENS OF THOUSANDS KILLED AND INJURED BY THE RAILROADS, IN ACCIDENTS IN COAL MINES, AND BY OCCUPATIONAL DISEASES

BY

FRANK KOESTER

(AUTHOR OF "HYDRO-ELECTRIC DEVELOPMENTS AND ENGINEERING" AND "STEAM-ELECTRIC POWER PLANTS")

NOTHER unnecessary waste is the wholesale slaughter of human beings by the railroads and in the industries, and the vast amount of preventable injuries, poisoning, and disease, levying their hourly toll all over the country.

In the daily battle of transporting itself about the city of New York, the population of that place is reduced by 350 a year killed and 2700 injured. In other words, of all those who start out to ride on any given day, by night one will be dead and three hurt; the price of inefficient transporation.

The yearly cost of this inefficiency to the transportation companies amounts to about \$2,500,000 in damages and \$1,000,000 in legal expenses, while to the public the cost is vastly greater, since, of the damages they receive at least half are consumed in legal expenses, while the amount recovered in no case amounts to a very large proportion of the actual loss. The inefficiency in preventing accidents and the inefficiency of the method of adjusting damages thus fasten themselves on the public in the shape of heavy loss of life and limb; a loss which, on the part of the companies, amounts to 9 per cent. of their running expenses. The maintenance of a vast horde of lawyers, who otherwise would be engaged in useful occupations, is another great drain.

The transportation situation in New York is duplicated in more of less magnitude in cities all over the country.

In railroad transportation and in the

industries, the situation is even more appalling. In 1910, 8.531 were killed and 102,075 injured, a total ranking with the great battles of history.

The figures compiled by the Interstate Commerce Commission, in its Accident Bulletin, showed 1,058 killed and 14,179 injured in railroads and 7,473 killed and 80,427 injured in the industries.

To illustrate how large a proportion of this is preventable, the exceptionally hazardous coal mining industry may be taken as an example.

A bulletin of the Bureau of Labor, for September, 1910, shows the casualties for the 20 year period ending 1908 as follows:

"Among an annual average of 471,145 employees for the 20 year period, there occurred, as far as officially reported, 29,293 fatal accidents, or an average of 1.465 per annum, resulting in a fatal rate of 3.11 per 1,000. If the decade ending with 1906 is separately considered, it appears that the average fatality rate was 3.13 per 1,000.

According to statistics, the risk of fatal accident in the coal mines of North America is decidedly more serious than in any part of any other coal field in the world. Considering the constant growth of the mining industry on this continent, an increase measured by an enhanced output in the United States alone from 253.741.192 tons in 1899 to 415,842,698 tons in 1908, or 64 per cent., the excess in the mining fatality rate is plainly a matter of most serious national concern. "The accident rate for the North Amer-

"The accident rate for the North American coal mines has gradually increased from an average of 2.66 per 1,000 during the first five years of the 20 year period to an average of 3.58 per 1,000 during the last.

The fluctuations in the rates from year to year are shown to have been considerable. The maximum was attained in 1907 when the rate reached 4.15 per 1,000 against a minimum in 1897 of 2.32.

"The true elements of risk of coal mining in North America are not, however, fully disclosed by the returns for the coal fields as a whole. More startling conditions exist, if particular coal areas are considered, for in these the hazards are much greater, so that if they were reduced to the general level the rate would fall quickly.

The New York Times of September 17, 1911, states, in referring to the mining industry, including metal as well as coal mines:

"Thirty thousand miners killed in the United States in the last ten years.

"Seventy-five thousand miners injured, many of them maimed for life, in the same period.

"Eleven thousand widows made by the deaths of the miners.

'Thirty thousand children left father-

less. "It is the story of the tragedy of the mines, but not the whole story. If the mines of the United States during the ten years had had the same standards of safety as in European countries; if the United States had killed two in every thousand employed, instead of three, four or five, 15,000 of the 30,000 of the American miners killed might be living to-day; 40,000 out of the 75,000 injured might have escaped injury, 5,500 widows might not have been widows and 15,000 orphan children might still have fathers.'

In addition to the vast totals of accidents of a sanguinary nature, there is an enormous loss through poisoning and consequent loss and shortening of the lives of those engaged in certain occupations.

Among them is the lead industry, concerning which Paul P. Peirce in the North American Review of October, 1911, in an article entitled "Industrial Diseases," states:

"Lead poisoning was made the chief

objective of the Illinois Commission on They discovered, Occupational Diseases. in that state, twenty-eight industries in which this form of poisoning is a factor; but the great majority of cases were chargeable to five industries, viz: whitelead manufacturing, lead smelting and refining, making storage batteries, making dry colors and paints, and the painters trade. The last was found to be numerically the most important lead trade in the state of Illinois, employing probably 30,000 men.

"In the absence of adequate statistics and research, the actual amount of sickness and death among the industrial population must be a matter of scientific conjecture. With German sickness insurance as a basis, Dr. F. K. Hoffman, of the Prudential Life Insurance Company, has attempted an estimate of the amount and cost of sickness among our industrial workers in 1910. Placing the number of persons gainfully employed at 33,500,000 and assuming the same sickness rate as is found in Germany, he finds that the number of cases of sickness among these workers last year must have been 13,400,000; the aggregate number of days of sickness 284,750,000; the loss of wages not less than \$366,107,145; the medical cost \$284,750,000; the loss through change of workers in industry on account of sickness, \$122,035,715, making a total economic loss among the industrial class of \$772,892,860 for the year. Of this total, German experience indicates that no less than onefourth is due to preventable causes, a needless loss of \$193,223,215. In fact, it is thought that the sickness rate here is somewhat higher than in Germany, and consequently that the above estimates are too low. Moreover, these figures take no account of permanent invalidity and excessive mortality involved in present industrial conditions; and Doctor Hoffman places the number of deaths among American wage-earners last year at 330,500, of which no less than one fourth were clearly preventable. Nor do any of these figures take account of the handicap which industrial disease and premature death imposes upon the posterity of the worker.³

Counting it up in dollars and cents, the

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Department of Commerce and Labor shows the losses due to tuberculosis, a largely preventable disease, the principal steps in the prevention of which should be taken by the legislators of the various states.

"The average length of human life in different countries varies from less than twenty-five to more than fifty years. This span of life is increasing wherever sanitary science and preventive medicine is applied. It may be greatly extended.

"Our annual mortality from tuberculosis is about 150,000. Stopping threefourths of the loss of life from this cause, and from typhoid and other prevalent and preventable diseases, would increase our average length of life over fifteen years.

"There are constantly about 3,000,000 persons seriously ill in the United States, of whom 500,000 are consumptives. More than half of this illness is preventable.

"If we count the value of each life lost as only \$1700 and reckon the average earnings lost by illness at \$700 per year for grown men, we find that the economic gain from mitigation of preventable diseases in the United States would exceed \$1,500,000,000 a year. In addition we would decrease suffering and increase happiness and contentment among the people. This gain, or the lengthening and strengthening of life which it measures, can be secured through medical investigation and practice, school and factory hygiene, restriction of labor by women and children, the education of the people in both public and private hygiene, and through improving the efficiency of our health service, municipal, state, and national."

On the subject of factory sanitation and labor protection, the Department of Commerce and Labor says further:

"The miserable hygienic conditions existing in the working places of some industries, for example, are unjust to the working classes, and sometimes react with frightful results upon the public. Under the influence of long continued work under unsanitary conditions, the physiques of the workmen, and especially those employed in factories, often show more or less characteristic marks. The height is usually below the medium; the body, thin and weak, is poorly nourished and of sickly paleness. This condition is called lymphatic or anaemic. The spiritual and moral life may likewise become inactive and apathetic. Even the strongest factory workers under such conditions become more or less exhausted before they reach 55 or 60 years of age. Often they are completely wasted and utterly unfit for work at that age. Many of those who work in spinning mills, cloth-printing establishments, and in general plants where there is an extra high temperature and lack of pure air are cut off prematurely.

"Women suffer even more than men from the stress of such circumstances, and more readily degenerate. A woman's body is unable to withstand strains, fatigues, and privations as well as a man's. This makes her condition all the worse because her wages are correspondingly smaller. The diseases which most frequently afflict the working class are a disturbance of the nutritive and bloodmaking processes. Weavers, spinners, and workmen employed in branches of industry where work is done in close, poorly ventilated cold or hot rooms, are especially subject to these diseases.

"Among the diseases to which the workmen of this class are subjected most often are the so-called inanition, scrofula, rachitis, pulmonary consumption, dropsy, also rheumatic troubles, pleurisy, typhoid fever, gangrene, and the various skin diseases.

"Every epidemic, be it typhoid, smallpox, scarlet fever, dysentery, cholera, etc., draws its great army from this class. For every death that occurs among the richer and higher classes, there are many in the working class. It is the workmen engaged in unhealthy factories first of all who fill the hospitals and their death chambers. Again, it is more often the working woman who suffers from female troubles, and even cancer. The reasons for the high mortality and shortness of life among the working class can easily be perceived from the foregoing facts. These two evils are always proportionate 100 to the danger and the unsanitary ditions existing in the indust Y

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TWO VIEWS OF THE "BACK TO THE LAND" MOVEMENT

I. "GO SLOW"

BY

C. L.

AM watching with keen concern, I may say with distress, this literary, on paper, "Back to the Land" movement. 1 am especially interested because 1 have done it myself, not on paper but on the land, and not only have 1 done it myself but 1 have watched other people do it — middle-class city folk, like myself, with the standards and habits of a city-life, average, twentieth century American standards.

I want to put down here our results, and I want these results to say to the school teacher, the tired clerk, the wornout lawyer or traveling man, "go slow —don't burn your city bridges behind you, in your 'Back to the Farm' stampede."

Now, understand me distinctly; nobody believes more than I that country life breeds the stock that founds a nation well, but founders are one thing, and descendants of founders returning to the soil are another thing. That is the first thing I wish to make plain: the second is that what I am about to say may not apply to the West, but it does apply to the North Atlantic seaboard.

Now let me give examples, proofs of what 1 am saying.

First, I will tell you the experience of a young college graduate. He had capital behind him and with it he bought a rundown New England farm worth \$6,000. He had intelligence, was not afraid of manual labor, loved the soil as his own child, and best of all had a good market a few miles away. He is in his seventh year on that farm. His farm is now beautiful to look at; it has the cleaned-up surface, the shining face of efficiency itself: but he has not yet made it pay. The process of learning how to farm was expensive; the process of learning what his own particular farm was good for was expensive: the process of restoring the soil acres upon acres needing capital in the form of fertilizer - was very expensive. But by the tenth year he hopes to get his farm where it will yield him a living. He is the most successful city man who has Notice, gone back to the soil that I know. however, he had capital to last for ten years: the obstacle to him has been the strain from loneliness in winter. For five years he did not mind it, but since then it has been a real factor, not in the making but in the un-making of his nerves. The manual labor of the summer is tremendous and leaves him tired and nervous for the winter strain of loneliness.

Now for a woman's experience — the land venture of a tired out social worker in New York. She was worn out with the sunless, closetless, heatless, small hall bedroom of New York. Her health was giving way under it. She bought a farm in a verdant New York valley, big rooms, sunshine, food on every side, for this farm was in working order; she did not have to enter on that capital-devouring process, bringing up the soil. "I have kept my head above water," she said, "but I have done it by taking into my house two expensive invalids supplied to me by an expensive New York doctor. Without boarders I should have long since gone under."

Now for my own experience. I went from a busy city life into the hen business.

We bought 150 splendid pullets, and from them raised our hennery to 300 hens and pullets. It is more than a year now since I first owned these hens. The year has been successful pullet-wise

TWO VIEWS OF THE "BACK TO THE LAND" MOVEMENT 717

but not money-wise. Our plant cost about We did not buy but paid rent: \$500. our incubators, run by my brother's intelligence, worked from the start to perfection: all but one of our hatches lived into maturity, and whenever we sold anything we got a good price; we avoided rats and foxes or they avoided us, and we did not have to pay one cent for labor; we had no devastating diseases. In short, two intelligent college men were running these hens and their intelligence brought success - but it did not bring money.

The financial statement is this, they paid for their feed, but taking it all in all gave us nothing back for capi-tal invested or for living expenses and all this when we did not have to pay one cent for labor! Fortunately we had behind us a good angel with a bank account who did pay our living expenses, otherwise we should have starved or gone back to the support of the city. Rumor that rife liar - Rumor says 600 hens will the third or fourth year make a living. Now my opinion is - and this is the gist and purport of my article - that 600 hens will not make a living for the tired social worker, or little school marm, nor yet for the man behind the counter and the man behind the desk.

Those 600 hens will, however, make a living for a certain Pole now working on a Connecticut Valley farm. His living is found. During last summer he spent $\$_{3.67}$. If you are satisfied with a standard like that buy your farm and go ahead, but if not, do not buy your farm, for you will be disappointed.

I wish I were not speaking the truth, but I am afraid I am speaking the truth. There is something in the Eastern farm for the very intelligent boy born on it, and something for the patched straw-hatted Pole, Czeck, or Swede who comes on to it, but for you, the average city worker, there is nothing but loss. You do not know the trade; no one can know it in less than ten years: you are not used to manual labor; you are not used to loneliness — but even if you learn the trade and surmount the labor and the loneliness, the chances are that you will not make a living suited to your incurable American standards. In putting your little all into a farm, I beg of you — "go slow."

THE WORLD'S WORK'S OPINION

Is there indeed no hope in New England for the average person who really wants a farm? Is it fruitless to aim at success on a New England farm?

There are many experiences that refute the foregoing — experiences of success. Under fair conditions, other successes can be attained. But the conditions are important, and most important of all — the quality of the person who does the job.

1. Farming is a business, a good business — r farmers. The city man who is to succeed for farmers. must be or become a farmer, and this involves temperament, physical strength, executive ability, business sense, and agricultural knowl-edge. The actual, practical experience is important, but secondary. What right has any one to suppose that the wornout mechanic, shop clerk, teacher, business man can buy land and immediately succeed in a business more complex and exacting, physically and mentally, than the business he left? For any man, anywhere, it is essential that he read true reports of farming activities to acquaint himself with the life it means; that he study the phase of agriculture that interests him, and from which he is to derive profit; that he study the locality in which he will settle; that he see the land and know its faults and advantages before he buy it; that he be prepared to spend from three to ten years in developing the business to profitable proportions; and that, if possible, he spend some months at an agricultural school and a year working on a farm, before he attempt an independent start.

How well equipped along any one of these lines was any one of the persons mentioned above? What could they expect but failure or delay? To "go slow" is indeed the vital advice; did any one of them follow it?

2. Aside from these general rules, New England exacts other specific conditions. Her agriculture is that of the relatively small farm; it is specialized; it calls for additional skill and careful management.

And so it goes. There is an agriculture and a profitable one adapted to New England conditions. But it is by no means a simple matter of ten acres, or 600 hens, or a neatly kept farmyard. Study it carefully, discuss it with men who know, plan your campaign first and at all times "go slow." But success awaits a combination of the right man and sincere, conscientious hard work.

II. PROSPERITY ON A RENTED FARM IN IOWA BY RICHARD NICHOLSON

N 1896 I started farming my own land, a half-section (320 acres) in northwestern Iowa. I had had four years' previous experience infarming, having worked as a "hired hand" on a neighboring farm owned by one of my brothers. For the first twelve years of my farming career, things went on financially pretty well, and despite the poor prices of the late '90's for farm produce, I was able every year to lay away a little something against the proverbial rainy day, and generally speaking was "in constant good health."

In 1908, as land values in Iowa had advanced very materially while rents had not risen correspondingly, I disposed of my 320 acres for \$90 per acre, and leased back, for five years, 240 acres and all the buildings for \$4.50 an acre a year.

In the spring of 1909, therefore, I started out as a "renter," having as my immediate possessions 8 good work horses worth \$200 a head; harness, farm machinery, wagons, etc., worth about \$1,000; 3 milch cows, worth \$50 apiece; 200 or 300 chickens, and 50 brood sows worth \$15 each. I had all my household furniture, also valued at perhaps \$1,000, the whole investment amounting to about \$4,500.

I intended to feed and fatten every year, as I had done in the past, a considerable number of cattle and hogs, and I found it was cheaper and more satisfactory to borrow the necessary money from the local bank at 7 per cent. for this purpose, paying the money back as my stock went to market than to use my own money and have it lie idle between feeding periods.

I was fortunate in retaining my old housekeeper, a most excellent woman, who receives as wages \$20 a month and perquisites that vary from ten cents a pound on all the butter sold, to one half the red cocker spaniel pups we raise and sell. The latter perquisite amounted last year to \$50. I have also two "hired men" — foreman and assistant. Each receives \$25 a month, with free board and washing. The foreman gets, in addition, 5 per cent. of all the money received from the sale of hogs. Last year this amounted to more than \$200. All four of us are keenly interested in the corn yield (this is our principal crop), for, when it exceeds 50 bushels an acre, we share and share alike in the surplus. Last year we netted \$25 apiece from this source.

In 1910 on this 240 acre farm we raised 4,546 bushels of corn worth \$1,636; 40 tons of clover hay worth \$400; we cut for additional fodder 22 acres of corn valued at \$550; and had left, after husking the corn, 115 acres of corn-stalks (used as winter feed for cattle and horses) worth \$115. We also raised 1,200 bushels of oats, which were used for horse feed; and an oat straw pile, worth \$15. Our increase in stock was one colt (\$70), and 3 heifer calves worth \$25 a head.

The total income from the farm from all sources was \$4,557.60; the total expenditures were \$2,880: \$1,080 for rent and \$1,800 for wages, house and living expenses, etc. The net profit was \$1,677.60.

Considering that the total amount of my own money invested was less than 5,000, that as far as actual hard work was concerned I did little if any — simply exercising a close, and to me highly interesting, supervision over the farm work and the "feeding" operations — I think the financial results are eminently satisfactory. I may mention that the net profit for 1909 was slightly less than that for 1910, whilst this year promises to be a little larger.

I was at no time "tied down to business" — could always take a "day off" when I so desired — and lived a healthy, happy, out-of-door life. Think it over, you weary toilers of the city — you who find it hard to "keep up your end" — remembering only that there are no fortunes to be acquired from farming — only the healthy pleasures of the simple life.

THE MARCH OF THE CITIES

THE CITY INDUSTRIAL AGENT A PART OF THE MUNICIPAL GOVERNMENT OF. NIAGARA FALLS

BY

EDWARD T. WILLIAMS

NTIL July 1, 1907, the work of locating industrial concerns in Niagara Falls had been done by the power companies and in a desultory way by the Board of Trade through its secretary — the writer of this article. This secretary worked without salary, and was engaged in other business at the same time. Besides such work as he found time to do outside of his regular business, and besides such work as other members of the organization did, other people in the city helped when they happened to think of it or had time. But it was nobody's business in particular, and so, as usual, it was not well done. No one adequately presented the advantages of Niagara Falls — its unlimited quantities of electric power delivered at the highest voltage, its advertising advantages, and its location.

Now Niagara Falls employs a municipal industrial agent. He is paid a salary, gives all his time to the work, and has back of him the power of the city government. His work is done in a systematic manner. He is responsible, and the city that he represents is responsible. When he guarantees to a manufacturing concern sewer, water, and pavements, the city sees that they are provided.

This new office was created by amendment to the city charter that established the industrial commission as a part of the city government. The board of estimate and apportionment and the common council were required by this law to appropriate enough money to run the department. The commission is composed of seven members — the mayor, the city treasurer, the president of the common council, and four citizens appointed by the mayor. The terms of two of these citizencommissioners expire every year, and the tenure of each is two years. The three elective officers named first also comprise the board of estimate and apportionment of the city. The mayor is chairman of the commission. This commission appoints the city industrial agent. The commission meets every two weeks under the provisions of the city charter, and holds such special meetings as are necessary. The city provides an office and equipment as well as a stenographer for the commission and the industrial agent. The manufacturers of Niagara Falls aid the work of making the city attractive to other manufacturers by exhibiting in this office specimens of their craftsmanship.

The city industrial agent prepares and circulates literature setting forth the advantages of the city. Every piece of mail matter that he sends out contains a boost for Niagara Falls. He gets the local manufacturing and business concerns to use it. He carries his propaganda beyond merely industrial lines. For example, he recently cooperated with the state senator from Niagara Falls to get a bill passed by the last legislature appropriating \$1,000,000 for the immediate construction of trunk highways north and south and east and west through Niagara County. These highways will make Niagara Falls a better market and benefit all of its inhabitants by placing a better supply of farm products within their convenient reach. Again, the industrial agent has encouraged as many public improvements as possible, for these make the city an attractive place to live in and to do business in. But mere extravagance is opposed, for the manufacturer has a watchful eye for the tax rate. Sewers, water, and pavements are necessary for most manufacturing concerns, and the industrial agent takes up these matters with prospective manufacturers. He also arranges to have railroad spurs laid to factories. He furnishes information about freight rates, either in bulk or in package. He keeps a mass of detailed information about the city at his fingertips: for example, that electric power - which is available twentyfour hours in the day by the turn of a switch as against ten hours for steam — is sold at half the cost of steam. And he puts these facts constantly before the manufacturing world.

Every year the city industrial agent investigates hundreds of manufacturing projects, good, bad, and indifferent, reaching out for advantageous propositions. His task is as surely to scare away companies of a suspicious sort as it is to secure the permanent establishment of reliable houses.

The efficiency of an industrial agent is illustrated by the following incident: Into Niagara Falls one afternoon came Mr. William J. White, who had been extensively engaged in the manufacture of chewing gum, but who retired several years ago. He now planned to go into business again. He visited Buffalo and hired a taxicab in order to look around. He continued his investigations until he reached Niagara Falls. There he went into a hotel and told the proprietor his mission. The hotel man immediately telephoned to the city industrial agent, who was at the hotel in three minutes. Mr. White wanted a building already erected, and there were few available. He left the city without finding what he wanted. The industrial agent took his address and made a careful investigation of the city. In a few days he wrote to Mr. White in New York that he thought he had the building, and the result was that Mr. White made another visit to Niagara Falls, during which the city was viewed at every angle. He then made trips to New York, Chicago, and St. Louis, but the outcome, after weeks of work and careful consideration, was that Mr. White decided to locate his plant

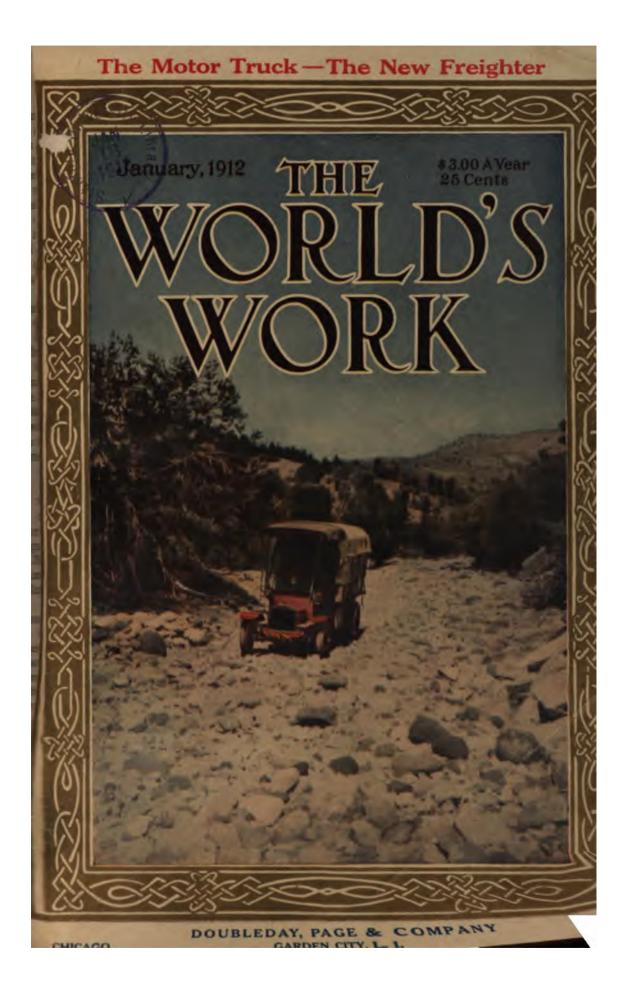
in Niagara Falls and to locate another plant in Niagara Falls, Canada, as he would be able to handle them both economically. By that effort of its city industrial agent, Niagara Falls now has a new industry whose product is valued at more than \$5,000 a day, wholesale. The location of that plant alone, in the matter of the employment of labor, freight shipments, the bringing of new people into the city, etc., is worth more than the salary of the industrial agent for a year.

Another case: A man living in Canada told the industrial agent about a very successful manufacturing concern, the Wagstaffe Company in Hamilton, Ont., that was ambitious to supply the American market. It had set up a small temporary plant in cramped quarters in Buffalo to "feel" the American market. The industrial agent got in touch with Mr. James Wagstaffe and showed him the city thoroughly. He met him every time he came to Niagara Falls, and remained with him until he left. addition to the other advantages of the city, he emphasized the fact that t raw material for such a plant was near at hand in large quantities in the Niagan fruit belt. The result was that Mr. Wagstaffe purchased five acres of land in Niagara Falls and built a large plant there.

In this way, five new industrial concerns were brought to Niagara Falls in 1911. One of these was Greif Brothers Company, of Cleveland, O., who operated a large cooperage. They had some correspondence last summer with the industrial agent about locating at Niagara Falls. The industrial agent went to Cleveland and a deal was closed. The company has twenty-two plants in five states and it made 7,000,000 barrels in 1910. Another was the Niagara Chocolate Company, that has just broken ground in Niagara Falls for a \$100,000 plant.

Altogether, Niagara Falls has demonstrated that a city industrial agent, paid to devote all his time to increasing the number of productive enterprises in the city, can be a very useful and profitable member of the municipal government.

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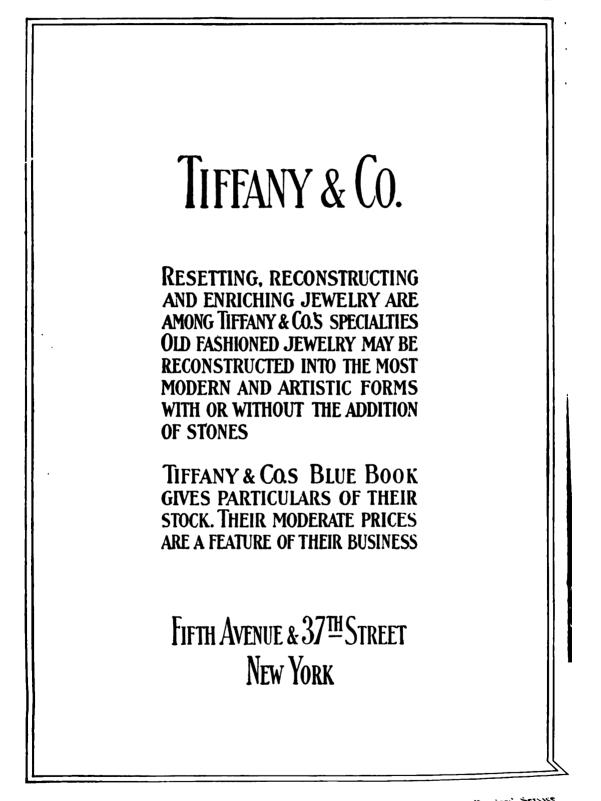
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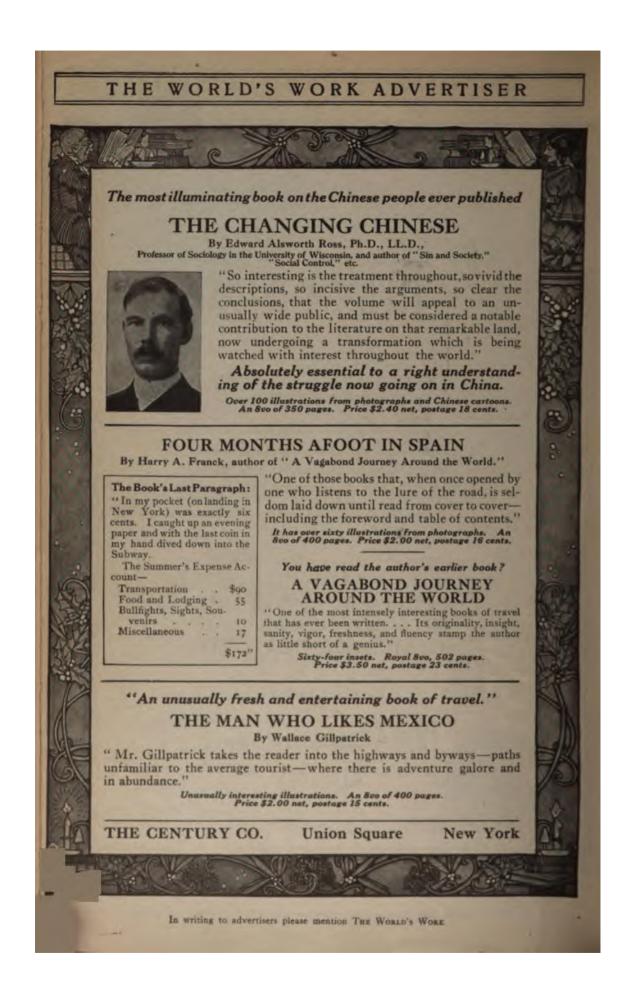
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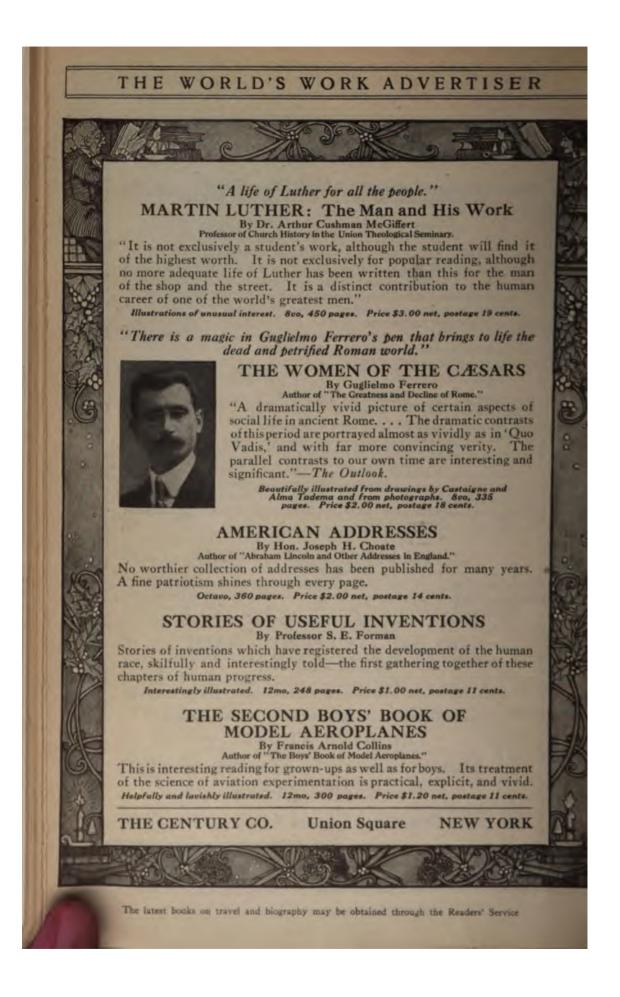


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A feature of *The Century* during 1912 will be "Everybody's Saint Francis," the text by Maurice Francis Egan, American Minister to Denmark, the illustrations by Maurice Boutet de Monvel. Mr. Egan is a poet, and an authority on church history. Boutet de Monvel is one of the greatest of living French artists. The result will be a noteworthy life of the saint who for five centuries has stirred the admiration of Catholics and Protestants alike.

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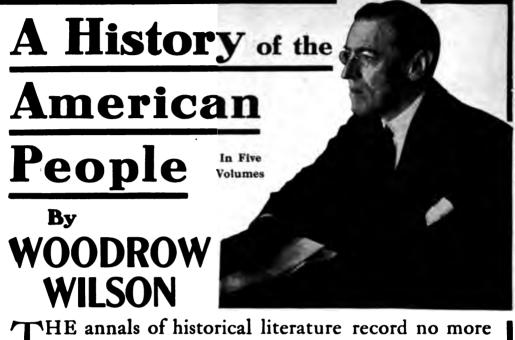
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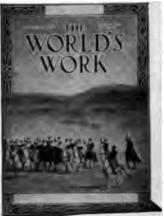
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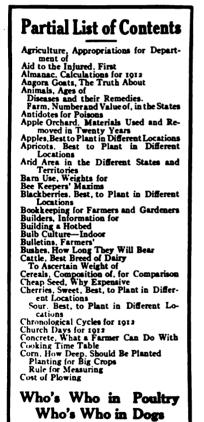
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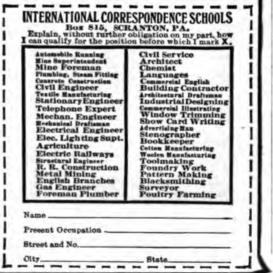
opportunity to make their dreams come true. Thousands of ambitious men are now taking this short cut to better positions - to greater home comforts-to a higher standing as citizens.

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COME to the happy land and *live*. Come to the land of mirth and flowers and sunshine and song—"The Playground of the World"—the land that Joel Chandler Harris made famous—the land of balmy breezes, the land of rest—rich with the romanticism of Colonial Days.

Nature was lavish, indeed, when she fashioned Savannah and her surroundings. The climate of the Riviera itself has no greater charm. In every way, Savannah's simple grandeur vies with the splendor of the Orient. Tourists have rightly named it "The Paris of America." Authorities are agreed that Savannah's vast Park system has no peer. Here is to be found the world's best automobile course—18 miles of hard, level road, hemmed with majestic trees. It was on this course that the Vanderbilt Cup Race of 1911 and the International Grand Prize Races of 1908, 1910 and 1911 were held.

Here is the country of magnificent roads. They wind in their stately course for scores of miles. There is no better golf links in the South than the eighteen-hole course of the Savannah Golf Club. It is accessible every day in the year. Game is plentiful. The Savannah Yacht Club rivals any Yacht Club on the Atlantic coast.

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Shore resorts are numerous. Tybee Island, only 18 miles away, teems with historic interest. It has a beach that cannot be surpassed. Isle of Hope, Thunderbolt and Montgomery are other suburban watering resorts that lie within four to ten miles of the city. All of these places are famous for their fish dinners. No spot in America offers greater inducements to the angler. As a cruising ground, this country is remarkable. Its many inland salt water lagoons and streams are navigable for hundreds of miles, with absolute safety.

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Savannah's residential park consists of 289 acres. This entire property is within the city limits and is reached by three electric lines that traverse the centre of Savannah. It has more than 5,000 flourishing trees. Every street is in excellent condition. The sewerage system is modern. Nearly six miles of piping are laid throughout the tract. There is ample city water supply at full pressure. Thorough provision has been made against fire. No residence section of Savannah is more immune from it. Chatham Crescent is thoroughly protected with rigid building restrictions that insure substantial, steadily increasing realty values. We now have for sale two restrictions that insure substantial, steadily increasing realty values. bungalows and three semi-bungalows.

Measure the satisfaction of having a cosy winter home here, in contrast with the cut and dried routine of hotel life, with its cold conventionalities. The amount that your family would spend in hotel bills during a single season would go a long way toward paying for a home in Chatham Crescent.

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We will be glad to send you a complimentary copy of "The Piayground of America." It is a masterpiece of the modern printer's skill. We believe that no finer work of its kind was ever produced. It contains dozens of exquisite half-tone reproductions of views taken in and near picturesque Savannah. The context, replete with historical references, makes this book a positive enrichment to any library. Write for your copy now. Please use the coupon below and send 6 cents for cost of mailing.

Those who contemplate visiting Savannah, with the intention of investigating our proposition, will be conducted in our handsome gasoline yacht on one- or two-day excursions through the beautiful sounds, streams and lagoons about Savannah-this at our own expense. Please notify us four or five days in advance of your arrival.

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In the center of the plot nearly eight acres have been set apart with a view to constructing a strictly high-class hostelry on this site. At e conservative estimate this property is worth \$100,000. It will be deeded in fee simple to the individual or corporation that will give evidence of ability and parpose to comply with our requirements. Those interested should write us at once.

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388.— BOND HOLDER. Q. The bonds which I own are all negotiable and I have been wondering what I should do in case any of them were lost or stolen. Would I be able to recover from the company or to trace the bonds in any way? A. If you know the surely

A. If you know the numbers of your bonds you would probably be able to trace a lost or stolen bond, because the coupons which are also numbered would come in for payment in the course of time and you would be able to find out in that way who has your lost bond. If he is an innocent party, however, and has bought the bond in good faith, you cannot recover from him and the company must pay him the interest and the principal when due.

has bought the bond in good faith, you cannot recover from him and the company must pay him the interest and the principal when due. When such a bond is lost, you should notify the fiscal agents of the company immediately, giving them the number of the bond. In some cases, if the bond remains lost for a long time, the company is willing to issue another bond to you but it requires you to file a satisfactory indemnity bond, so that in case the old one turns up it will not suffer a loss. One thing that any prudent man will do is to keep

One thing that any prudent man will do is to keep careful record of the numbers of the bonds that he owns, even though he keeps them in a safe deposit box and runs practically no risk of losing them, for they may be lost in transit or mislaid in some other way. A good many people, when they buy bonds, which they intend to hold for some time, have them registered as to principal which does not interfere with their negotiability to any extent and which is, to a slight extent, a safeguard against loss.

389.— INDUSTRIAL. Q. As a long time holder of several good industrial stocks I should like to have your offhand opinion as to the ultimate effect of the enforcement of the Sherman Law, so far as earning capacity of my stocks are concerned. Is there reason for real alarm, not based on market quotations during the period of agitation but upon ultimate results?

A. Taking "ultimate" to mean results after the series of Government suits is finished and the industrial world has adapted itself to the findings of the Supreme Court, it would seem that there is not much ground for serious alarm. It comes down to a question what the various constituent parts of the affected trusts can earn after they have adapted themselves to the law. Of course, opinions differ widely but it is not of record that any of the responsible officers of the companies that have been sued expect to see profits disappear. The only tangible evidence is the price of Standard Oil stock and the price of American Tobacco stock. You have probably observed that neither of these companies has by any means been wiped out and that, apparently, those who are most closely in touch with the affairs of the company have not sold out in despair and gone into other lines of business. Apparently they figure that there will still be some profits to be divided amongst those who hold the equities in these companies and there is no reason why the outside critic should hold a different view.

This, of course, does not pretend to guage the extent of the disturbance that might run along with the process of adjustment. It is this process that is most threatening to the holders of industrial securities and not the ultimate results.

390.— TRUSTEE. Q. In reply to a former inquiry you stated that in buying high grade railroad bonds for an estate they should be bought at "veasonable" prices rather than at high record prices. I am at a loss to determine what a reasonable price is and would be glad to get some light on the subject in case of, for illustration, Illinois Central Refunding 4 per cent., Delaware & Hudson 4 per cent., Chicago, Burlington & Quincy General 4 per cent., and Chicago, Rock Island & Pacific General 4 per cent. bonds.

A. In figuring on a reasonable price for these bonds or any other interest bearing securities whose rates of interest do not change, the most sensible basis is a comparison of prices. In such a comparison it is well not to use extremes such as, for instance, the high prices of 1905 or the low prices of the panic year of 1907. At the present time the high price of 1909 might be used as a high and the low price of the current year as a reasonable low. On this basis in the bonds you name the following is a record of high and low for the current year and high for 1909.

		1911		1909
		LOW	HIGH	HIGH
Ills. Cent. Ref. 4's .		96 1	98	101
D. & H. Ref. 4's .		97	100	103
C. B. & Q. Gen'l 4's		95	98	101
C. R. I. & P. Gen'l 4's	•	951	987	101

You will find that current quotations are pretty well below both the high of the current year and the high of 1909. It would be safe to say that bonds of this class bought for permanent funds at prices half way between the high and low of 1011, or lower than that, would certainly be reasonable in price and in all probability most critics would put the limit of reasonable price higher than that. It is assumed, of course, that you are not thinking of buying for profits but simply desire to buy wisely so that your fund will not look as if it were bought in a boom. In all probability bonds bought on the above "reasonable" basis would inventory in an appraisal higher than their actual cost more than half of the time that the fund was held, if it were held over a period of years.

Sound Investments

THE selection of sound investments is not a difficult problem. It is but a question of education along comparatively simple lines. And yet, it is a subject deserving of careful study by everyone, but especially by those whose habit it may be to save some part of their earnings, by people dependent upon income, or by business concerns appreciating the wisdom of creating a surplus reserve fund.

The more study you give this subject, the greater will become your conviction that the success of well-informed investors is due for the most part to the efficiency of the organization of their investment bankers.

Let us submit to you three sound investments, each of a distinctly different type, and yielding an average return of about

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Bonds of the following issues, selected from the large list which we own, were carefully investigated and approved by our experts before purchase and are recommended by us. These bonds are well secured, marketable and in negotiable form with coupons attached, covering semi-annual interest payments to maturity, when the bonds are to be redeemed at \$1,000. Inquiries from investors concerning these or other bonds answered without cost or obligation.

Title of Bond	Due	*Approximate Cost	Annual	Yield to Maturity
New York City 41s	1960	\$1024.00	\$42.50	4.09%
Jersey City, N. J., Water 42s	1961	1062.50	45.00	4.20%
State of Louisiana, Port Commission 5s	1942	1082.50	50.00	4.50%
Southern Pacific R. R. 1st Ref. 4s	1955	950.00	40.00	4.25%
Pennsylvania R. R. Convertible 3 ¹ / ₂ s	1915	970.00	35.00	4.37%
Kansas City Southern Refunding & Improvement 5s	1950	1005.00	50.00	4.97%
St. Louis, Springfield & Peoria R. R. 1st and Ref. 5s	1939	1000.00	50.00	5.00%
Virginia Railway & Power, 1st & Ref. 5s	1934	975.00	50.00	5.20%
California Gas & Electric, Unifying & Ref. 5s	1937	950.00	50.00	5.37%
Mobile (Ala.) Gas Company, 1st Gold 5s	1924	960.00	50.00	5.42%
Tri-City Railway & Light Company, 1st & Ref. 5s .	1930	950.00	50.00	5.42%
*Prices subject to market changes				

Accrued interest to be added.

Circulars describing above bonds mailed on request.

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Dated Dec. 31, 1909. Denomination, \$1,000. TAX FREE IN PENNSYLVANIA. Maturities January 1, 1913, 1914, 1915, 1916, 1917, 1918, 1919 and 1925.

Secured by deposit with the trustee of 5% Sinking Fund Gold Bonds of the United Coal Company, due February 1, 1955, at the ratio of \$1,250 in bonds to each \$1,000 note issued.

of $\$_{1,250}$ in bonds to each $\$_{1,000}$ note issued. The retirement of the bonds, and consequently of the notes, as they mature, is provided for by ample sinking funds which will retire the bonds before one-half of the coal is mined. This is one of the largest coal mining companies in Pennsylvania, now stand-ing third in tonnage mined annually. It has more than 35,500 acres of valuable coal land, in which, it is conservatively estimated there are more than 52,400,000 tons of merchantable coal. Its market facilities are large. Its business is con-ducted most conservatively, over $\$_{1,100,000}$ having been reinvested in the property out of the profits. It has shown a consistent record since its organization in 1902. The total value of the property, according to recent appraisement of two well known consulting engineers, whose reports are on file in our office, is more than $\$_{10,000,000}$, while the total outstanding bonded debt is less than $\$_{11,500,000}$. note issue is limited to \$1,500,000.

Guaranteed by the American Water Works and Guarantee Company.

(Whose Capital and Surplus is over \$10,000,000) Dated April 1, 1911. Registerable.

Denominations	Maturities
\$1,000	April 1, 1913-14-15
\$1,000-\$500	April 1, 1920
\$1,000-\$500-\$100	April 1, 1925
(m) (• • • • •

This company is a holding company, all of whose capital stock is owned by the American Water Works and Guarantee Company of Pittsburgh, Pa.

The United Water and Light Company owns the controlling stock interest in and the bonds of several water works and electric light plants. The company's notes are secured by the deposit with the trustee of guaranteed water works bonds at 125% of bonds deposited to 100^{07}_{10} of notes issued.

The notes are callable at 103 and interest at any interest paying date, upon six weeks' notice. The total amount of notes of the above issue is limited to \$4,000,000.

A large portion of the above described securities have been absorbed by banks, institutions and private investors, the issues combining features which are particularly attractive in the present market. Both companies have a most consistent record, their business is conducted conservatively, and their officers are men of the highest reputation and integrity.

The notes are well secured, being protected by a 25% margin in the deposit of bonds, and the bonds being issued by the companies on a conservative basis.

We recommend the notes for January investment, and offer the unsold portions of both issues. Price upon application.

We offer at all times a large and attractive list of securities, including water works. traction, hydro-electric and general public utility bonds. Also municipal bonds many of which conform to the requirements of the United States Government to secure Postal Descriptive circulars will be sent in answer to inquiries. Address Dept. B. Savings.



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<u>Cumberland Telephone & Telegraph Company</u> Twenty-five Year 5% Gold Bonds

Dated January 1, 1912.

Due January 1, 1937.

Interest payable semi-annually. Denominations \$500 and \$1000.

The Cumberland Telephone and Telegraph Company, one of the largest and most prosperous subsidiaries of the American Telephone and Telegraph Company, owns and controls the entire Bell Telephone business of Kentucky, Tennessee, Mississippi and Louisiana, besides parts of Illinois and Indiana. The territory served, some 400,000 square miles, represents one of the richest agricultural sections in the United States, rapidly increasing in population and wealth.

The growth of the Company, since its inception in 1883, has been remarkable. For each of the past twenty-eight years of this period, the number of subscribers, gross revenue and net earnings show an increase over the previous year. The following is a condensed statement of the results of the last five calendar years:

Year	Subscribers	Gross Revenue	Net Revenue
1906	141,266	\$5,384,844	\$1,647,436
1907	165,190	5,917,273	1,752,689
1908	170,039	6,141,817	1,993,430
1909	187,259	6,615,368	2,156,847
1910	206,287	6,897,080	2,407,268

The cost of the physical property alone is in excess of \$27,900,000 against which the total amount of this new issue of bonds will not exceed \$15,000,000, subject only to a prior mortgage of \$750,000.

Dividends have been as follows, from 1892 to 1897 - 4%; 1898 - 5%; 1899 - 6%; 1900 to 1908 - 7%; from October 1, 1908 to date -8%.

Capital stock outstanding \$19,680,150, with surplus and undivided profits as of October 1st, 1911, of \$5,381,918. By virtue of ownership of more than 50% of the outstanding capital stock of the Cumberland Telephone and Telegraph Company, control is held by the American Telephone and Telegraph Company (the parent company of the entire Bell system), with a capitalization of \$263,335,600, and a market value of \$365,000,000.

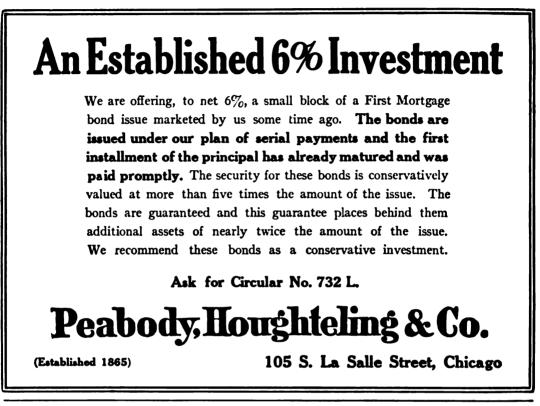
Net Earnings of three times the interest charges, the high character of the security, and the certainty of a broad market indicate that this new issue should sell almost immediately at a premium. We recommend these bonds as desirable for institutions, estates, and conservative investors.

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Price to yield about 5%.

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4 The investment service rendered by this house is two-sided. It is general; it is also specialized.

Q We offer at all times a complete line of high-grade bonds of every description and we are prepared to advise expertly with an investor and supply him with those securities best suited to his own particular needs.

q Furthermore, we make a specialty of local Saint Louis securities which possess peculiar value and attractiveness for the individual investor and are deserving of closest inspection and investigation.

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Earnings : The large earnings and ra- ing comparative statement of earn		sinces of these si	ubsidiary propertie	is are shown by	the follow
For the years ended Septe	mber 30th.	1911.	1910. \$12,437,190	Increase. \$709,129	Per ceat
Gross (all sources) Operating expenses and taxes			7,513,023	373,498	5.0%
Net Earnings		5,259,800	4,924,167	335,633	6.8%
SUSQUEHANNA			and the second second	and a second sec	_
Controls by stock ownership throu Railway & Light Company, the for	igh the United Gas illowing Subsidiary	& Electric Comp Properties :	oany of New Jerse	y and the Lancas	ter County
Altoona Gas Co., Altoona, P. Citizens Gas & Fuel Co. of Te Colorado Springs Light, Heai Elmira Water, Light & Railro Hartford City Gas Co., Hartfo Leavenworth Light, Heat & Lockport Light, Heat & Powe	rre Haute, Ind. t & Power Co. Dad Co., Elmira, M Ord, Conn. Power Co.	Union Ga The Will The Will The Edis Lancaste	d Light, Heat & is & Electric Co. ses-Barre Co., P a Traction Co., on Electric Co., or Gas, Light & I ra Realty Co., L	, Bloomington a. Lancaster Co Lancaster, Pa Fuel Co., Lanca	, 111. unty, Pa.
Earnings : These properties are show	ing large annual in	creases in earning	zs, as is shown by	the following on	omperative
statement :	ars ended Septembe				-
Proportion of surplus earnings of ertics represented by their stor	k controlled by the	1911.	1910.	Increase.	Par cent.
Susquehanna Ry., Lt. & Power (of all charges Income from interest on securities		\$509,930.33 53,514.55	\$377,149.43 59,044.61	\$132,780.90	35.2%
All other Income		37,588.40	17,924.35	19,664.05	
12 mos. Sus. Ry., Lt. & Pr. Co. pf	d. stk., div	601,033.28 217,960.00	454,118.39 204,610.00	146,914.89	32.3%
Balance		383,073.28	249,508.39	133,564.89	\$3%%
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All bonds offered for sale by this bank are parts of issues bought by experienced bond buyers as investments for the bank's funds. We offer no bonds for sale that we do not consider safe enough to hold among our own investments.

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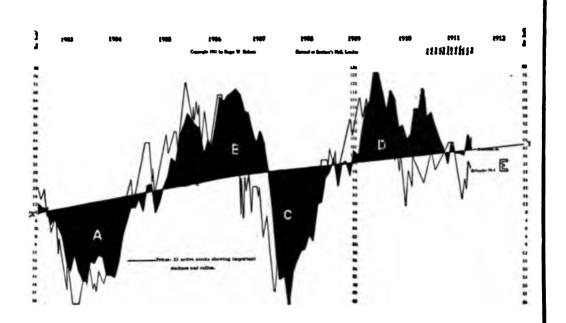
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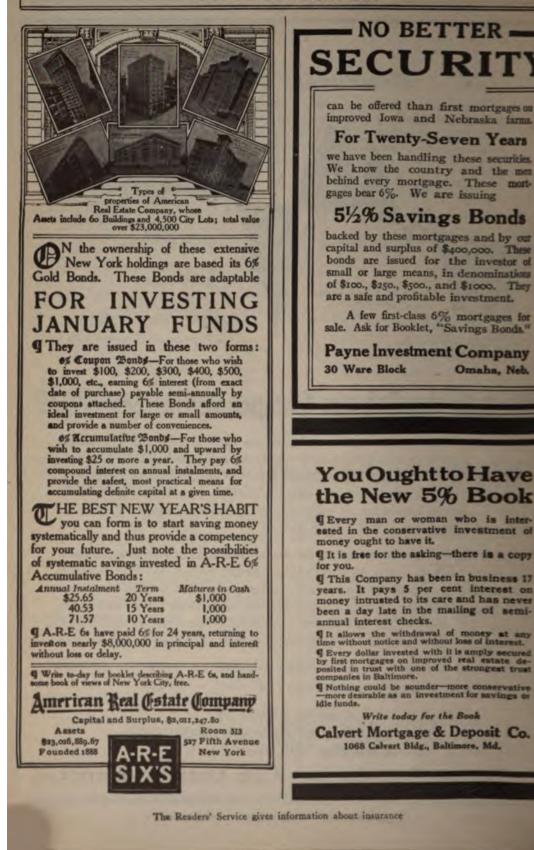
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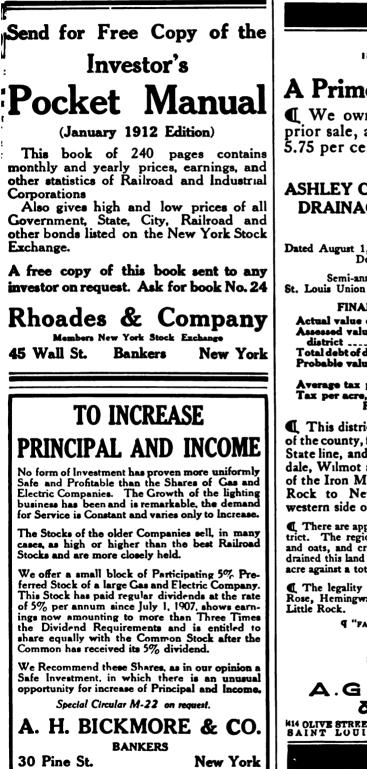
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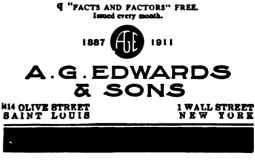
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This district lies in the southeastern part of the county, from Parkdale to the Louisiana State line, and embraces the towns of Parkdale, Wilmot and Cvpress. The main line of the Iron Mountain Railroad from Little Rock to New Orleans, runs along the western side of the district.

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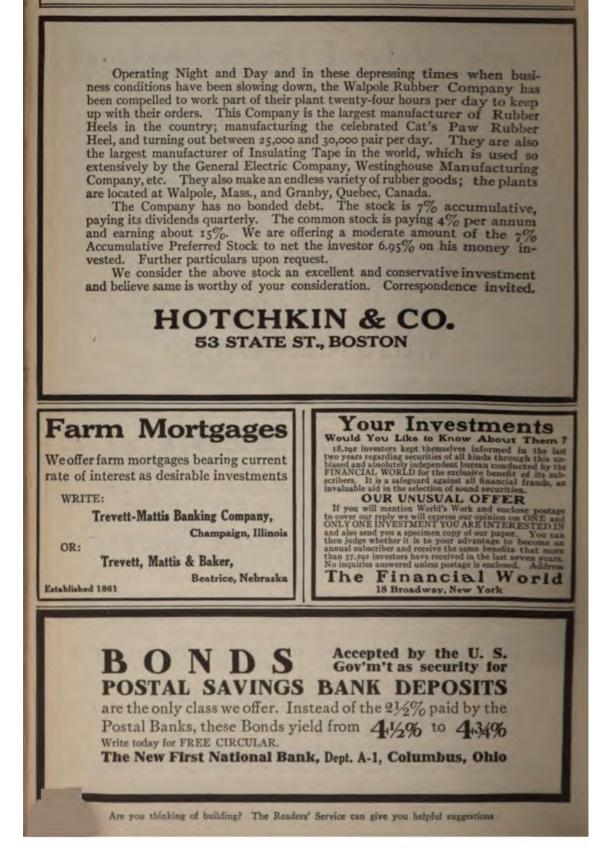
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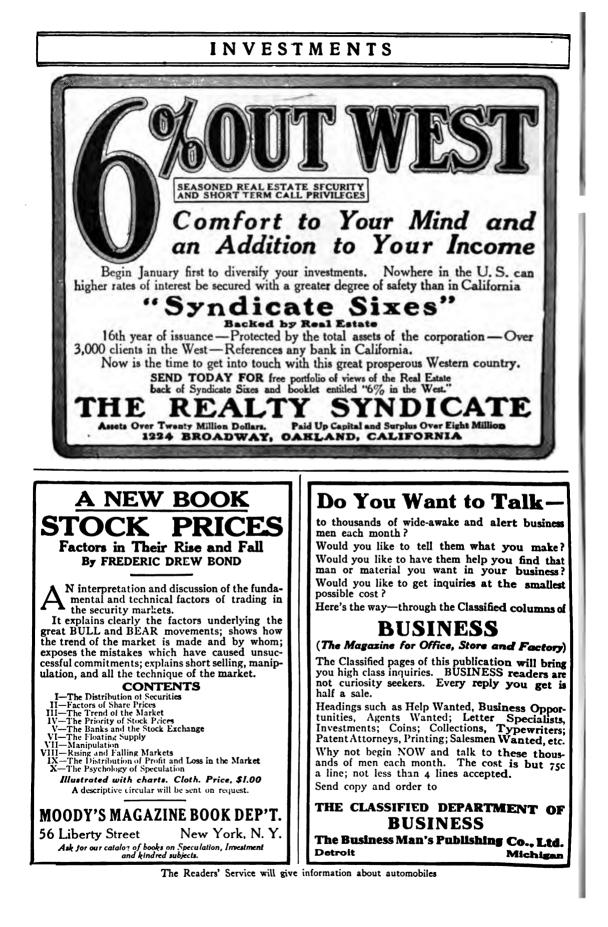
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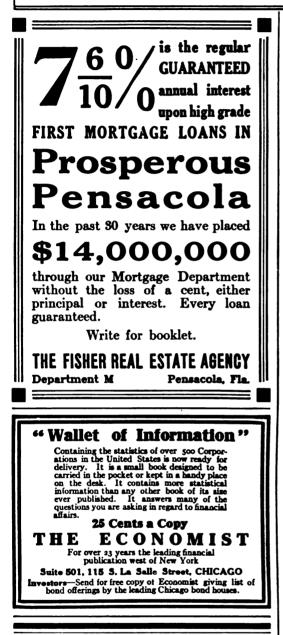
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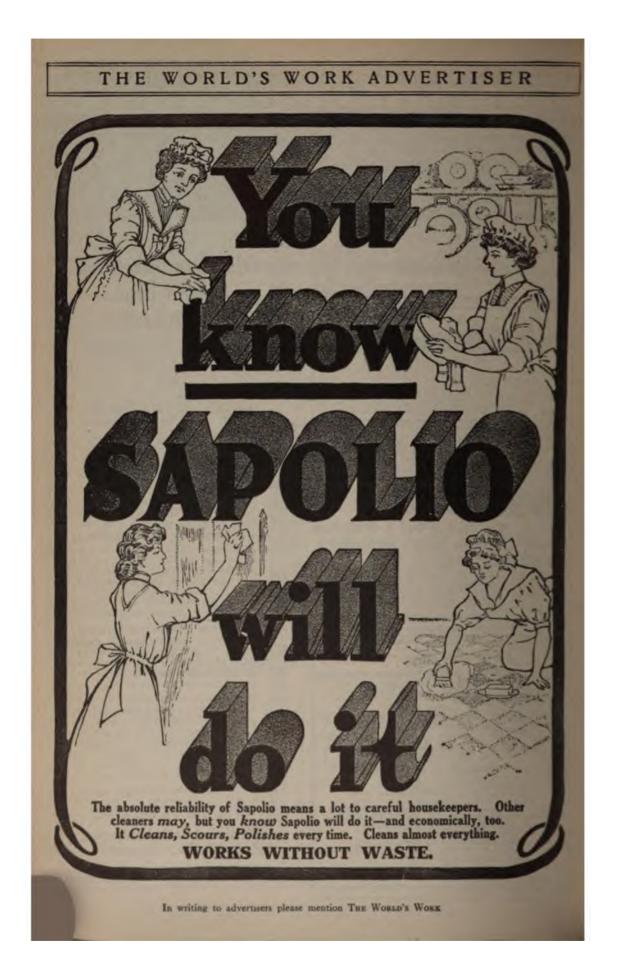
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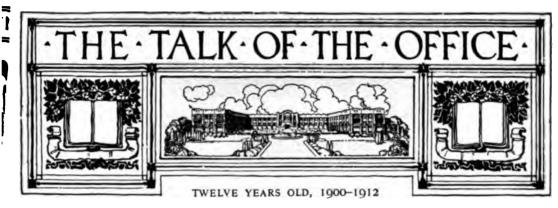
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Doubleday, Page & Company are twelve years old this month, having begun to harass an indulgent public on the eternal question of buying books on the first day of the new century, a little more than a busy decade ago. We began with no books, no magazines, and a conviction that the country needed a new publishing house, and that we were the people to build it. In these twelve years we have issued some thirteen hundred different volumes. They have not, every one of them, done as well as we had hoped, but the great majority have been extremely successful. We have printed and sold of these books something like 7,000,000 copies, beginning in 1900 with a few hundred thousand, and ending in 1911 with nearly two million volumes for the year; and during the same

period we have made many million magazines.

During these years we have had pleasant relations with a majority of the most popular authors of our day, the alphabet being well represented all the way from George Ade to Emile Zola. Many of these books are known and read all over the world. Twelve years is not a long time to bring together a representative list of books and authors; older houses have had the great advantage of friendly connections with many famous writers before we began business. We have not planned nor tried to break the relations which existed before we came into existence, yet through the favorable consideration of our author friends, we have, we think, a list which stands a fair comparison with the majority of publishing houses, and solely because so many writers have been found who were glad to encourage a young house.

In October, 1910, we moved from New York to Garden City, and began to make books and magazines in a forty-acre garden. Next to deciding, against the advice of almost all of our friends, to go into the publishing business at all, this move to the country was the best thing we ever did, and we received the same *Punch's* advice that we did about going into business — *Don't*. We are glad we did both things, even against the fears of friends.



The Country Life Press from an aeroplane 700 feet above the ground, taken by one of our friends. Philip Wilcox, from a Wright biplane

In January, 1911, we actually began to bind a few books at Garden City, and in the whole month we averaged a few hundred a day. At the end of the year we were making 10,000 a day and twice as many magazines. Gradually every part of book and magazine making has been developed in this building at Garden City. We set the type by that wonderful machine, the Monotype (we can set a book every day in the year); our photographers make many of the pictures, and our photo-engraving department makes the black and white plates for printing them, as well as the magazine covers and book illustrations in color. It is a difficult art to develop, but one which we think the covers of the magazines show that we have fairly well mastered. We even make the brass dies for the book bindings in the shop.

Some of the books are compiled and prepared in the building, and the newest department is devoted to binding books in leather. We hope that the Country Life Press bindings may yet become favorably known.

Early in the new year the temporary station will make way for a permanent one on our own grounds. It will appear on the time-tables as "Country Life," and will be about half way between Garden City and Hempstead.

The year has brought about 750 people together at the Country Life Press; we have received and mailed something like 7,000,000 pieces of mail matter, and paid into the Garden City Postoffice more than \$70,000 in the twelve months for postage. The Government has established its own postal station is the building, so that letters and magazines ge each night into our own mail car, filled during the day as it stands on our track at the doir, and, like the rest of the Hempstead brand, this track of the Long Island Railroad is elso trified by the third rail all the way to the Penesylvania Station at 33d Street, New York. We have our own Western Union Telegraph offic, direct trunk telephone wires to the New York office, a system of over fifty brand telephone stations in New York and Garden City.

In the big station at 33d Street, by the way we have the little Book Shop where our magzines, and the books of all publishers are sold

So many people have asked us how the plan of moving into the country has worked, that we have bored our readers with these particulars, yet the interest shown by many thousand visitors has led us to write and print a little book about it, a very imperfect affair, which we will some day remake for a more effective description; but we shall be glad to send the present pamphlet to any interested friends for the asking.

In New York at 11 West 32d Street, two blocks from the Pennsylvania Station, we have the city trade book department, and the advertising departments for our magazines, and we have advertising department offices in Boston, Cleveland and Chicago.

A happy and prosperous New Year to all the patient readers of The Talk of the Office.

P. S. If you are looking for new, cheap, and easy New Year Resolutions, we respectfully suggest that here are some magazine club offers calculated to please the very elect(our own readers):

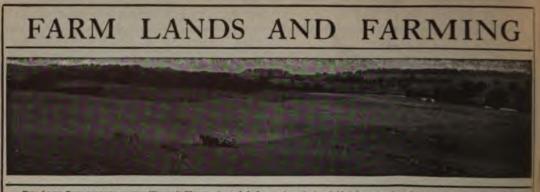
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THE LAND DEPARTMENT OF THE WORLD'S WORK exists to help farm seekers obtain reliable information about over the United States. Inquiries will be answered definitely, or authorities suggested, by letter and on this page. The opportunities advertised under this heading have been investigated and found to be authentic and insukworthy. ut farming . 11 . The opportunities advertised under this heading have been investigated and found to be as Address LAND DEPARTMENT, WORLD'S WORK, Garden City, N. Y.

1.—SOUTH ATLANTIC STATES. Q. Please give me information about farm land, preferably for truck farming near a city, in Georgia, North Carolina and South Carolina. I have about \$3000 to \$5000 available.

A. The chief trucking districts of these states are about Norfolk, Va., Wilmington, N. C., Charleston, S. C., and Savannah and Brunswick, Ga., though most of the coast region south of Norfolk contains good truck land. Most of the produce is shipped to Wash-ington, Philadelphia and other northern markets. Uncleared, unimproved and poorly located, although potentially profitable, land can yet be bought cheap — perhaps for \$10 or \$15 per acre; but an acre of highly improved truck land may bring as much as \$1500. Ordinarily a young inexperienced man can best afford to buy cheap, uncleared land, begin slowly, de-velop it gradually and wait for profits and an increase in land values, knowledge and efficiency. Older, ex-perienced, well-capitalized farmers can more often pay for high priced land, fertilizers and implements and begin at once to farm intensively and on a large scale.

scale

scale. Reliable general descriptions can be obtained from the Commissioners of Agriculture or Agricultural De-partments of these states, at their capitals. The fol-lowing railroads can also furnish information: The Southern Railway, Washington, D. C., the Norfolk and Western, Roanoke, Va., the Norfolk and Southern, the Atlantic Coast Line and the Seaboard Air Line, Norfolk, Va. But best of all, go and see. There is no other way to form a good judgment.

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A. It is rarely practicable, to buy land for general farming within commuting distance of New York, or any very large city, because farms within that radius cost from \$150 per acre up, which is ordinarily too much to invest in merely general farming land. The only way to make them pay is to farm them very intensively, raising truck crops, greenhouse products, flowers, etc. Well located general purpose farms can however be bought in parts of New York, Massachu-setts and Connecticut, relatively near other cities. You had best reconcile yourself, to settling at least one hundred and fifty miles from New York. You can obtain facts about New York farms for sale from the Commissioner of Agriculture, Albany, N. Y., and from the Farm Bureau of the New York Central Railroad,

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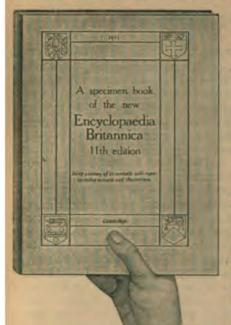
New York City. The Delaware, Lackawanna and Western Railroad, New York City, can also supply information for certain localities.

Western Railroad, New York City, can also supply information for certain localities.
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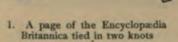
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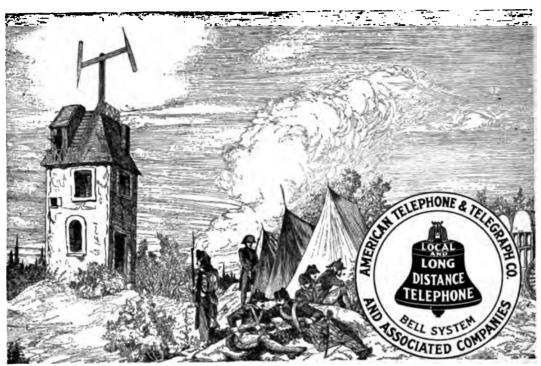
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In place of the slow and unreliable service of couriers, he built lines of towers extending to the French frontiers and sent messages from tower to tower by means of the visual telegraph.

This device was invented in 1793 by Claude Chappe. It was a semaphore. The letters and words were indicated by the position of the wooden arms; and the messages were received and relayed at the next tower, perhaps a dozen miles away.

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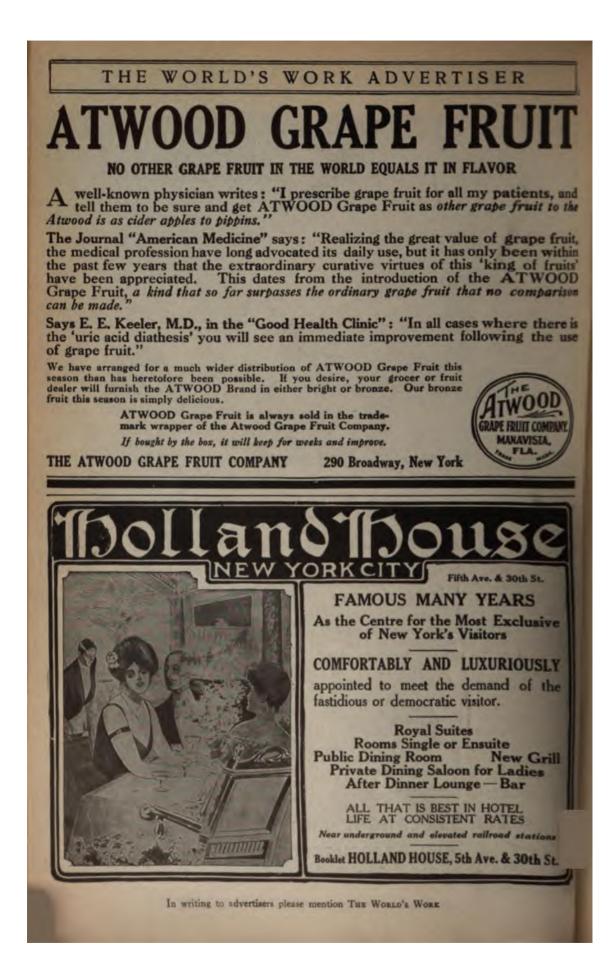
of to-day the visual telegraph system of Napoleon's time seems a crude makeshift. It could not be used at night nor in thick weather. It was expensive in construction and operation, considering that it was maintained solely for military purposes.

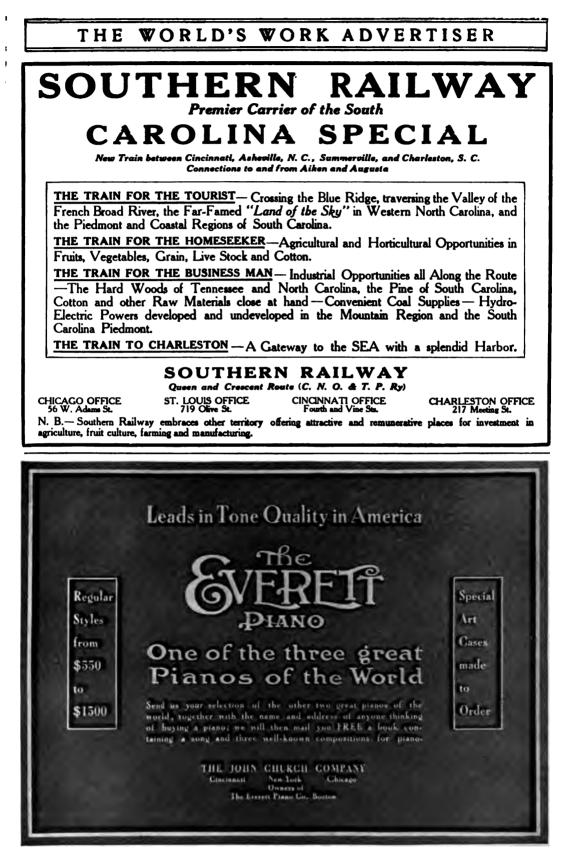
Yet it was a great step ahead, because it made possible the transmission of messages to distant points without the use of the human messenger.

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the maker of motion pictures, make it best for your use. Then too, Kodak Film is properly orthochromatic (gives the most practical rendering of color values), is absolutely protected by duplex paper from the offsetting of numbers, and is superior in keeping quality. Be sure that it is Kodak Film with which you load

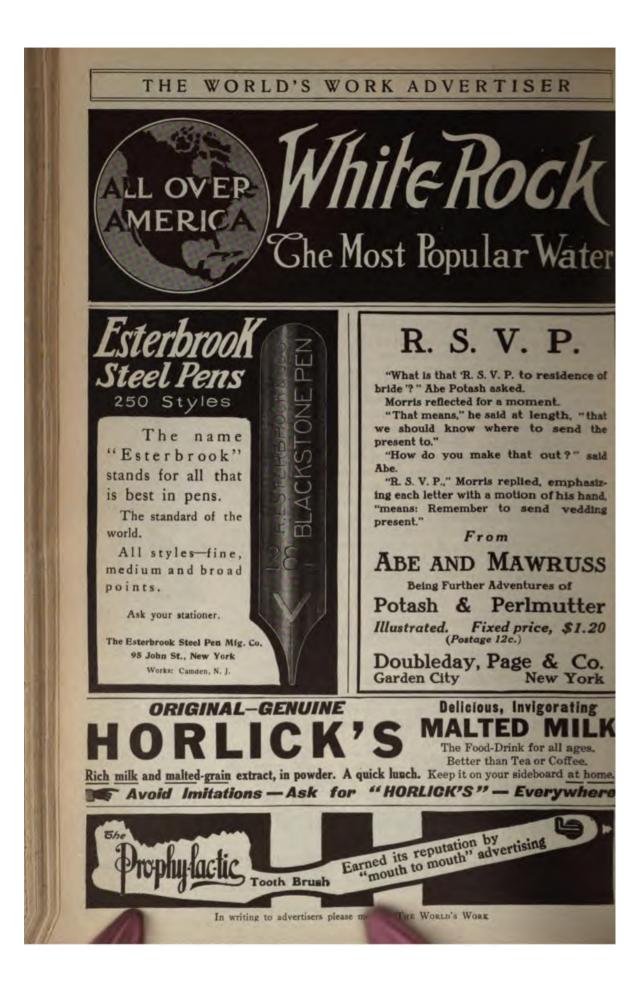
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IN 1650 FEARS WERE EXPRESSED THAT THE (See Page 37 Govt. Rep't) DRAIN WOULD SOON EXHAUST THE SUPPLY.

Many years later the alarm was raised again, but far-sighted

JOSHUA McGEE REASSURED THEM

and told the anxious ones that "cutting a few hundred masts a year would make little inroad upon America's forests' which he stated to be "14 or 15 miles long and 300 to 400 miles broad". (He was a true conserv-ative!) And the cutting went right along, yet HERE WE ARE IN

and STILL PLENTY OF WHITE AS GOOD AS EVER. And plenty of NORWAY PINE, TOO, 1912 PINE (which for most uses is just as good as WHITE PINE.)

(which for most uses is just as good as WHITE PINE.) And the best of it is that there is going to keep on being plenty. After 288 years of White Pine cutting in Massachusetts alone (which by many is sup-posed to be denuded of timber) there were 238,000,000 feet of White Pine alone cut in 1908 (Government figures). The Forest Service further reported that "it is not im-probable that a similar cut can be made every year in the future from the natural growth of White Pine in that state." And Massachusetts is "not much" these days on White Pine production. Minnesota and Wisconsin now produce THE BEST as well as the most White Pine. This Government Report also says, "The supply of White Pine lumber need never fail in this country, provided a moderate area is kept producing." You may rely on us to see that through WIDE AWAKE RETAILERS EVERYWHERE, YOU may secure this "staple American lumber" with the same certainty and the SAME QUALITY ADVANTAGES ENJOYED BY YOUR ANCESTORS.

If you ever buy lumber, from a chicken coop to the "trim" of a palace, WRITE US before you do it. Interm you self—this question of "what wood to use" is deeper than many realize. We will refly PROMITLY AND CANDIDLY. SPECIAL NOTE: Anyhow, drop a card for our little book (you need it for your own sake, not ours.) FREE on your simple request. Don't wait—there's no profit in waiting. Write TODAY.

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California is not a foreign land, but the most beautiful part of your country, yet so different, so wonderful that few can realize the truth of what they read about it. You must *really live* the days and nights of this glorious, blooming California of *yours* to know it as these Sunset Leaguers know it.

There's a family in your very neighborhood who knows California and the West, who will tell you of this wonderland. Let us make you acquainted—let the Sunset Indian put you in touch with folks who really know. Even if you are only thinking about the West, and the Panama Exposition of 1915, you want to think right—that's why we so frankly ask:

What's Your Name? and where do you live? We want to get acquainted. We want to know you personally. We want to send you booklets and magazines and pictures that will help you understand California as we understand it and let you drink in some of the abundant glories of this land of charm—enough for us all.

Here flowers bloom the year round; winter is only a name, for snow-capped mountain tops and blooming valleys thrive side by side. Summer is never burdensome. And here lies the romance of the Orient, without the dirt; and the wonderful Pacific that laps the shores of Japan and washes the sands of the Golden Gate.

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WHAT THE WOULD-BE BUYER WAN TO KNOW ABOUT A CAR

WANTED a car. For a long time I thought a horse and buggy was good enough for me, but the evident satisfaction my friends had in their automobiles overcame my prejudices and I became a convert. I found that my horse was constantly on my mind when I was driving and he was constantly dipping into my pocket book when he was in the stable. A car I would have, but which. was utterly ignorant of the workings of a gasolene motor, did not know what the transmission did nor how the carburetor worked so the advertising that I read consciously or had absorbed unconsciously only confused me. There must be hundreds like myself who, ignorant of the technical points of an automobile, want to know the primary things about them. If I had read in the early stages of my enthusiasm an advertisement that told in simple terms how far the car would run on so many cents worth of gasolene,

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how many miles I could run in an a noon comfortably, how in a general the machine was controlled, how a 1 not an expert mechanician could leas run the car; in a word, an advertise that would make me believe that it no trick at all to run *that* car, that the of running was reasonable and the p ures even of a tyro sure, I would | searched no further.

As it was I was so confused with technical terms I read, so impressed the apparent complications that I all gave up. Several of my friends were neither mechanical geniuses nor sessed of remarkable intelligence see to be able to run their cars all right. I took a chance and I am glad I did.

Now, I know the difference betw a magneto and a differential, and I i the technically worded advertisem with pleasure and understanding — b bought my car on faith.

LIGHTING THE CAR WITH ELECTRICIT

When it begins to grow dark of an evening, the human nature of a motorist often triumphs over his better judgment and he takes a chance of being arrested or of having an accident rather than go to the trouble of stopping the car, dismounting, turning on the gas tank, adjusting the wicks of the oil lamps, etc., a series of operations necessary before he can "light up" under the old regime of automobile lighting — especially inconvenient if the night is wet or windy.

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which dynamo lights the car and ke the battery fully charged. The batt is used to supply light and power w the engine is stopped. In short, an el tric lighting equipment for an automol is as practical as it is attractive a convenient.

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The Commer Truck

(to next page)



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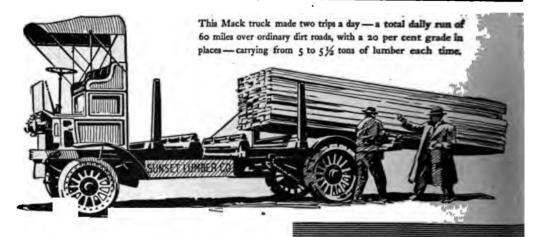
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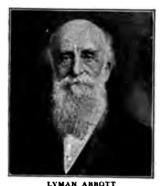
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Has La Follette a good fighting chance for the Republican nomination?

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Is 1912 to be a Democratic year?

What will the platforms be?

What are the issues at stake?

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The Editor-in-Chief of The Outlook, Lyman Abbott, will present the vital issues of the campaign as they develop and discuss them in the spirit of broad statesmanship which has marked his work in many campaigns.

Theodore Roosevelt, ex-President of the United States, is a world authority on problems of National government.

From his position on The Outlook's editorial staff, Mr. Roosevelt will continue to present-exclusively through The Outlook-his views on political as well as all other public questions.

President Taft's Own View

of what his Administration has accomplished, and his judgment of the measures still remaining on what he calls his "calendar of unfinished business," will be found fully set forth in The Outlook of December 2, 1911, where it was presented by special authority of the President.

Bryan's View

K.

Three times Democratic candidate for the Presidency, William Jennings Bryan speaks with the authority that comes from having voiced the opinions of millions of his countrymen. Mr. Bryan's views on the political situation and the coming campaign are to be fully set forth in one of the early issues of The Outlook.

La Follette's View

Picturesque and daring, the most striking figure in the Republican Progressive movement, and its foremost Presidential candidate, the Senator from Wisconsin is an extraordinary factor in National politics. As Governor of Wisconsin he made a great record. He has been a power in the Senate. He is going to tell fully and explicitly where he stands, in an early issue of The Outlook. His own statement—presented th¹ The Outlook—will have wide interest. The Outlook what the believes to be the trend of political thought

Harmon's View

Conservative leader in the Democratic party, Conservative leader in the Democratic party, candidate for the Presidential nomination, twice elected Governor of Ohio, the man who handled the first case under the Sherman Law, Judson Harmon's opinions have great National interest. He will soon state them fully through the pages of the Outlook. This statement will follow logically The Outlook's articles in which Governor Woodrow Wilson and Oscar W. Underwood have set forth their views.

Bristow's View

Force and earnestness have characterized Mr. Bristow in all his public career. As Senator from Kansas he has been a power in debate and a real influence in constructive legislation.

THE OUTLOOK IN THE PRESIDENTIAL YEAR

Henry Cabot Lodge is writing for The Outlook the first history of the Hundred Years of Peace following the War of 1812. It concerns the various difficulties which have arisen between Great Britain and the United States in the century of peace since the Treaty of Ghent. This will be a rapid review in two or three articles of the essential facts which have en-abled two countries with a border line of three thou-send miles to live in peace for a full hundred years. sand miles to live in peace for a full hundred years.

Governor Johnson

Governor Johnson is going to talk to Outlook readers about California's fight for justice and decency. The Governor and his colleagues are doing some big things in Cali-fornia which other States ought to know about. Congressman William Kent, of California, in "A Talk with Governor Johnson," will tell the readers of The Outlook what these things are and how they are being accomplished. For example: how a great business monopoly has been thrown out of politics; how the recall has helped to place the people in power; how Woman Suffrage has gained a place in the State government, how decency and progress have been placed above mere considera-tion of party. Through Mr. Kent, Governor Johnson will present many of his views on the Nation's progress toward justice and democracy.

Gifford Pinchot

leader in America's Conservation movement, has Jeader in America's Conservation movement, has recently returned from Alaska, where he has studied at first hand certain questions which deeply con-cern the American public. Mr. Pinchot will shortly contribute to The Outlook one or more articles on a subject—to be announced later—that is certain to be of unusual interest and significance.

Winston Churchill

is writing for The Outlook the true story of "A State and a Railway." In "Mr. Crewe's Career" he gives a vivid picture of the struggle of a State to overcome a corrupt political machine, backed by big interests. This is the story of the fighting Progressives of New Hampshire, their success in freeing the State and giving the rule to the people. He will describe the present political conditions as he sees them in his own State, pointing out the good which is being accomplished.

William Allen White

William Allen White author of "What's the Matter With Kansas?" is going to tell in The Outlook the inspiring story of how the people of Kansas, without any fuss and without much noise, built up in five years a gov-ernment of the people; how they freed the State from railway despotism; how they wiped out the "slush fund" and saved the State's money; how they put the bad politicians out of office; how they cleaned up the penitentiaries, and did many other good and constructive things. All this is a striking example of the people governing the people. Mr. White has been in the thick of the fight, and no one could be better fitted to write this story.

The Truth About Alaska

The Truth About Alaska The record of The Outlook's investigations in Alaska begins in the issue of December 23, 1911. W. D. Hulbert, acting for The Outlook, has for several months been making a study of Alaskan conditions on the ground. He has had acceptional opportunities for observation and has had access to the most authoritative sources of information. If you want to know what Alaska is, what it needs, what is really going on there, you want to read this first-hand story. If you want to know the facts about the Guggenheims, the "Syndicate," the Cunningham Claims, Controller Bay, the Cordova "Coal Party," the fisheries, the fur seal problem, the National forests, read these articles and the editorials that will accompany them.

Home-Making

FIOME-IVIAKING Vitally interesting to every American woman will be The Outlook's series of articles on Home-Mak-ing, beginning with the article "What Is a Home For?" We hear it said that the housewife's work is drudgery and that the way to liberate women is to give them a chance to escape from drudgery. These articles will show from various points of view that there is no more drudgery in the work of the housewife than in that of the lawyer, the physi-cian, or the politician; that woman's work in the home needs scientific training just as does man's work in the office or factory.

Training the Child

Iraining the Child The Outlook will devote a great deal of attention during the coming year to the progress and welfare of the child—the most important subject in the world. H. Addington Bruce is preparing a series for The Outlook dedicated to the proposition that the proper environment and the right home influ-ence for our children are more important than heredity or any given method of schooling. Be-ginning with the wonderful story of Karl Witte, he will continue with the first principles of Child Training based on his own first-hand study of such cases as that of the Sidis boy, the Wiener children, and many other striking examples. He will show how parents by simple, practical methods can work marvels in the development of their children. Fol-lowing this series will come a group of articles by Elizabeth McCracken, entitled "The Children of America."

Adventures in Court

Adventures in Court "Better lose money than go to law" is a common saying founded in wisdom. What the average citi-zen suffers in trying to settle a dispute, defend himself from attack, obtain compensation for in-jury, or even comply with the demands of the law—all this makes a story sad and laughable. Frederick Trevor Hill, who is both lawyer and writer, is preparing for The Outlook a serial based on his own rich experience and observation, which will be dramatic and humorous, and will open the eyes of the ordinary citizen to the delays, com-plexities, absurdities, and injustices of our courts as they are to-day.

For information regarding railroad and steamship lines, write to the Readers' Service.

What's the Matter With Business?

That something is the matter everybody knows.

What it is, the public has not yet been told definitely.

High authorities in the financial and industrial world are giving their opinions on this puzzling question to the readers of The Outlook.

Francis E. Leupp, who has had a notable career in journalism and in the Government's service, is securing for The Outlook the constructive views of these men as to what may be done to make business more stable, more productive, and more just for all concerned.

Is J. Pierpont Morgan justified in his belief that the country is all right, and that the present condition of business is due to mental rather than material causes?

Is James J. Hill right in proposing to get rid of trust evils by requiring all corporations to reduce their capital to the actual amount of money, or its equivalent, put into the corporation ?

Frank A. Vanderlip, president of the biggest banking institution in the United States, makes the first statement in The Outlook of December 9, 1911.

John G. Shedd, head of Marshall Field and Company, will, in the second article of the series, answer the question from the view-point of a great merchandising concern.

President Mellen, of the New Haven System, Frank Trumbull, Chairman of Board of Directors, Chesapeake and Ohio Railway, and other prominent figures in transportation will give the view-point of the railway man.

John Mitchell will tell how organized labor looks at the question.

Lyman J. Gage, Leslie M. Shaw, and George B. Cortelyou, former Secretaries of the Treasury, will tell how it appears to those who have controlled the Nation's finances.

J. Laurence Laughlin, the eminent economist, will show how the question strikes one who is at once a philosopher and a practical man of affairs.

These and others will contribute to a feature which alone would make The Outlook for the coming months a journal of the greatest interest and usefulness to every man in business.

The Outlook

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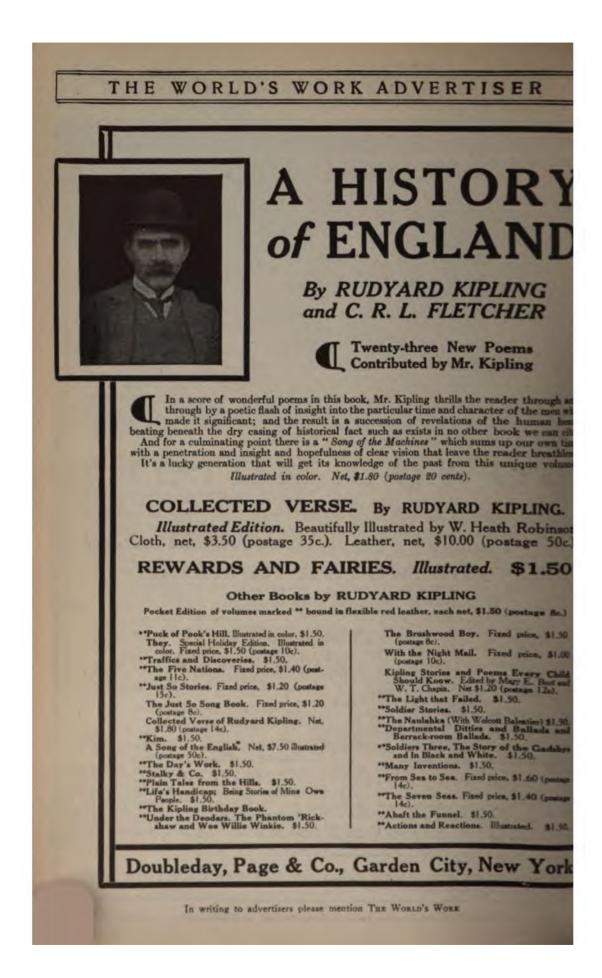
THE OUTLOOK

287 Fourth Avenue, New York You may send me three consecutive numbers of The Outlook beginning with the current issue. I enclose two Two-Cent Stamps to cover postage. Many of The Outlook's strongest features cannot be announced in advance, for The Outlook is first of all a weekly Newpaper, handling great topics on the instant. Therein lies its distinction. Iu authority is its strength. If you are not already a subscriber send this coupse with two two-cent stamps for postage.

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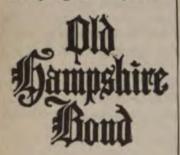


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[4]

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SN'T it strange, though, how many bond papers have been born "old?" Just because of the standard set by Old Hampshire Bond we now find offered by both printer and maker, stationery marked "Old THIS Bond" "Old THAT Bond" "Old SOME-OTHER Bond" and many of the titles sound like or suggest the real HAMPSHIRE.

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This book is for the members of the firm, managers and heads of departments

It was an expensive book to produce and, therefore, we ask you in sending for it, to use your business letter head and state the position you occupy with your firm—to aid us in avoiding needless waste.

The King of France said: "Begin at the beginning, go to the end, and then stop." That's just what this book does—in other words, it's *adequate* in the handling of its subject,

Dictation on The Edison Business Phonograph

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It is every bit of it about the advantage of using the Edison Business Phonograph in handling correspondence, all of it more or less closely related to your own business but

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There is a place on your desk for this book, there is a place in your mind for the facts which it contains, just as there is a place in your office for the great business system which this book represents—no matter what the size or character of your business. Write for this book today.

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Impressive Stationery at a Usable Price

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Cheap stationery is just as wasleful as expensive stationery. What you need is good quality at a usable price. It's worth a little effort to get it. If you have any difficulty, a note to us on your business card or letterhead will bring you the names of those printers and lithographers in your locality who handle Construction Bond and some specimen letterheads showing the various colors and finishes.

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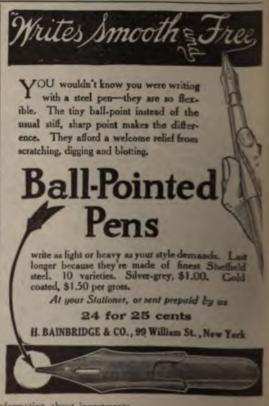
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"Tell him he'll have to wait until I finish checking my postings."

"All right, but how about Mr Brown—he says to tell you he's been holding up some percentage work for two or three days, waiting for a chance at the machine?'

"Well, I won't keep it long but there's nothing doing until I get through "

It won't cost you anything to have a Comptometer put in your office on trial. If you don't choose to keep

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-This is typical of what happens in offices where they understand the Comptometer where its value has been demonstrated by use on all kinds of figure work-addition, multiplication, division and subtraction.

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Not much enthusiasm at first-a little prejudice maybe, but once it is realized how much wearisome labor it saves-how easy it is to operate-what satisfaction and economy in its rapid work and sure accuracy, then they are all after the Comptometer when there is any figuring to do.

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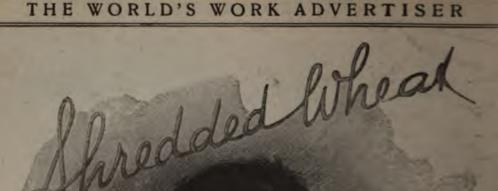
With an Inter-phone System in your home you can telephone your instructions direct to the kitchen, or to any other room in the house. You can avoid stair climbing and needless walking from room to room. Simply push a button on the nearest Inter-phone and talk. Convenient? You'll wonder how you ever did without it.

Cost of installing an Inter-phone system ranges from \$6.00 per station up. Maintenance cost is no more than for your door bell.

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NESTERN ELECTRIC COMPANY Manufacturers of the 6,000,000 "Bell" Telephor





His first telephone message — what shall it be? Naturally the first thing a real live boy would think of would be the thing he likes best. That's the reason he is 'phoning for Shredded Wheat, the food that builds sturdy, healthy boys and girls—a food to grow on, to play on, to work on.

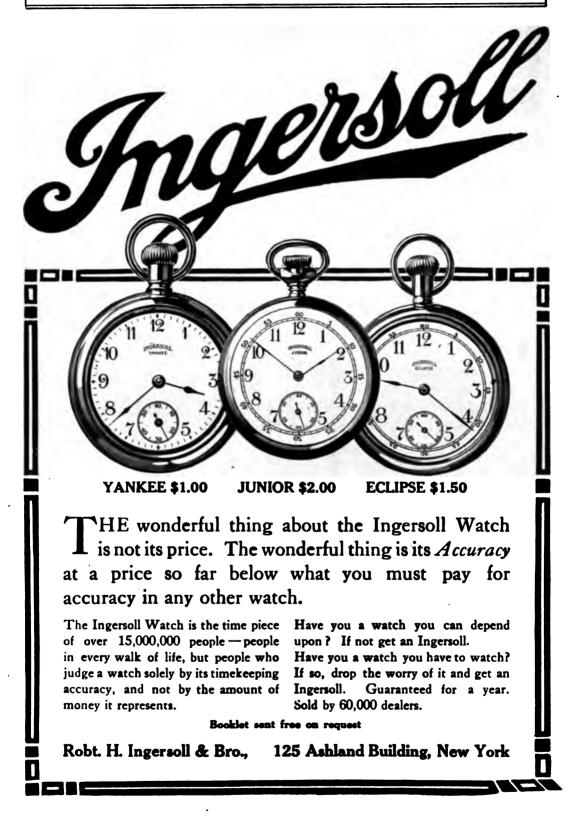
For breakfast in Winter nothing so nourishing and satisfying as Shredded Wheat with hot milk and nothing so easy to prepare. Heat the biscuit in oven to restore crispness, then pour hot milk over it, adding a little cream and a dash of salt.

Made only by

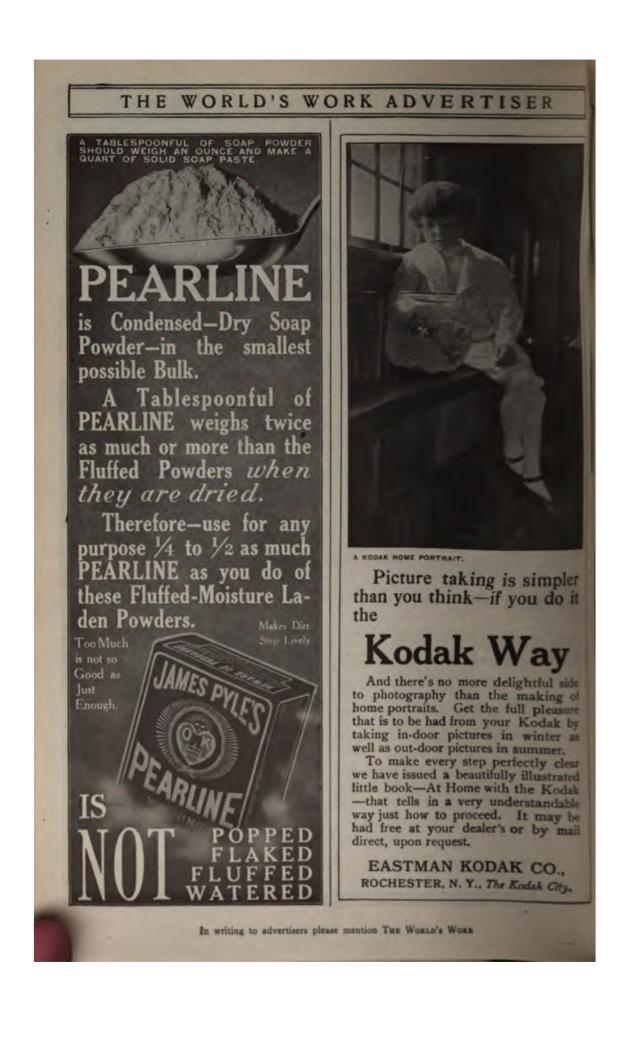
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From the census of 1910 it is found that the center of population is in Bloomington, Indiana, 39 degrees 10 minutes 12 seconds north, and longitude 86 degrees 32 minutes 20 second

"If all the people in the United States were to be assembled in one place, the center of population would be the point which they could reach with the minimum aggregate travel, assuming that they all traveled in direct lines from their residence to the meeting place."

-U. S. Census Bulletin.

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It is the point which can be r with "the minimum aggregate" by all the people living within the of telephone transmission and access to Bell telephones.

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WHEN a watch factory not far from Chicago decided in opening a new plant that electric drive was the only thing for the modern watch works, they called our engineers in consultation.

We advised them that in their particular case the apparent extra expense of individual motor drive with Westinghouse Motors over group drive with electric motors was not an expense at all, but an investment.

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Take a tip from Sir Walt. He was a good trye. If he hadn't been willing to take a chance for hundred years ago, he never would have know what a smoke was like. He tried tobacco and discovered the jimmy pipe.

If you haven't smoked Prince Albert, there's a discovery in store for you. Try it. You'll discover the greatest improvement in pipe tobacco since Raleigh packed his first pipe home to England.

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People lose money by producing too much light and smothering it with the wrong shade or globe. That is easily fixed; the right shape and kind of glass, giving the same illumination with less current, stop that loss right away. Read "Scientific Illumination".

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How about your lighting?

Is it right? If so, you are one in a thousand. Are you wasting the strength and value of your employes — which is money? Are you throwing away valuable electric current — which is money? Are you driving away trade — which is money?

At home — is your family enjoying satisfactory and restful lighting, or suffering under the strain of the average badly lighted home?

Scientific Illumination is the only economical illumination. It uses just the right amount of current. It gives you the kind of light you need and where you need it. It makes money by saving money and increasing efficiency.

Send for "Scientific Illumination" — an easily understood book — and let our Illuminating Engineering Department help you with your lighting problem. We do this because glass is one of the most important factors in illumination. When you realize the importance of good lighting, you will use one of the many kinds of glass we make, of which, by the way, Alba is, in more than nine cases out of ten, the globe or shade which gives the

greatest amount of agreeable, usable, money-making light.



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The Varnish	Murphy Varnish Company	NE

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When you buy Kryptoks you get the only unnoticeable and inconspicuous double-vision lenses made. Two pieces of glass of different refractive powers are so skillfully fused into one lens that no line of demarcation can be seen. The lens is then ground with two distinct focal points —one for near vision and the other for far vision.

Worn by over 200,000 people Kryptok Lenses look exactly like single-vision lenses

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Your optician can supply you. Kryptoks can be fitted to any style frame or to your old frames.

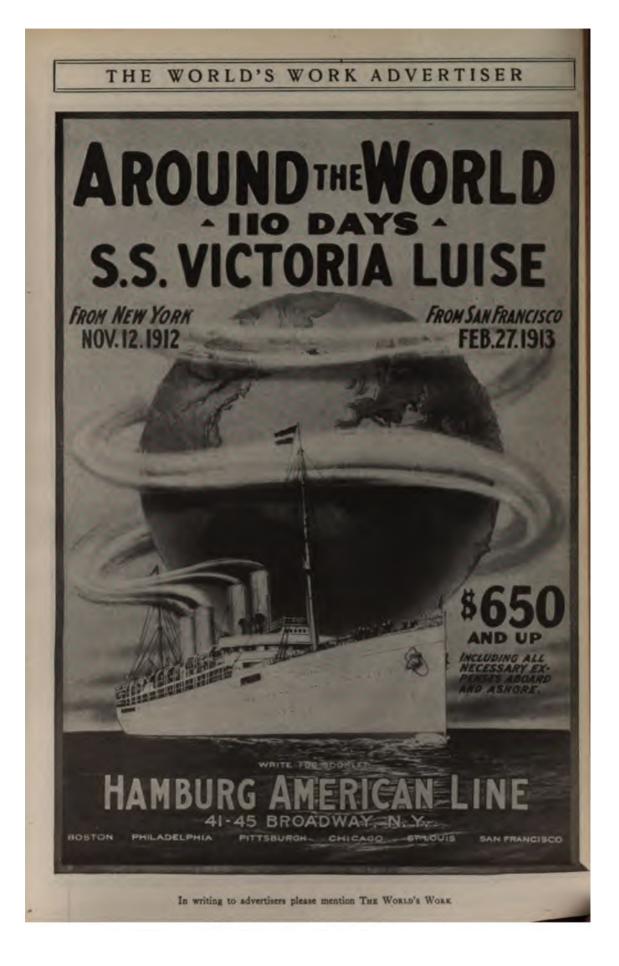
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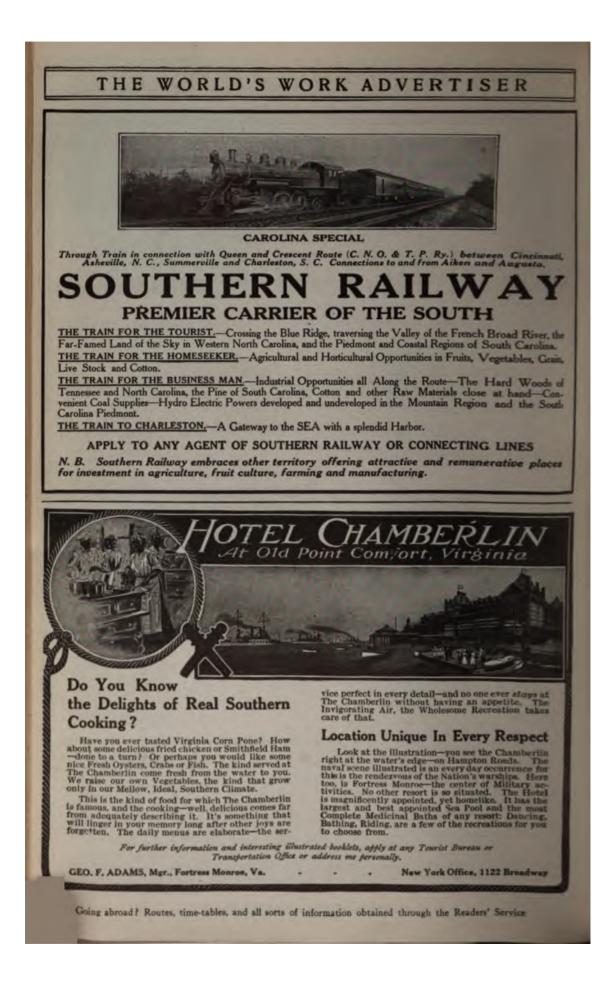
which explains Kryptok Lenses fully besides containing many facts of interest to every one who wears two-vision lenses or who should wear them.

KRYPTOK COMPANY 110 East 23rd St. New York

This is a Kryptok Lens for the absence of seams.

add or sugrest old age. They improve one's This is a Pasted Lens te the ugly seams. They unsightly. They indicate old age. Pasted lenses detract from one's appear-







Yes sir, yes ma'am, you'll come right into this garden land of *yours* where the birds sing and the flowers bloom year around; where winter is but a name!

You'll come into your *own* out here in California—and in the wonder-States of the Pacific Coast.

Life's worth living to sit by the blaze and read about your California and plan what you will do, not this year perhaps, but before many years.

For the call of the far-West is in your blood, be you young or old; it should be the solution of your life's problem.

And it will be if you'll listen to 51,000 men and women—members of the Sunset League—who want to make you as enthusiastic as they are about this West country of yours.

Will you kindly get a pen and sign the accompanying coupon? Will you enter into the spirit of good fellowship, good living and sunshine and gladness by mailing your name and address.

Because we want to send you pictures and booklets; we want to tell you about a family in your own neighborhood who know all about California and the great Pacific Coast States who'll want to help you know, too.

We want you to meet that family and talk it over; to get the spirit that has made the West your land of the open hand and

open heart, where it's good to live and know life at its best!

A 2 cent stamp will bring to your door immediately a Panama Exposition Booklet; a sample copy of "Sunset — The Pacific Monthly" Magazine, with its magnificent four-color photographs of western scenes; a booklet describing the Panama - Pacific Exposition at San Francisco in 1915; an entertaining and in forming volume on "California's Famous Resorts" and one of our descriptive booklets about <u>California</u>, Oregon, Washington, Nevada, Arizona or New Mexico.

Besides, that 2 cent stamp will put at your command "Sunset—The Pacific Monthly" Information Bureau. It will tell you everything you want to know. Use it to your heart's content.

We'll send information about the Sunset League, that has no dues, no obligations, except that you pass on to your neighbor what you learn about California and the West. Does all that interest you?

Are you the manner of man or woman who would live life at its best?

UCFT	ACOUAIN	TEDU	COURON
UL I	ALUUAIN		LOUPUN

SUNSET-THE PACIFIC MONTHLY MAGAZINE INFOR MATION BUREAU, San Francisco, Cal. Gentlemen :- Enclosed find ic. stamp. Please send, fully prepaid, California literature, the Panama Exposition booklet, marked copy of Sunset-The Pacific Monthly				
prepaid, California literature, the Panama Exposition				
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6.2

Magazine, and booklet about______ without any further obligation on my part.

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Street

City or town

Going abroad? Routes, time-tables, and all sorts of information obtained through the maders'



"The Outlook Has Become the Forum for Public Discussion in America"

"The Outlook's interview with President Taft defending his administration is the big news story to-day.

"In this interview, which comes from a trained newspaper man, for the first time in his incumbency of the White House, President Taft gets a clear view of what he is trying to do before the American people. . . .

"But this is beside the real point of this editorial.

"The point is this: That The Outlook has become the forum for public discussion in America.

"Week after week for a year or more The Outlook's editorial page has been discussed. The Outlook has made a place for itself distinctive and peculiar. Nothing else like it—since, perhaps, Greeley's day—has been known in America. It has made editorial news, and the Press Associations carry its views and discussions as regularly as they carry the market reports.

as regularly as they carry the market reports. "Theodore Roosevelt . . . is doing as much for the country as though he were President. He is directing the thought of the people into straight channels that will lead to wise action.

"But The Outlook—a happy compromise between all the good of a newspaper and all that is fine in magazines—has become a function of the American government as it now exists. It is the greatest organ of public sentiment in the country to-day. No leader of American sentiment or public feeling can ignore it.

"For now abideth these four—the executive, the legislature, the judiciary, and The Outlook. And the greatest of these is The Outlook."

William Allen White in the Emporia (Kansas) "Daily Gazette" of December 1, 1911.

The Outlook

287 Fourth Avenue, New York

If you have not yet become a regular subscriber of The Outlook we shall be pleased to send you three consecutive issues as an introduction upon receipt of this coupon with two twocent stamps to cover postage.

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No other lands are as quaint and fascinating, no other trips are as full of comfort and health as those which have been arranged this season by the

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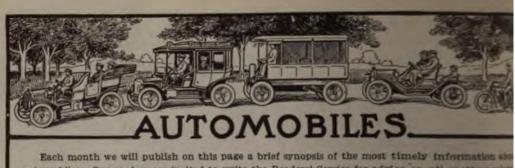
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automobiles. Our readers are invited to write the Readers' Service for advice on all matters reat to automobiles. An expert will answer these inquiries promptly by mail. This service is free.

IN THE MATTER OF TIRES, LUBRICA ING OILS, ETC.

Conditions have changed among the automobile public. There was a time when the average automobile owner knew little or nothing about tires. He was more or less at the mercy of the manufacturer and usually took what was handed out to him, for the reason that he did not know a good tire from a bad one.

Now, however, the automobile owner is a wiser man, and why? Because the manufacturer has undertaken to educate the automobile owning public through magazine and newspaper adve tising regarding the construction of tires, the material from which they are made, etc. So now the automobile owner is able to judge for himself as to the value of tires and to select those that are the best for his individual needs.

This educational process on the part of the manufacturers has proved that an automobile owner cannot spend a few hours to better ad vantage each month than by studying all of the automobile tire advertising he can lay his hands on, and by sending for catalogues and carrying his investigation still further. This search for facts is most instructive and the net result is money in his pocket and greater enjoyment from motoring.

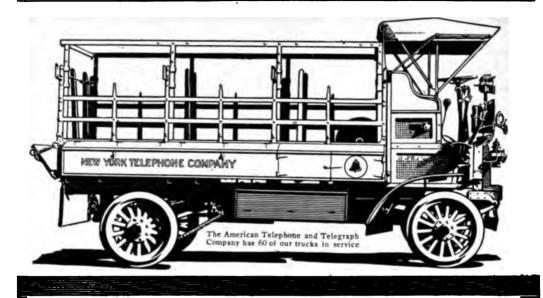
A system in vogue among many owners is to keep careful record of the exact date a tire goes on each of the four wheels of his car. Then when the tire finally gives out, by consulting his speedometer, he can tell just how many miles each tire has travelled. Here by the way, is a very practical purpose which the speedometer serves and one that is not generally appreciated.

The cost of tires, as an item of expense, has grown to such proportions that nowadays the owner himself, even if he keeps a chauffeur, ald superintend all the buying. Indeed, we know from actual investigation among or readers that in nine cases out of ten the does do the buying. This is no reflect chauffeurs for many of them are able men point is they are not spending their own of and, naturally, are not inclined toward this matter the close attention it warrant

There is one thing that automobile of generally know precious little about, and is proper lubrication. It is an item of more importance than the tire question in it directly affects the very vitals of the namely, the engine. It is easy enough to cover whether the oiling system is we properly, but it is a far different matter to sure that the engine is being fed the right of a lubricant. A man's digestive organis be in perfect working order but indigestible will prove his undoing. So it is with the gine of an automobile.

Mr. Automobile Owner, study the autor oil situation and be very sure that you fees engine the kind of food that it deserves not leave the selection of lubricants to an else. It is altogether too important a m The car is yours. You are paying the Investigate for yourself. There are sco automobile oils on the market — some very others of an inferior grade. It is no ecce to buy a cheap oil — it will prove the expensive in the end.

Here is a helpful little idea which may be to some of our readers at least. In rainy we take an oily rag and rub over the wind vertically, not horizontally. This will vent water from standing on the glass an afford the driver a clear view ahead.



Mack and Saurer

This company was formed for the purpose of assisting the business public in solving its transportation problems, rather than to sell a particular kind of truck.

It is an association of the only truck manufacturers who have been in business long enough to justify the initial expense of their product by proved length of life and economy.

The only organization devoted exclusively to the manufacture and sale of motor-trucks, and offering trucks of sizes from 1 to 10 tons capacity, which is equipped to supply the most economical truck for every kind of merchandise, and to manufacture every type of body in its own plant.

Sales and Service Stations established in the most important centres and rapidly being extended. The strongest financial connections to insure stability of product and thoroughness of service.

You cannot afford to settle your transportation problems without taking this organization into account.

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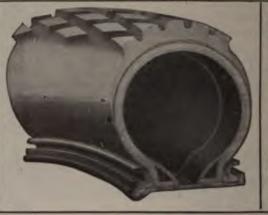
International Motor Company

General Offices : 57th and Broadway New York Works : Allentown Pa ; Plainfield N J Sales and Service Stations: New York, Chicago, Philadelphia, Boston, San Francisco and other large cities

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Made With or Without this Double-Thick Non-Skid Tread

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Note the Countless Edges and Angles

No-Rim-Cut Tires

10% Oversize.

1911 Sales-409,000 Tires

Stop for a moment, Mr. Tire Buyer, on this verge of 191 Consider how motorists are coming to Goodye No-Rim-Cut tires.

Six times the demand of two years ago—800,000 sol Enough sold last year to completely equip 102,000 can Now the most popular tire in existence.

Just because one user says to another "These tir avoid rim-cutting, save overloading. They've cut my ti bills in two."

For the coming year, 127 leading motor car makers have contracted for Goodyear tires. We've increased our c pacity to 3,800 tires daily.

Now make a resolve—to save worry and dollars, to giv perfection its due—that you'll make a test of these pa ented tires.

For information about popular resorts write to the Readers' Service

Upkeep Reduced \$20 Per Tire

These are the facts to consider:

No-Rim-Cut tires now cost no more than other standard tires. The savings they make are entirely clear.

And those savings are these:

Rim-cutting is entirely avoided.

With old-type tires — ordinary clincher tires — statistics show that 23 per cent of all ruined tires are rim-cut.

All that is saved — both the worry and expense — by adopting No-Rim-Cut tires.

Then comes the oversize.

No-Rim-Cut tires, being hookless tires, can be made 10 per cent over the rated size without any misfit to the rim.

So we give this extra size.

That means 10 per cent more air -10 per cent added carrying capacity. It means an over-tired car to take care of your extras -10 save the blowouts due to overloading.

And that with the average car adds 25 per cent to the tire mileage.

All that without extra cost.

Tire expense is hard to deal with in any general figures.

It depends too much on the driver — on proper inflation — on roads, care, speed, etc.

But it is safe to say that, under average conditions, these two features together — No-Rim-Cut and oversize — cut tire bills in two at least.

We figure the average saving — after years of experience with tens of thousands of users — at 20 per tire. This varies, of course, with different sizes.

Whether more or less, it means something worth saving. It totals millions of dollars every year to users of these tires.

And you get your share — without added cost — when you specify Goodyear No-Rim-Cut tires.

13 Years of Tests

Here is the final result of 13 years spent in tire making.

Year after year — on tire-testing machines we have proved out every fabric and formula, every method and theory, for adding to the worth of a tire.

We have compared one with another, under all sorts of usage, until we have brought the Goodyear tire pretty close to perfection.

These are the tires made in No-Rim-Cut type — made 10 per cent oversize. And they represent what we regard as finality in tires.

In the test of time they have come to outsell every other make of tire.

Our new Tire Book is ready. It is filled with facts which every motorist should know. Ask us to mail it to you.



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Branches and Agencies in 103 Principal Cities. We Make All Kinds of RubberTires, Tire Accessories and Repair Outfits Main Canadian Office, Toronto, Ont. Canadian Factory, Bowmanville, Ont.



The above 4 1-2-ton Commer Truck was recently bought by Doubleday, Page & Co., the publishers of World's Work and Country Life in America.

Guaranteed for Seven Years.

TECHNICAL names of steels and parts may mean but little to you as a buyer, hence we offer this guarantee on every W C P Commer Truck sold :

We warrant Commer Trucks for SEVEN YEARS from date of delivery. This warranty is unlimited regarding defective material and workmanship.

Our positive belief in the W C P Commer Truck is thus proved by the first motor-truck guarantee that really means something. Scarcely any broader or fairer warranty could be given any motor truck buyer. Yet we cannot pose as altruists: the warranty adds no risks to our business. For not one Commer Truck has ever worn out though thousands are in service on the six continents, many of which are seven years old.

> Our seven year warranty is commercially sound for it is based on proved service done by A COM-MERCIALLY SOUND PRODUCT—The Commer Truck.



the marter restored



The above Commer Truck is owned by the Eagle Storage Wareb They have recently placed a repeat order for a second Commer Truck.

4 1-2 TON 5 1-2 TON 6 1-2 TON

THE Commer Truck now built in America is known as The W C P Commer Truck. It is of 4 1-2, 5 1-2 and 6 1-2 tons carrying capacity, the price of the 41-2 ton chassis being \$4500 instead of \$5750, the price of the 41-2 ton Commer formerly imported.

The W C P Commer Truck is a du-plicate of the British-built Commer Truck being made under the same critical methods of manufacture and inspection. The materials used in Commer Trucks as built on both sides of the Atlantic come from identically the same sources. ' steels are largely employed—steels namic that have proved their ability to stand

terrific strain without breaking, sagging or crystalizing.

There is the same high duty engine the engine that no other motor truck engine in the world can successfully compete with in low gasoline and oil consumption. There is the same unique and foolproof transmission of the constant mesh type.

Send for a copy of our 32-page and nouncement from our Engineering Department, which ran recently in two of the leading automobile publications. It contains one of the soundest and simplest expositions of motor trucks facts ever given.

Write us today before you forget.

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Comparison Sells More Chalmers Cars Than All Our Advertising

Any Other Medium Priced Car

You will buy the car that has the most features designed for your convenience, your comfort, your safety, your economy and your pride of ownership.

Some cars seem to be built to please the builder. You want one that was built to please the buyer—for you are a buyer.

Therefore we refer you to the diagram above. Chalmers "Thirty-Six" is a car for the buyer. Look over the entire motor field and see if you can get these "Thirty-Six" features in any other car at \$1800. See if you can get all of them in any other car at any price.

Why They Bought "Thirty-Sixes"

During the last few weeks we have been asking many of our owners to tell us why they bought the "Thirty-Six." Everybody seems to agree on these ten big reasons:

1. Chalmers Self-Starter

Does away with cranking. Adds at least \$500 to the value of an automobile. Simple, safe, efficient, air pressure type. Nothing complicated -- just press a button on the dash and away goes your motor.

- 36" x 4" Tires and Demountable Rims Big tires insure case of riding and reduce tire trouble to the minimum. Demountable rims rob punctures of their terrors.
- 3. Five Speed Transmission Four Speeds Forward and Reverse

Affords utmost flexibility of control. With it you can climb steepest grades without loss of time and without punishing your motor.

 Long Stroke Motor Maximum power at low engine speed, splendid pulling, longer service, greater quietness, freedom from vibration. 36x4 Tires and Demountable Rims Genuine Celular Radiator Five Speed Transmo Dual Ignition Long Stroke Motor 4 ph iburetor Dash Adjustment Comfort and Conv Beauty and Style Price \$1800

5. Dual Ignition

Simplest ignition system yet devised. Nothing equals a magneto for furnishing perfect ignition

- 6. Dash Adjustment for Carburetor You can get the proper mixture for starting on to suit varying weather conditions without get ting out of car.
- 7. Genuine Cellular Radiator The sort you find on highest priced cars. Iner perfect cooling, longer life, good looks.
- 8. Comfort and Convenience Long wheel base, big wheels and tires, deep upholstering, roomy bodies made for masimum comfort. Convenience is secured by a score of refinements.
- Beauty and Style Chalmers symmetry is the kind of heauty the means efficiency. Finish is superb- in costs paint and variable. Choice of three attraction color schemes.

10. Price-\$1800

Because of the features listed above and a score of other advantages; because of perfect design, high grade material and workmanship of the Chalcoso standard, the "Thirty-Six" offers the gradest value for the money of any motor car built

The Biggest Chalmers Year

Since July 1st we have shipped 42% more can than during the same period last year—and last year was a good year too.

We have delivered more than 2,000 of the "Thirty-Sixes." These cars have now been tested in owner hands in all parts of the country; in various altipules in diverse climates; on all sorts of roads. Everwhere they have made good.

In view of these facts, we suggest you place you order now-and the earlier the date set for delivery the better. Our new catalog free on request.

Chalmers Motor Company. Detroit. Mich.

Send for WORLD's WORK handbook of schools

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THE dealer who sells you DIAMOND TIRES is thinking of your profit as well as his own-he is "tire-wise" -and believes in trading uprather than trading down.

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• He can buy cheaper tires than DIAMOND TIRES, and make a larger one-time profit, but he cannot sell you *better* tires.

€ The dealer who sells you DIAMOND TIRES can be depended upon when he sells you other things- he believes in service—in integrity. He's reliable.

In addition to dependable dealers everywhere, there are FIFTY-FOUR Diamond Service Stations. Diamond Service means more than mercly selling tires—it means taking care of Diamond Tire buyers.

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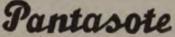
But we can't



Top That Leaks A

costs money in spoiled trimmings, ruined clothes and expensive repairing.

Using an umbrella under a Top is "carrying coals to Newcastle." A Top made of genuine



leather will stand -

Folding, Creasing, Bending, Racking, Straining, Rough Usage, Hurry-up Folding, Careless Handling, Intense Cold, Intense Heat, Wind Pressure, Water Soaking, Sun Baking, Sleet Freezing. Oil Spattering, Grease Spatter-ing, Mud Spattering, Dust and Dirt Smudging. Did you ever think of that?

A **Pantasote** Top will stand all these things-the other kinds won't.

Pantasote has an outside surface coating which is not only waterproof, but is so smooth that it can be easily washed when the rest of your car is being cleaned.

And the cheap Top simply cannot be cleaned. The more you brush and the more you scrub, the more you grind the dirt and dust into the very heart of the material.

In the Park or on the Avenue, an ill-kept Top makes you unpleasantly conspicuous-A **Paniasole** Top keeps your whole car looking new.

Reach For A Pencil

Reach FOF A Fencil and jot down on a postal the word "X-Ray." Then we will send you a copy of the new handbook — "The X-Ray on Automobile Tops " which gives you an X-Ray look into the various materials used for automobile Tops. Takes you beneath the out-side surface coating. Shows you just what you are buying in the way of fillers and linings. This, booklet is profusely illustrated—it is worth real money to you if you own a Top or if you expect to own one. Write today, right now before you for-get. Get this information which makes you inde-pendent of the conflicting stories that you will hear from conflicting dealers and top manufacturers.

The Pantasote Company No. 102 Bowling Green Building NEW YORK



ATWOOD GRAPE FRUIT

NO OTHER GRAPE FRUIT IN THE WORLD EQUALS IT IN FLAVOR

A well-known physician writes: "I prescribe grape fruit for all my patients, and tell them to be sure and get ATWOOD Grape Fruit as other grape fruit to the Atwood is as cider apples to pippins."

The Journal "American Medicine" says: "Realizing the great value of grape fruit, the medical profession have long advocated its daily use, but it has only been within the past few years that the extraordinary curative virtues of this 'king of fruits' have been appreciated. This dates from the introduction of the ATWOOD Grape Fruit, a kind that so far surpasses the ordinary grape fruit that no comparison can be made."

Says E. E. Keeler, M.D., in the "Good Health Clinic": "In all cases where there is the 'uric acid diathesis' you will see an immediate improvement following the use of grape fruit."

WOOD

RAPE FRUIT COMPAN MANAVISTA,

We have arranged for a much wider distribution of ATWOOD Grape Fruit this season than has heretofore been possible. If you desire, your grocer or fruit dealer will furnish the ATWOOD Brand in either bright or bronze. Our bronze fruit this season is simply delicious.

ATWOOD Grape Fruit is always sold in the trademark wrapper of the Atwood Grape Fruit Company. If bought by the box, it will keep for weeks and improve.





What you wish to know about any bond from The Readers' Service.





The New Model Five L.C. Smith & Bros. Typewriter

Helps Dept

Doubleday, Pa

This Point is the Printing Center

(BALL-BEARING, LONG-WEARING)

THE printing center is the point where every operation of every part of this typewriter culminates—completes itself.

In the New Model Five, the printing center is completely safeguard-

ed. Ball-bearings of the carriage and of the Capital Shift make it substantial and stable, no matter at what point in the line. Ball-bearing typebars throw the types accurately and positively to the printing point.

In addition, a typebar guide completely prevents all vibration of typebars from collision due to an uneven stroke in rapid operation.

Other new features are a geared carriage-ball controller; ribbon colorswitch in the keyboard; a device which absolutely prevents battering of type faces; and a lighter, snappier key-touch which is a joy to the operator.

Don't miss the free book of Model Five. Write for it today.

L. C. Smith & Bros. Typewriter Co. Head Office for Domes- Syracuse, N. Y., U. S. A.



Dictaphone dictation is the *direct* method—and the one method wherever time is figured in dollars and cents

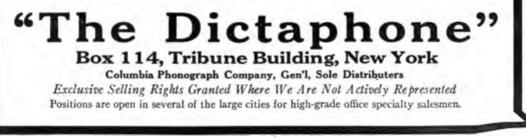
THIS has been well proved over and over again by individual business men, by famous writers, by the busiest specialists in the medical profession, by the ablest lawyers, by the best-known preachers, by government officials, by department heads in the largest manufacturing organizations, by the great mail order houses, by the department store managers, by the office managers of the insurance companies and the railroads.

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It is well to know what other fir are using, and what they have say. This book tells you.

It will do more in ten minutes put you on the right road to go stationery than our advertisi could do in ten months.

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It is "Their Opinion" of



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Made in White and Six Colors with Envelopes to Match You need it; you can get it—easily—in the 150 principal cities in the United States where the most responsible printers and lithographers carry in stock

CONSTRUCTION BOND

Let us send you the names of those concerns in your locality who *recommend* Construction Bond because it helps them give you better stationery for your money. Here's the reason:

Construction Bond is sold *direct* to these responsible printers and lithographers only; it is always sold and handled 500 lbs. or more at a time. Other fine bond papers are sold through local jobbers to any printer, as little as 10 lbs. at a time. The economies of our method of distribution have brought us the support of the most important printers and lithographers in the United States — the very concerns who are best able to produce stationery of the character you want.

To specify and *secure* Construction Bond is to be sure of getting good paper, good work on it, and the utmost value for your money. Send us your business card and receive *free* our portfolio of handsome specimen letterheads and the names of those who can supply you Impressive Stationery at a Usable Price on Construction Bond.

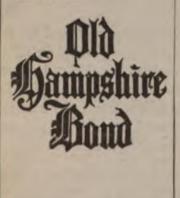
W. E. WROE & CO., Sales Office, 1001 Michigan Ave., CHICAGO



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YOUR big customers—the ones whose business is your prize and pride—probably use Old Hampshire Bond Stationery. See if they don't. If they do not—all the more reason why you should use

3



[8] HERE are still

a few large institutions that do not concern themselves enough about their stationery, just as there are big houses that don't believe in advertising—yet.

Old Hampshire Bond is the best and cheapest advertising you can do. A stock of it is an *investment* — not an overhead expense.



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[9]

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You will take pride in signing letters written on Strathmore Parchment. They give inviting presentation to your thoughts. Their dignified appearance bespeaks the highest business **K** ideals and begets the deepest consideration. The Strathmore Parchment Test Book sent free on request-or ask your printer.

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"Art Metal" Steel Half-Sections are the cleverest, handiest, safest filing cabinets ever produced for offices where avail-able space is limited.

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We have unequalled facil-ities for built-to-order equipment in steel and bronze for public build-ings, banks, libraries and commercial offices. Plans and estimates furnished.

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The NEW Strain of the most reliable pen made. It can't leak because the strain in possesses three features that make it the most reliable pen point which makes leaking impossible. It can't blot because the "Ladder Feed" controls the supply giving the exact amount necessary — no more. Ask any sta-Strain of the pen wet which insures the "Gold Top Feed the point of the pen wet which insures which insures the "Which insures the "Balance of the pen wet which insures the the point of the pen wet which insures the the point of the pen wet which insures the the pen wet the pen wet which insures the pen w toner or jeweler to show you a selec-tion of the New "Swan] Safety" Fountpens. Price \$2.50 and up. Illustrated list showing the different sizes and styles made, sent free on request. SWAN SAFETY PEN 17 Maiden Lane, NewYork MABIE, TODD & CO. 209 So. State St., Chicag Melborn, London Meanhaster, Ung. Parts Brussels Sydney 124 York St., Toronto

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Are you the man on whose judgment the man in the front office relies?—Then this is a book for you.

This had to be a good book, almost a great book, for it advocates the business appliance directly concerned with big men. Most other business appliances save their cost many times over in stenographers' and office boys' wages, but it is

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Every Moore's Non-Leakable Fountain Pen carries with it the most unconditional guarantee.

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\$600 Saved; \$15,000 in New Business Secured-a Seven Months' Result with the Multigraph

'O some users, the chief value of the Multigraph is the saving it effects on printing-bills. Τo others, its greatest service is in getting new busi-But for most users it performs both services. ness.

In the double-service class is the Haskins Glass Company, of Wheeling. Take its own word for the facts:

"In reply to your request for information regarding Multigraph which was purchased from you some seven months ago, we are very glad to advise that the machine has proven entirely satisfactory, and even exceeded the estimate of usefulness which your representative claimed this machine would be to us at the time of purchase.

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There's no question about the efficiency of the Multigraph as a machine. That has been proved time and again during the past six years. The question with you — and with us — is one of service. How much will the Multigraph save for you? How will it help your business? Those things depend upon your business—and that's why we make it ours to find out

ours to find out.

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That's not simply talk. It goes. Your own business must prove its need before your money will buy a Multigraph. If you permit, one of our representatives will assist you to secure the evidence. If you wish to form your own opinion first, we shall be glad to furnish literature, samples, and data.

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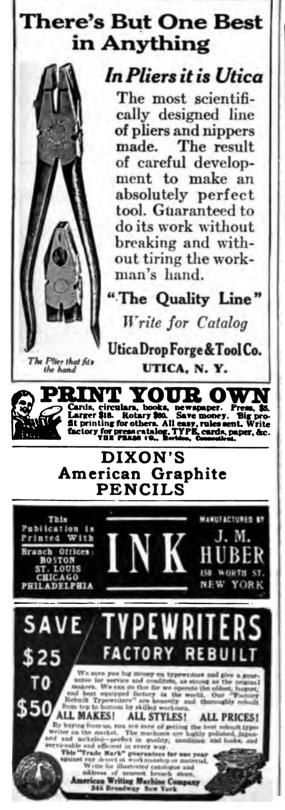
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With Carter White Lead and any good tinting colors, an experienced painter will produce any shade or tint you want, will spread a brushfull on a board that you may see just how it will look, and if necessary, change it until it exactly suits your ideas.

More than this—some lumber is more absorb-ent than others; old paint is never in the same condition on the sunny side of a house as in the shade; atmospheric conditions also affect the life of paint. All these things are considered by the experienced painter, and he will mix his Carter White Lead paint to suit the condition of any surface any surface.



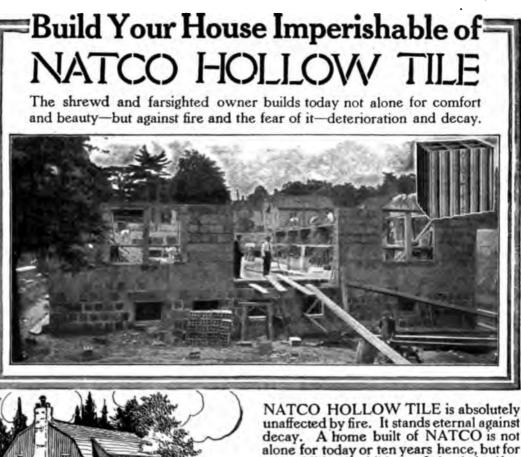
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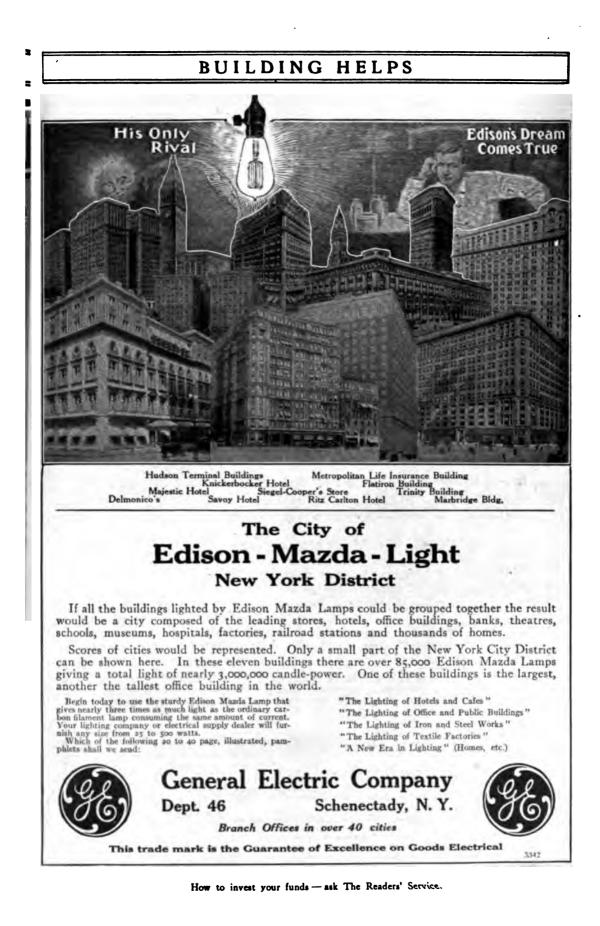
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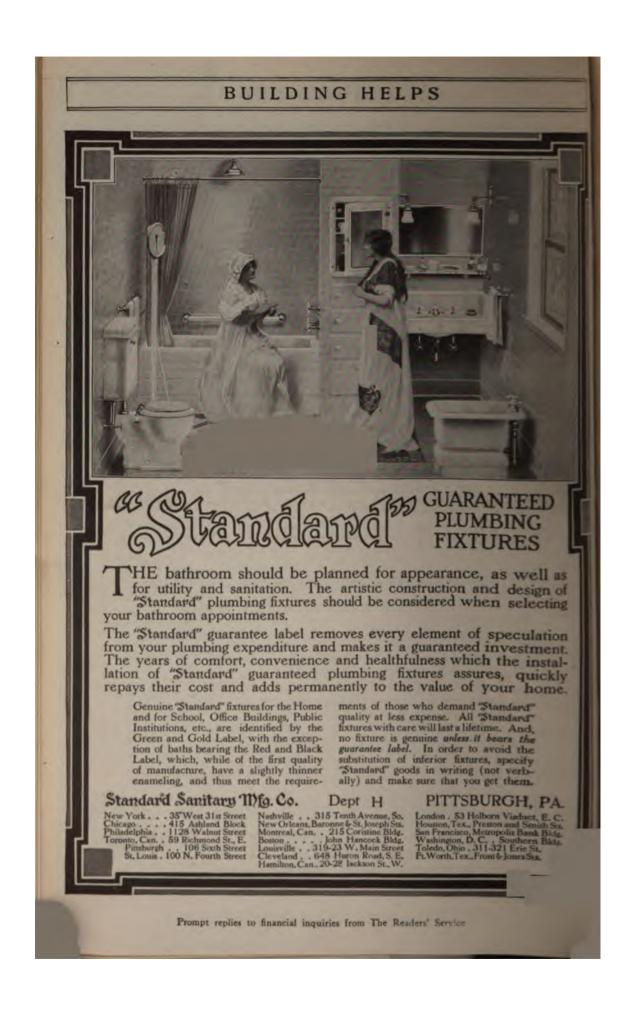
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BUILDING HELPS



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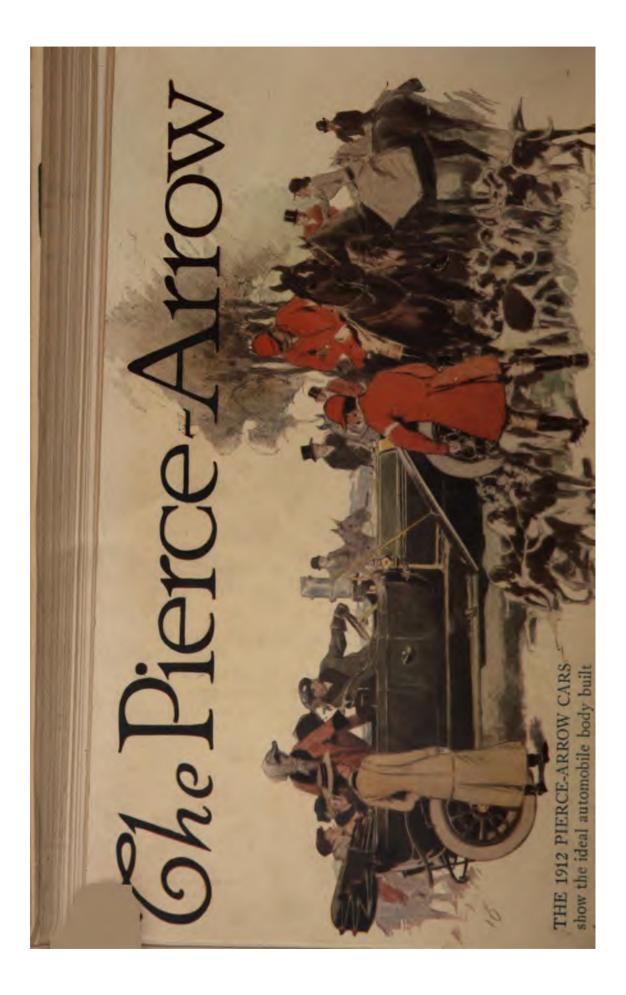
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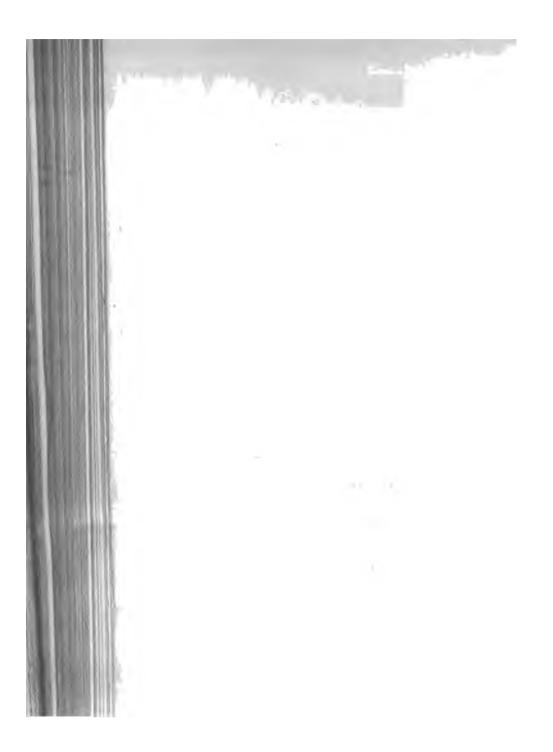
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