

*Americanized
Socialism:*

*A Yankee View
of Capitalism*

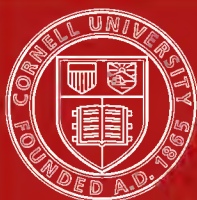
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A M E R I C A N I Z E D
S O C I A L I S M

AMERICANIZED SOCIALISM

*A Yankee View
of Capitalism*

BY

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PREFACE

Socialists differ about the philosophy and the tactics of socialism, but they agree about its program. Adherence to the program therefore is the test of a socialist. Morris Hillquit, probably the best authority on orthodox socialism in America, is fully in agreement with this position, as shown by the following quotation from an article in the *Metropolitan Magazine* for July, 1912:

“Stated in . . . concrete terms, the Socialist program requires the public or collective ownership and operation of the principal instruments and agencies for the production and distribution of wealth. The land, mines, railroads, steamboats, telegraph and telephone lines, mills, factories, and modern machinery. This is the main program, and the ultimate aim of the whole Socialist movement, the political creed of all Socialists. It is the unflinching test of Socialist adherence, and admits of no limitation, extension, or variation. Whoever accepts this program is a Socialist; whoever does not, is not.”

On the basis of this definition, no doubt many persons who did not suspect themselves to be socialists will discover that they are. They will see that socialism and common sense have a closer connection than some reports have led them to believe.

The program of socialism rests both on a material and a moral foundation. The material foundation of socialism as expounded in the philosophy of Karl Marx is not the theme of the following chapters. They are concerned more particularly with the moral foundation, which deserves greater attention than it has heretofore received because the justification of any pro-

posed program must, in the final analysis, be a moral one. The moral foundation of socialism is to be found in the philosophy of utility, which tests all acts or courses of action by their presumable power to promote the happiness of mankind; and if socialism cannot be justified by its usefulness it cannot be justified at all.

Reasons for claiming that a socialism grounded in the philosophy of utility embodies the best traditions of Americanism will be found in the pages to follow. These reasons have not been generally recognized heretofore because the Americanism of the men who founded, and those who saved, this Republic has in the last generation or so been superseded by a Toryism identical in spirit with that against which they contended. Indeed, the proportion of Tories in America to-day is greater than in the time of our Revolution.

But true Americanism during the last generation has not been dead; it has merely been sleeping. With the entrance of this country into a war for democracy it has once more revived, and already is beginning to rebuild our Tory economic institutions on the old American principles. Such a revival of Americanism should not only be everywhere encouraged to the utmost, but should be recognized for what it really is; and it is the main object of the following exposition therefore to point out how the original principles of Yankee democracy, applied to modern industrial conditions, not only justify the program of socialism, but supply a practical American tactic for bringing it to pass.

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AMERICANIZED SOCIALISM

INTRODUCTION

Applying Old Principles to New Issues. That land is fortunate which can appeal to tradition and reason at the same time. So far as the principal domestic issue now before its people is concerned, our land is thus fortunate. The problem presented by the issue of capitalism vs. socialism in this country is an old problem in a new form, and the main purpose of this book is to suggest how the solutions found practical in the past may be applied in the present.

What America Needs to Learn. The practice of democracy in this country has revealed both the strength and the weakness of the principle. It has proven to be, not an assurance, but only a condition, of national well being, a necessary, but not a sufficient, guarantee of the success of nations. The test of the value of a means is the achievement of its end, and democracy can only meet this test by adopting the practice of efficiency, for both democracy and efficiency are essential to the happiness of peoples.

A hundred and forty years ago America learned the lesson of democracy from hard experience with the principle of European monarchy. To-day from a similar source of instruction she is given the opportunity to learn the lesson of efficiency.

What European Experience can Teach. The wisdom of nations as of men may be measured by their

ability to learn from the experience of others, and the present workings of the principle of monarchy in Europe, if the lessons they are adapted to teach are learned, may be turned from a curse into a blessing.

Modern war is fought by machinery; it is but industrialism applied to destructive instead of constructive ends, and only a vast preponderance of other favorable factors will enable an industrially inefficient nation to prevail over an efficient one.

The war in Europe has plainly proved that the key note of industrial efficiency is collectivism. Germany with her inferior resources prevailed over her enemies so long, because through the more perfect centralization and co-ordination of her powers she was better able to focus the whole effort of the nation on a single object. Individualism against collectivism in modern war, or in any other branch of modern industry, is a bow and arrow against a repeating rifle; a lesson which all the nations of Europe are now rapidly learning, some of them much against their theories and therefore against their will.

Although Germany's industrialism is highly collectivist it is not democratic, and therefore does not seek a democratic goal. It employs modern means to medieval ends. Germany is combining efficiency with autocracy, and that means efficiency for the benefit of autocracy. Her victory, had she achieved it, would only have glorified her king at the expense of her own as well as other peoples, just as all wars urged and won by kings have always done. This is as true of Austria and Turkey as of Germany. Their rulers all seek autocratic ends, even if less efficiently than Germany. If this war benefits the cause of democracy it is only because kings have rashly loosed educational forces too strong for them to control.

The fact that Germany at present is an intelligent autocracy which has sought the material well being of its people as one means to the well being of their rulers, mitigates, but does not reverse, the rule. In the long run autocracy is a ghastly failure, as the history of Europe, particularly the history now in the making, proves. It perverts whatever it touches, causing the best of means to serve the worst of ends. The greatest service kings have ever rendered a people is to teach them that it is better for them to rule themselves.

Efficiency Not Inseparable from Oligarchy. Because in the case of Germany efficiency is associated with autocracy, many persons infer that it is peculiar to that form of government, overlooking the wretched inefficiency of almost every other autocracy in the world or in history. There is in fact no necessary connection between oligarchy and efficiency. There is no reason why efficiency cannot be combined with democracy and applied as successfully to the service of the people as to that of kings. Democratic collectivism can do for peoples what oligarchic collectivism can do for oligarchs, either in peace or war, for collectivism is only a means, and can be devoted as well to a useful as to a harmful end.

America Should Reject Inefficiency as Well as Oligarchy. How to combine efficiency with democracy, then, how to induce men to work together for good as effectively as in Germany they have worked together for evil, is a problem that may well occupy the thought of our country in its present condition of transition. The United States has made the best start in democracy of all the great nations of the earth. She is the logical country to solve this problem, and she can

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solve it by showing the same willingness to accept the teachings of experience that she showed four generations ago. It is well to love your enemies, but also well to learn from them. Let us adopt the good, while opposing the evil, in German institutions, emulating the efficiency of Germany while rejecting her perversion thereof, thus devoting science to the salvation, instead of the subjection, of mankind.

I

AMERICANISM AND SOCIALISM

Socialism "Made in America." Not long ago I was talking to a typical old time Yankee farmer, a veteran of the Civil War, and a man imbued from his youth with the traditional American way of thinking. He asked me to tell him what socialism was. He said he had read about it in the newspapers but could not make out what it meant. I told him in brief that it meant the operation by public officials in the public interest of the railroads, coal mines, steel works, cotton mills and similar industrial activities by which the public would supply themselves with substantially all the things they needed at cost, in much the same way as they now supplied themselves with postal facilities through the postoffice.

"Is that socialism?" said he. "Why, I have believed in that for years. I have often talked it over down at the store, and lots of folks around here think as I do about it."

This experience is quite a common one with me. I find wherever I go among old time Americans that the essentials of socialism are understood and accepted, often with enthusiasm. Indeed, there are rather good reasons for thinking that a large minority, perhaps a majority, of the people of this country already are disposed to believe in the program of socialism, and would vote for it if it were presented to them in the terms in which they think. I am at least aware that

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the majority of men with whom I am well enough acquainted to know their real views, including business, professional, working men and farmers, are believers in socialism, though very few vote the socialist ticket.

Now why is this? Is it because they are not really socialists at heart and do not really understand the issues involved? By no means. While they have no thorough grasp of the principles underlying socialism they understand it at least as well as the average member of the Socialist party, though they think in a very different, not to say a more practical, way about it. The Socialist party, though seeking a splendid ideal, and one which must appeal with particular power to people reared among American traditions—the ideal of a co-operative commonwealth—employs tactics so defective that it may be seriously questioned whether its activity is not more of a harm than a help to the progress of industrial democracy in this country. To the average party socialist practical socialism is little more than a tail to the labor union kite, a movement to make the manual worker dominant in politics; while theoretical socialism is more a matter of words than of ideas. It is a language rather than a philosophy or a plan. A few formulas containing the words working class, exploitation, class struggle, surplus value, class consciousness, economic determinism, and some others “made in Germany” constitute his philosophy of socialism, and with these he seeks to convince the American people. Of course he fails, not because the people are not ready for the issue, but because the Socialist party does not know how to present it, does not grasp the American way of thinking, nor speak the traditional American language.

The old time American of whom I just spoke and those like him all over the United States make nothing

out of the orthodox socialist lingo. It is all Greek to them. It may be all right in Europe where the democratic tradition does not generally exist, but in this country men think in terms of the traditions common to the country, and to them the reasoning which leads to socialism is much shorter, clearer and easier than that furnished by the Marxian philosophy. A brief glance at the development of American institutions will show how genuine socialism rationally follows from universally accepted American traditions familiar to every American school-boy. Indeed the American theory of popular government, which no politician in the country would dare in terms to oppose, furnishes the necessary and sufficient premises on which the doctrine of socialism rests. All the socialist need do is to draw the conclusion. It will not take a very long story to show this.

Monarchy, Slavery, and Capitalism. When our fathers settled the wilderness which is now the United States of America they transplanted here the institutions of seventeenth century England. Some of these institutions were good, some were bad, some took root and flourished, others languished and decayed, according as they were well or ill adapted to the environment of the new land. In addition to these, others were adopted from the natives or the neighboring colonies.

Among these institutions were three which constituted grave menaces to the welfare of the American people, because they were institutions of privilege, by which I mean institutions in virtue of which one individual, class or aggregate of men can live upon the labor and control the lives of other individuals, classes or aggregates. In colonial times two of these institutions were in an advanced stage of development and the third in its infancy.

The most revered of the three was a practice by which the control of the lives and property of the people of the colonies was in large measure in the power of the imperial government, consisting of a small class of persons in Great Britain, the landed aristocracy, represented by the king and parliament. Within wide limits this small class could, if they willed, control the life and liberty and by taxation dispose of the property of any citizen of America without his consent. This variety of oligarchy is known as the institution of autocracy or monarchy, because of its concentration of power in the person of the autocrat or monarch.

The second of these institutions of privilege, which was falling into disrepute in late colonial times, was one by which control of one person over another was realized through actual ownership of the person controlled. Thus the life and labor of one class was at the disposal of another in the same way that the life and labor of horses or oxen is at the disposal of their owners. This practice goes by the name of the institution of slavery. It was borrowed from the Spanish colonies.

The third institution of privilege, which in the eighteenth century was in an embryonic state, was embodied in the custom of vesting the ownership of things used by the community and essential to its welfare in individuals, or small aggregates thereof. This institution bore a resemblance both to monarchy and to slavery. To monarchy because the owners of these publicly important instrumentalities could, by virtue of their control of prices, tax the community for the use of things essential to the community's welfare without its consent. To slavery because these instrumentalities were operated, not by their owners, but by hired employes whose labor was at the disposal of the owners, not because of ownership of their persons, but

because of ownership of the instruments of production through which the product of the workers' labor became the property of the owner. The institution thus resembling both the maturer institutions of privilege is called capitalism, and has to-day so developed that as an oppressor of the people its power is probably not less than that of its predecessors.

The Abolition of Monarchy and Slavery. Everyone knows what the American people did with the first two institutions of privilege. They abolished them. The Revolutionary War ended monarchy and the Civil War ended slavery.

In place of monarchy our fathers erected in this country a democracy which sought, and with considerable success, to place the control of government in the hands of the governed, to take the public business out of the hands of irresponsible private parties—kings and lords—and vest it in the hands of public officials, elected by, or otherwise responsible to, the people.

Of course the machinery of democracy which they devised and put into operation was crude and imperfect. To a properly constructed instrument of democracy it bore about the same relation that Franklin's printing press bears to a modern Hoe newspaper press. Unfortunately while our people have applied the scientific method to mechanical affairs they have failed to apply it to political affairs, with the result that our machinery of democracy has advanced little beyond the crude devices of the eighteenth century; but there are reasons for hoping that the time will come when they will wake up politically as they have already waked up mechanically, and will no more think of invoking Hamilton's constitution as a model instrument of democracy than they think of invoking Franklin's press as a model printing press. For such

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an awakening we all should labor, nor grow discouraged at the moderate benefits thus far attributable to democracy. It is always possible to give a good principle a bad reputation by carrying it out in a defective manner, and the defects of democracy are not defects of principle but of machinery. Even with its present archaic methods our democracy will compare very favorably with the average monarchy. If you don't think so, go and live in Austria or Turkey awhile. They are about an average.

As to slavery the American people had nothing better to substitute for it than the competitive wage system then, and now, prevailing in the north. It was, and is, a much better system than slavery, but its advantages are personal rather than economic. Men and women can no longer be whipped like horses nor bought and sold like sheep, and this is a great advance; but, as in the case of the Revolutionary statesmen, those who engineered emancipation had only an imperfect substitute to offer. Economically the average Southern black is little better off than he was before the war because he has merely escaped from the oppression of slavery into that of capitalism.

But again, let us not be discouraged at the rather disappointing results of emancipation. The American people have not reached the goal, but they are moving in the right direction. They are groping, but they are groping toward and not away from the light. They have only to be consistent, to follow up their own best traditions, in order to complete the work which their abolition of monarchy and slavery has begun.

Of course in speaking of American traditions and ideals I do not mean to imply that Americans have always thought the same about everything, much less

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about the three institutions of privilege which, following rather blindly the traditions of their ancestors or neighbors, they had drifted into. There was a time when Americans thought well of the institution of monarchy, but they changed their minds about it. There was a time when they thought well of the institution of slavery, but they changed their minds about that too. And in both cases they are well satisfied that their revised estimate of these institutions is the correct one. It is to these revised and confirmed traditions, not to the outgrown and repudiated ones, that I refer when I speak of Americanism, and I think you will agree that this is the only proper use of such a term. To-day it is true most Americans seem to think pretty well of the institution of capitalism, but there are signs that they are changing their minds about it, and when they have suffered and pondered its evils a little longer they are likely to think the same about it as they do about its kindred institutions monarchy and slavery.

Lincoln's Method of Handling Issues. Now it is important to prove to the American people, if possible, this proposition that socialism is consistent and capitalism is inconsistent with Americanism as embodied in traditional American ideals, and the only way I know by which to prove a proposition is to reason it out—to apply logic to it. At least, I take it this is an old-fashioned American way, and in order to support this contention I wish to point out the way in which the ablest of our old-fashioned American statesmen handled the issues paramount in his time. In his debate with Douglas at Galesburg, Illinois, Abraham Lincoln in answering one of his opponent's arguments used the following language:

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"Nothing in the constitution or laws of any State can destroy a right distinctly and expressly affirmed in the Constitution of the United States.

"The right of property in a slave is distinctly and expressly affirmed in the Constitution of the United States.

"Therefore, nothing in the constitution or laws of any State can destroy the right of property in a slave."

Lincoln then proceeded to point out that the fault in this argument was not in the reasoning but in the premises, but I am not concerned with this particular argument. I cite it merely to show Lincoln's method of getting at the truth. He appeals to reason, to logic; he even throws his reasonings into strict syllogistic form, as in this instance. Throughout Lincoln's addresses and messages we find this constant use of reason as a test of truth, and until it can be shown to the contrary, I shall assume it to be the best of all traditional American ways of getting at the truth.

I would not be at such pains to insist on this point were it not for the fact that we live in an age which holds reason in some disrepute. There are many persons about who contend that we must not try to be too consistent, that there are limits beyond which reason should not be used, that we must not carry logic too far, the implication being that unreason is sometimes better than reason, that illogic is better than logic, that belief is a good substitute for evidence as a guide to human affairs.

Socialism and American Democracy. Abandoning this un-Lincoln-like method, let us examine the issue of socialism vs. capitalism in the light of American doctrines as expressed by Lincoln, using Lincoln's syllogistic methods and taking him for our guide. We might if we pleased use various other American leaders as our authority on what true Americanism is, but

time does not permit, and Lincoln epitomizes without misrepresenting the other prophets of Americanism.

And first let us apply the test of democracy, beginning by asking what Lincoln's conception of democracy was. In Chicago in 1858 under the name of "self-government" he referred to it as follows:

"I believe each individual is naturally entitled to do as he pleases with himself and the fruit of his labor, so far as it in no wise interferes with any other man's rights; that each community, as a State, has a right to do exactly as it pleases with all the concerns within that State that interfere with the right of no other State; and that the General Government, upon principle, has no right to interfere with anything other than that general class of things that does concern the whole."

At Cincinnati in 1859 under the name of "popular sovereignty," he gave this definition of it:

"I think a definition of popular sovereignty in the abstract, would be about this—that each man shall do precisely as he pleases with himself, and with all those things which exclusively concern him. Applied in government, this principle would be that a general government shall do all those things which pertain to it, and all the local governments shall do precisely as they please in respect to those matters which exclusively concern them."

And in his message to Congress of July 4, 1861, he handled the matter in this way:

"This relative matter of National power and State rights, as a principle, is no other than the principle of generality and locality. Whatever concerns the whole should be confided to the whole—to the General Government; while whatever concerns only the State should be left exclusively to the State. This is all there is of original principle about it."

In brief, then, Lincoln's position is this: Democracy means the rule of the people. The rule of the people over what? Over what concerns or pertains to them, of course; over their own affairs, their own business.

Whatever concerns any given group of the people should be ruled by that group; proportionally if the concern is shared by other groups, exclusively if it is not. This is the traditional American meaning of democracy. "This is all there is of original principle about it." And this gives us at once the minor premise of our syllogism, which may be condensed to the following proposition:

The people should rule over what concerns them.

Now just to get in practice, let us apply this principle to the issue of the American Revolution, the issue of political democracy vs. autocracy.

Are the powers exercised by the king and parliament any concern of the people of America? Is the power to tax, to regulate commerce, to appoint the governors and judges in the colonies and exercise other political powers, any affair of the people of the colonies? The answer is obviously yes, and this gives us the major premise of the reasoning upon which our revolutionary forefathers acted, the complete syllogism being as follows:

The people should rule over what concerns them.

The conduct of the political affairs of America concerns the American people.

Therefore the American people should rule over the conduct of the political affairs of America.

Now in the same way let us again use Lincoln's method in applying the test of American democracy to the more modern issue of socialism vs. capitalism.

Is the manner in which the great industries of this country, the railroads, coal mines, packing plants, textile and steel mills, etc., are operated any concern of the people of this country? Are the interests of the people in any material manner affected by the mode in which the products of their socialized industries are produced and exchanged? Are the operations by

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which the people are supplied with the material conditions of their existence, their food, fuel, clothing, transportation, etc., any of their business? Again the answer is obviously yes, and this gives us the major premise of the reasoning upon which sane socialists ask the American people to act, the complete syllogism being as follows:

The people should rule over what concerns them.

The conduct of the industrial affairs of America concerns the American people.

Therefore the American people should rule over the conduct of the industrial affairs of America.

Comparing this argument with the corresponding one for political democracy it is clear that socialism is not an inference from the American political system, but that both are inferences from a common premise—the premise of democracy. The people should rule over their industrial affairs for the same reason, and in the same sense, that they should rule over their political affairs.

Now there is just one way in which the argument for industrial democracy is met in this country. It is by the denial of the premise of democracy—the minor premise. The major premise is too obviously true to deny. But this denial is in the form of two separate contentions. First, the contention for absolute industrial oligarchy; second, the contention for limited industrial oligarchy.

Unlimited Industrial Oligarchy. Those who hold the first position contend that while the American people know enough to attend to their own political affairs they do not know enough to attend to their own industrial affairs, and that private individuals perform public industrial functions as incidents of money-seeking in a manner more in the public interest than public

officials working only in the service of the public are able to do. They claim the premise of democracy should not be what Lincoln said it was, that the people should rule over what concerns them. They claim it should read this way:

The people should rule over some of the things that concern them, and let private individuals, not responsible to them, rule over others.

Here and now I will not attempt to reply to this contention, except to say that if those who thus contend can prove just enough without proving too much, if they can apologize for capitalism without at the same time apologizing for monarchy, if, in short, they can discredit industrial, without at the same time discrediting political, democracy, they will do what has not heretofore been done to my knowledge. The weakness of their contention will appear more clearly later. Just now I desire to consider a little the proposals of a class in the community who hold the second position.

Limited Industrial Oligarchy. I refer to those persons who believe in ruling the public industries of the country by public regulation or control through commissions or courts, instead of through ownership as socialists propose. Their instruments of control are such bodies as the Interstate Commerce Commission, the Federal Trade Commission, and the United States Supreme Court. The fact that they believe in public control indicates that they admit the conduct of these industries is somehow the concern of the public, and they propose a means by which the public shall rule what concerns it. They give signs of believing in the control of the people over their own business, but they do not believe in the way of controlling it proposed by socialists.

They have a different way. They will let the public commissions do it.

So, our trade, commerce, and other controlling commissions rule the public industries of the country, do they? Well, then, what are the boards of directors of the various big companies doing? Are they doing nothing? Oh, no, they are doing some of the controlling too. They are sharing the control with the commissions. But this obviously is not industrial democracy although it squints in that direction. It is a policy of limited industrial oligarchy. It is a policy of "butting in" on plutocracy. It is a compromise policy having only a faint resemblance to the old-fashioned American method of dealing with undemocratic institutions. Those who propose it do not agree with the founders of this republic that the people should attend to their own concerns without interference from private parties however paternal. They believe in such interference. They suggest indeed that the people shall also interfere a little in their own concerns, but shall leave most of the management and all of the profit to the little fathers of industry. They are opposed to a limited political paternalism but they favor a limited industrial paternalism.

Just apply this principle to the argument for political democracy. Suppose our forefathers instead of abolishing the rule of George III and establishing their own had simply tried to go shares with him. Suppose they had said that the conduct of the political affairs of America is a quasi-public function, just as our statesmen say to-day that the conduct of the industrial affairs of America is a quasi-public function. Suppose they had proposed the same scheme that our regulators propose to-day, namely, let us do some of the ruling and let George do some of it. Obviously they would have been at least quasi-tories. Such a proposal would certainly not have been consistent with the democracy of

Jefferson, Franklin and Washington. At any rate our forefathers of the Revolution did not pursue such a policy. They left that to European countries which have been applying the policy of public regulation to their political affairs for some time. Some of them have been centuries at it. England began it way back in the thirteenth century with the Magna Charta and has been butting in more and more to the control of her autocrats until she has butted her king into the impotence of a figurehead. Other European monarchies have pursued the policy to a less degree. This compromise with autocracy, this sharing the rule with the oligarch, is a European policy. It is thoroughly un-American, but has been recently imported by our quasi-progressives who seem to consider it better than the true American article. But there are signs that many of them are beginning to revise their opinion. The policy of limited industrial oligarchy is strictly comparable with the well-worn European policy of limited political oligarchy and neither is consistent with itself. To-day, as in 1776, there are only two clear-cut and consistent attitudes toward public affairs, namely, the straight American attitude—Let the people attend to their own business. And the Tory attitude—“Let George do it.”

American Experience in Regulating an Institution of Privilege. Unfortunately, however, the regulators can find one American precedent for their policy, though they are at no great pains to call public attention to it; perhaps because it has been so emphatically repudiated. This is not the first time our government has tried to regulate an institution of privilege. The “great compromisers” of the ante-bellum period, Clay, Webster, Douglas and their ilk, sought to deal with the institution of slavery as our advocates of regulation seek to deal with that of capitalism. They tried to settle it by a

series of compromises. Lincoln's description of the process reminds us of some more modern ineffectualities. In a speech at New Haven, Conn., in 1860 he said, speaking of the slavery issue:

"There have been many efforts to settle it. Again and again it has been fondly hoped that it was settled, but every time it breaks out afresh and more violently than ever. It was settled, our fathers hoped, by the Missouri Compromise, but it did not stay settled. Then the compromises of 1850 were declared to be a full and final settlement of the question. The two great parties, each in national convention, adopted resolutions declaring that the settlement made by the compromise of 1850 was a finality—that it would last forever. Yet how long before it was unsettled again? It broke out again in 1854, and blazed higher and raged more furiously than ever before, and the agitation has not rested since."

The statesmen of our day are trying to settle the trust and labor problems—the problem of capitalism—by the methods which the ante-bellum statesmen used in trying to settle slavery. They are trying to compromise with it. The issue has changed but the mental processes of legislators remain the same. Our Sherman Act, Elkins Act, the various Interstate Commerce Acts, the Federal Trade Commission Act, etc., are strictly comparable with the Missouri Compromise of 1820, the Compromise Acts of 1850, the Kansas-Nebraska bill, the Wilmot Proviso, etc. They are attempts to patch up an outworn and evil institution instead of abolishing it. And the results are the same. The more it is patched the more it needs patching. We are now engaged in patching the patches. Our state and national governments pile up elaborate laws in an orgy of over-legislation to settle the trouble and it is as far from settlement as ever. Precisely in the manner described by Lincoln, it is ever breaking out anew. The statesmen of the earlier nineteenth century spent forty years fooling with the slavery problem and then muddled into a war which incidentally settled the

problem in the only way it is possible to settle the problem of an evil institution—by abolishing it.

Our statesmen are following the same old road. We are evidently in for forty years of fooling with the problem of capitalism. We have already had about thirty, but despite all our prosecutions and dissolutions, our investigating, regulating, and capital-baiting, prices go higher, the labor war grows fiercer, and the trusts wax fatter. Let us hope another ten years will exhaust the people's patience. We shall be fortunate then if some of our practical men do not muddle us into another war, which seems to be the so-called practical man's way of solving problems, both here and abroad. You remember that Lincoln and other "visionaries" of his time suggested that the slavery problem be settled by the purchase of the slaves by the nation, but the "practical" men of the day said the scheme was impractical, it would cost too much. So they adopted a practical method—the Civil War—three months of which, as Lincoln pointed out, cost the nation as much as would the purchase of every slave in the country. We have just such practical men about to-day, and they wield great influence, too. They are honest and sincere men, but no more honest and sincere than those who got us into the Civil War.

Now what is the explanation of all this failure of our anti-trust and regulatory laws? Why does so much legislative effort accomplish so little? Again we have only to go back to Lincoln to find the answer. His diagnosis of the futilities of his day is entirely applicable to those of our own. Thus he says:

"These repeated settlements must have some fault about them. There must be some inadequacy in their very nature to the purpose for which they were designed. We can only speculate as to where that fault—that inadequacy is, but we may perhaps profit by past experience.

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"I think that one of the causes of these repeated failures is that our best and greatest men have greatly underestimated the size of this question. They have constantly brought forward small cures for great sores—plasters too small to cover the wound. That is one reason that all settlements have proved so temporary, so evanescent."

That explanation fits our present situation pretty well. Little need be added to it. It is a case of "plasters too small to cover the wound" again. Think of a Sherman act and a pure food act, and all the other little plasters and patches as cures for the great cancer of capitalism. And yet our best and greatest men so underestimate the size of this question that they have faith in such cures. Oh, if the nation would but take Lincoln's advice and profit from past experience, so that at least the more obvious futilities of history would not be called upon to repeat themselves!

Capitalism and American Slavery. But we must pass on to the obverse side of capitalism. We have discussed in the light of Lincoln's reasoning the relation of capitalism to monarchy. Let us use the same source of illumination to reveal its relation to slavery.

In showing that capitalism rests on the same basis and derives its sanction from the same premises as monarchy we followed Lincoln's method and reasoned the matter out, not scorning a formal syllogism now and then. Let us continue to follow that method.

In Lincoln's last reply to Douglas at Alton, Illinois, October 15th, 1858, he gives his views about the real essence of slavery. He classes it with monarchy as an institution of privilege, and points out the trait of human nature upon which both institutions rest. Here is how he sums it up:

"That is the real issue. That is the issue that will continue in this country when these poor tongues of Judge Douglas and

myself shall be silent. It is the eternal struggle between these two principles—right and wrong—throughout the world. They are the two principles that have stood face to face from the beginning of time; and will ever continue to struggle. The one is the common right of humanity, and the other the divine right of kings. It is the same principle in whatever shape it develops itself. It is the same spirit that says, 'You toil and work and earn bread, and I'll eat it.' No matter in what shape it comes, whether from the mouth of a king who seeks to bestride the people of his own nation and live by the fruit of their labor, or from one race of men as an apology for enslaving another race, it is the same tyrannical principle."

"You toil and work and earn bread and I'll eat it." Lincoln tells us this is the real essence of slavery, and he also tells us that the issue raised by the practice of this principle will continue in this country after he is dead. He is, as usual, right in both contentions. Slavery has been abolished, and death has silenced the voice of Lincoln, but the practice of one man's taking what another man earns continues, just as he said it would. But it is going to be abolished as other methods of doing the same thing have been abolished, and when it is the last great institution of privilege in this country will have gone the way of the first two.

Let us see if we can form a syllogism which will show the relation of capitalism to this great issue. Suppose we try this one:

People who own things for a living do not need to toil and work to produce the bread they eat.

But somebody must toil and work to produce the bread they eat.

Therefore people who own things for a living eat the bread that somebody else has toiled and worked to produce.

Now note that if we substitute the word "slaves" for the word "things" in this syllogism we have the exact argument that Lincoln used, and which determined his

stand on the slavery issue. In other words, slavery is but a special case of capitalism because slaves are special cases of things in general. Special cases are always comprehended more easily than general ones because they are more simple and concrete. Thus any one now can see that the system of owning slaves for a living permits one man to live on the labor of another. Quite a few people see a little further. The single taxer, for instance, sees another special case. He sees that the system of owning land for a living permits one man to live upon the labor of another. The socialist sees the general case. He sees that the system of owning *anything* for a living permits one man to live upon the labor of another. He sees that the issue is not in the particular kind of thing owned, but in the system of payment for ownership; the system of owning something, instead of doing something, for a living. For the wealth consumed by the owning class must come from somewhere. Production is necessary to consumption. And therefore it is impossible to have a class which is paid in proportion to what it owns, without at the same time having a class which is *not* paid in proportion to what it does. In order that he who owns something for a living may receive, it is necessary that he who does something for a living shall give. It is well for the owners of our planet that they have been successful in teaching the workers that it is more blessed to give than to receive. They are willing the toiler shall be blessed to the limit of this cheering beatitude. Perhaps they think atonement for the loss suffered in this exchange may be secured by the practice of due meekness in receiving, recalling that other beatitude—"Blessed are the meek, for they shall inherit the earth."

Of course it is easy to reproach the capitalist for his willingness to eat the fruit of others' toil, yet after all, how many are there who are not willing to do it? Very

few indeed, if the process is only concealed a little, and the system of capitalism is well adapted to conceal it. The capitalist, like the slave holder, seems to be conferring, not receiving, the benefit. Both live by permitting others to work with their property. They do the permitting and the others do the working. Here seems a fair exchange if you do not think too much about it. It is true that Lincoln referring to this prayerful practice on the part of the slave-holders implied a reproach when in his second inaugural he said:—"It may seem strange that any men should dare to ask a just God's assistance in wringing their bread from the sweat of other men's faces," but he also added, "let us judge not that we be not judged." To say capitalists are bad men because capitalism is a bad institution is as senseless as to say slave holders are bad men because slavery is a bad institution, or kings are bad men because monarchy is a bad institution. On the average, kings, slave holders, capitalists, subjects, slaves and working men are the same average mixture of good and bad. Don't let the "good man—bad man" issue sidetrack you. Keep your eye on the "good institution—bad institution" issue. It is thinking on that issue which has always been fruitful in this country. The desire to let the other fellow do the sweating is a human, not a capitalistic, trait, and if it requires an apology it is human nature that must apologize. But while it is an almost universal human desire, yet institutions which sanction it are not in the interest of humanity. Mankind cannot afford to let its weaknesses determine its institutions.

The relation of slavery to capitalism, however, can be perceived more concretely if we consider for a moment the modern method of producing things. The production of almost everything to-day depends upon the use of things previously produced: tools, machines, apparatus, or other artificial means, constituting forms of

wealth used in the production of more wealth. These forms of wealth are known as capital.

The primitive counterpart of capital was the human hand and body which produced wealth by direct manipulation of the land and the raw material thereof, and under primitive conditions if you wanted to avail yourself of another man's labor by means of a property relation, it was necessary to own either the land, or the hand and body of the worker. Thus in old times feudalism despoiled the worker through its system of land ownership, as slavery despoiled him through its system of hand ownership. But to-day men work, and in order to compete in the market must work, with appliances which are, in essence, extensions of their hands, and hence to-day there is no need to own the actual human hand in order to avail ourselves of human labor. It is only necessary to own the modern extension of the hand in the form of capital, and the same result is achieved. Just as it would be unnecessary, if we owned the hands of the slave, to own the body which operated them; so it is unnecessary, if we own the tools which his hands operate, to own either the hands or the body of the worker which operates them. Moreover, inanimate capital is less irksome to own than animate. For if we own the man we have to look after him as carefully as if he were a horse, whereas if all we own is the instrument with which he works all we need look after is the instrument. We can let him shift for himself.

Capitalism indeed is simply a method for doing efficiently what slavery did inefficiently. It is the new system of hand ownership as slavery was the old. It is an improved means of permitting one man to eat the bread that another has toiled and worked to produce, and unless Lincoln misrepresented the true American position on this issue, it is as much opposed to that position in its

aspect as an exploiter of the producer, as in its other aspect as an oppressor of the consumer.

The Goal of Americanism. It seems not unfair to claim that in the foregoing discussion it has been shown that capitalism combines the essential qualities of monarchy and slavery—that it is a denial of the right of the people to rule their own concerns, and an assertion of the right of one man to consume the product of another man's labor. Both the denial and the assertion have been repudiated by the American people—repudiated at the cost of two long and bloody wars. They are absolutely un-American in the sense that they are opposed to the best traditions of the republic. They are only tolerated to-day because they are disguised under forms, of which our people are indeed deeply distrustful, but the true nature of which is still obscure to them. If this is the case, then at least one duty of enlightened Americanism seems clear. It is to try to show to the American people, first the true relation of capitalism to monarchy and slavery; and second to point out the only substitute for it consistent with American ideals. Namely, for the people to attend to their own industrial affairs, in the same sense in which they attend to their own political affairs, thus replacing industrial autocracy with industrial democracy. And to conduct them for public service instead of for private profit, thus replacing the practice of owning something with that of doing something for a living; to the end that public functions shall be conducted as public functions, instead of as by-processes of private money making, and that no able-bodied adult shall eat the bread that another has toiled and worked to produce.

The name of such a system of doing things ought to be rather a matter of indifference, but unfortunately it is not, because men have the habit of judging things by

what they are called instead of by what they are. The word socialism, partly by the vagaries of persons calling themselves socialists, partly by the successful sophistry of our Tories, honest and dishonest, has been invested with so much obscurity and suspicion that it constitutes a real handicap to the soundest, most practical, and most typically American policy which can be applied to our present industrial problems. The word socialism does not even express by its derivation the meaning of the doctrine. Socialists do not need to contend for the socialization of industry. Every one, including the monopolist, contends for that. What they contend for is the democratization of industry; in other words, for consistent democracy, which is therefore the proper term for what is now called socialism.

If it could be called democracy or even nationalism, Americanism, collectivism, or anything suggestive of its real character, and expounded in the common sense American fashion of Lincoln, all the powers of plutocracy could not prevail against it, and some day this is going to be done.

I rather think the progressive elements of all parties will in a few years become convinced that the paltering policy of regulation borrowed from European nations is futile—many of them see it already—and will turn to the tried and trustworthy American method—the method which our forefathers finally applied in dealing with monarchy and slavery. They will turn from the policy of Clay the Great Compromiser to that of Lincoln the Great Emancipator. They will profit from past experience as Lincoln did and advised others to do. How Lincoln profited is a matter of history. When in June 1858 he received the nomination for senator at Springfield he made one of the most famous speeches of his career. It was not the speech of a “practical” man and it lost him the senatorship. His practical friends to

whom he showed it previous to delivery called it a "damned fool speech" and advised him not to give it. They wanted the Republican party to continue the policy of compromise. But Lincoln had learned the futility of trying to regulate an institution of privilege and resolved to speak out plainly, and so informed his timorous advisers, saying: "The time has come when these sentiments should be uttered, and if it is decreed that I should go down because of this speech, then let me go down, linked to the truth."

Here is what Lincoln had learned from experience:

"If we could first know where we are, and whither we are tending, we could better judge what to do, and how to do it. We are now far into the fifth year since a policy was initiated with the avowed object and confident promise of putting an end to slavery agitation. Under the operation of that policy, that agitation has not only not ceased, but has constantly augmented. In my opinion, it will not cease until a crisis shall have been reached and passed. "A house divided against itself cannot stand." I believe this government cannot endure permanently half slave and half free. I do not expect the Union to be dissolved—I do not expect the house to fall—but I do expect it will cease to be divided. It will become all one thing or all the other. Either the opponents of slavery will arrest the further spread of it, and place it where the public mind shall rest in the belief that it is in the course of ultimate extinction; or its advocates will push it forward till it shall become alike lawful in all the States old as well as new, North as well as South."

Experience is bound to teach the progressive thinking men of our day what it taught Lincoln, that it is futile to compromise with an institution of privilege, and when it has taught them this they can "better judge what to do and how to do it." In other words, to know "whither we are tending" will enable them to convert the policy of regulation from a policy of blind makeshift to one of constructive democracy. They will inevitably learn that this policy is not permanent, but transitional, leading in one or the other of two opposite directions. The

money power like the slave power, regulation or no regulation, will not stand still. It will either advance or it will recede. A nation cannot endure permanently in a condition of divided interest—half of its power going to the doing, and half to the owning class. It will go all one way or all the other. Either those who do the work of the nation will win the right to the full product of their labor, or the plutocracy which already rules over so much of the nation's life, political as well as industrial, will extend that rule "till all of liberty shall be lost."

Until this lesson has been learned by enough of the people, the apostle of Americanism must be satisfied to carry on a campaign of education such as that which Lincoln carried on against slavery; proving by Lincoln's methods that a nation tolerating capitalism, like a nation tolerating slavery, is a house divided against itself; that such toleration involves an irrepressible conflict between the man who toils for bread and the man who eats it for him—a conflict of which, as Lincoln explicitly maintained, the irrepressible conflict of slavery was but a special phase; showing, as Lincoln showed, that the house need not therefore fall, but that if it would avoid falling it must cease to be divided; and insisting, not in a spirit of hatred of any man or class of men, but in Lincoln's spirit of "malice toward none and charity to all," that it is the nation's duty and interest to treat the institution of capitalism as our forefathers treated those other institutions of privilege, monarchy and slavery; to place it, in Lincoln's phrase, "in the course of ultimate extinction," and to do it as promptly as it is practical to do.

When that extinction has been accomplished the original American ideal, the end to which the fathers of the republic looked forward, will have been realized. We shall, for the first time in history, have a consistent democracy—a government, economic as well as political,

“of the people, by the people and for the people”; and we have reason as well as faith to believe that such a government, in profound contrast to the imperial governments whose instability is attested by all the ages, will prove to be one that “shall not perish from the earth.” Nor need we confine our hope to America. As she has taught the world by her example in the past, so may she teach it in the future. The great principles of democracy and liberty rooted in American traditions are principles of humanity. The ultimate stability, not alone of nations, but of society, depends upon them. As they are essential to the emancipation of a race and of a nation, so also are they essential to the emancipation of a world.

II

THE PERVERSION OF PROPERTY.

The Origin of Institutions. Institutions are ways of doing things. Human ways of doing things are determined by the immediate need of having things done, and immediate needs call for immediate means of meeting them. Given any human need recognized by society, the nearest and most obvious method of dealing with it will be adopted with little regard to the more remote results, and thus it comes about that institutions often come to be ways of dealing with human affairs which achieve the more immediate and superficial ends of mankind and defeat the more remote and far-reaching.

Institutions are modified in the same way in which they are originated. As men do not originate an institution until the concrete immediate need of doing so arises, so they do not modify such as they happen to be born to until there is urgent need of doing it. Indeed, owing to man's inertia, the need must be of great intensity or duration before much effort is made to meet it, either by originating or modifying institutions. There is thus always a lag in adapting human habits to human needs, the lag being greater as the need is less urgent.

This method of improvising institutions without considering their more remote results is the method of drift so familiar throughout history and so habitual throughout society to-day. It is the confirmed habit of men to drift from one policy to another, following the line of least intellectual resistance. Instead of thinking things out so that their institutions may accomplish the most

useful results, immediate and remote, they try to patch up old institutions so as to just "get by" with the least possible change in habitual usages. They resort to a makeshift—to what old-time folks call a "'twill do"—which, put to the test, too often turns out to be a "'twon't do." When some obtrusive evil stares men in the face they ask themselves, not, Is a change useful? but, Is it necessary? The idea being that changes should be made, not when it is useful to make them, but only when it is absolutely necessary; and then that the change should be, not the most useful change available, but the change involving the minimum departure from the *status quo* compatible with removing the immediate necessity of further change. It is no wonder that practices so established are liable to perversion.

Examples of these "quick results" ways of doing things, superficially beneficial and remotely baneful, are so common as to be commonplace.

Thus for example we preserve, and permit the propagation of, the feeble-minded and unfit and as an immediate effect promote comfort and ameliorate life for them; as a remote effect, deteriorate the race and saddle posterity with debts and difficulties vastly greater than those which the immediate remedies relieve.

Thus we wastefully exhaust the mines, deplete the forests, sap the soil, and generally "develop" the resources of a country, getting as an immediate result cheaply won wealth for the first comers; and as a remote one, hard won wealth, poverty, struggle and difficulty for the many who come after them.

Thus we build our cities by letting each person come in and settle in the easiest way possible, putting his house, his factory, his shop, or his barn where most convenient for him. The immediate effect is a quick and easy settlement with the minimum of interference with the whims of the first settlers. The remote effects

are city streets marked out by cows, factories and slaughter houses in residence districts, residences where shops ought to be, gas works and tenement houses in just the right spot for warehouses, and railroad terminals, parks and public buildings stuck in wherever the planlessness of the whole proceeding has left a chance place for them. Instances might be indefinitely multiplied of this drifting, planless method of grafting ill growths upon good, and of adopting practices which meet an evil on a small scale only to cause it on a large one.

Origin of Property. One of the best examples of this process is exhibited by the growth of the institution of property, an institution found in some form among all peoples and hence obviously originating in some universal immediate need. The necessity which has forced this institution on people is plain enough. It is the need for security in the use of the things, particularly the material things, which have immediate direct relation to the welfare of each individual. It is a practice originally improvised to meet the evil of universal robbery among individuals. Communities can no more gain a subsistence by the members robbing one another than by taking in one another's washing. The privilege of robbery, if restricted to a class, would doubtless be a material benefit to that class, but it can be of no use to a whole community. Any system of sponging, if mutual, leaves no one a beneficiary. Yet probably among cave men as among cave bears robbery was a privilege accorded to all. It was a human, as it is still an animal, institution. The intelligence of the bear was insufficient to improvise an improvement on it, but after thousands of years of hard knocks, no doubt, groups of men came to some understanding about the matter. They became tired of having the food, clothes, weapons and implements that

they needed to use, subject to appropriation by any one strong, sly, or otherwise possessed of "ability" enough to appropriate them; and thus an understanding grew up that any one helping himself freely to what his neighbors had become lawfully possessed of would get into trouble with the whole neighborhood—that the community generally would make it worth while for robbers to discontinue robbery, and would use some sort of a communal club to enforce their point of view.

This invasion of the sacred right of stealing was the origin of the institution of property. It interfered mightily with personal liberty and individual initiative. It discouraged enterprise—of the kind that flourished prior to its establishment. We may be sure that it always caused loud complaints of the invasion of man's inalienable right of free appropriation, made sacred by the immemorial practice of generations. All the conservatives would be against it, and would use the usual conservative arguments. It may seem strange to think that the idea of private property was once a radical idea, but there can be no doubt that it was. The oldest, most primitive of the rights of man is the right to take what he wants wherever he finds it—from his neighbor if that is the handiest place to get it. This right dates back of man himself to his animal forbears, and still exists among them. It is the right of mutual appropriation. If you wish to see the origin of the institution of property throw an apple core into a hen yard. Thus simple is the need which led to an institution so universal.

Purpose of Property. From the origin of the institution of property it is easy to perceive its purpose, for its purpose was fixed by the need which it was designed to meet. The original idea, essence and purpose of property was to secure to a person or group of persons

the use and control of the things which that person or group needed for his or its own subsistence and welfare. Ownership simply meant a security of control guaranteed to the extent of its power by the community—the tribe, the village, the nation, or whatever group of persons acted for such a purpose as a unit.

That it is useful to guarantee to a person what he uses, to conjoin use and ownership, is so obvious that even primitive man perceived it. Not that the community guaranteed the supply of each person's needs—the difficulties of supply are too great in a primitive society for that—but it guaranteed peaceful possession. It left men the right to despoil nature to get what they needed, but denied them the right to despoil their fellow man. The whole practice originated in the importance to a person of the undisturbed control of that which he needed to use.

This union of use and ownership is almost perfect in primitive society. When we know what group of society needed to use any particular kind of property we can tell what group owned it. Thus each individual owned his clothes because he alone needed to use them, but tents, cooking utensils, domestic animals, etc., were owned by the family, because they were used by the family, and the land or hunting grounds were owned in common because used in common. Thus each aggregate of the community owned what it used, an arrangement so obviously advantageous that no one could fail to see it.

This original form of property obtains very widely even to-day. In America we have only to go back to the colonial period to find it in almost its primitive form. To be sure agriculture had changed the aspect of the ownership of land. The early colonial farmer owned arable land because he needed it for his own use, but the great forest hunting grounds because used by all were still common property, as among the Indians.

Beginnings of the Perversion of Property. But even in colonial America there is clearly to be seen the beginning of the crack or rupture of the institution of property, the entering wedge of the change which perverted it. The mischief began when the process of division of economic function began. It started with the appearance in society of the distinction between the manipulator or operator, and the consumptive user, the producer and the consumer of property. So long as this division remained within the family there was no real difficulty, because the interests of the members of the family were the same. On the old-time farm the farmer was the exclusive operator of the plow, but he was not the exclusive user of it. The whole family were the users of it, because they had use for it. The farmer himself used it both productively and consumptively—the rest of the family only used it consumptively; but obviously the idea of use in its original relation to ownership includes both productive and consumptive use. Those persons should control a thing who use it, whether productively or consumptively. Mere operation is not use. Similarly the farmer's wife was perhaps the exclusive operator of the kitchen range or of its primitive counterpart the turn-spit and cooker, but the whole family were the users of it, because certain of their needs were met and their welfare determined by its instrumentality. Thus the plow and the cook stove were in effect the property of the family, and this is in complete accord with the original idea and purpose of property. Perhaps the actual title was in the farmer as the head of the family, but had he attempted to exclude the rest of the family from their use on that ground he would have found that the real title was in the family; and had he or his wife attempted to assert their exclusive right to the product of the plow or of the cook stove, respectively

because they were the exclusive operators thereof, they would have found that the community would tolerate no such grotesque idea of property. Within the family the original idea of the conjunction of ownership and use still obtains, because there is within the family no conflict of interest to disturb the original relation.

When farmer Jonathan eats the uncooked products raised by himself there is no distinction between operator and user. There is not even an exchange of services. The man serves himself. When Jonathan and his wife Abigail sit down to eat the cooked products of the farm there is a distinction between operator and user and an exchange of services between Jonathan and his wife. He has operated the outdoor economy, she the indoor economy, of the household, and they perform mutual service; there is exchange, but still the exchange involves no bargaining or trading and therefore causes no trouble.

The division of economic function when it gets outside the family however at once begins to develop a morbid and malignant growth in the institution of property, which, as usual with such growths, is too small to be noticed. These beginnings date back to prehistoric times, but primitive economic relations survive in society and exist side by side with modern ones, just as among organisms the lowly amoeba exists side by side with man and other mammals. Hence we do not need to go back to primitive society to see how the institution of property developed the morbid growth which perverted it. We can see it in the survival of primitive things which exist all around us, but which are more characteristic of colonial times than of our own.

Consider for example the industrial relation of the village blacksmith to the community. It differed in a critical way from that of the farmer to his family. The colonial farmer's family, with only slight exceptions, con-

sumed what it produced. Productive and consumptive use were all within the family. The family worked for itself. This is the old individualistic basis of industry. But the blacksmith works for some one else. He specializes on blacksmithing. He is the user of the tools of industry only in the sense of being the manipulator or operator of them. The results of his manipulation are of use to others—to the neighborhood at large. In order to make his work count consumptively for himself therefore he must receive something as payment for his operative services—exchange becomes necessary, and the exchange, in contrast to that between the farmer and his wife, is outside of the family.

Now when exchange outside of the family begins, bargaining begins. A conflict of interest between the blacksmith and his customers, between productive and consumptive use, is set up. The economic interest of each party to a bargain is to give as little and receive as much as possible. This bargaining process, originating in the simple, inevitable and beneficial process of division of function, is the germ of all the evils of our economic system; from the nuisance, waste and nonsense of the dickering and chaffering of the oriental bazaar, to the vast oppression of producer and consumer worked by our giant monopolies.

Origin of Capitalism. Just as soon as the old individualistic basis of industry gave way to what we may call the socialistic basis, represented by the work of the village blacksmith, just as soon as producer and consumer ceased to be the same, or within the same family, just as soon as the operator began to operate for some one outside his family, for some one whose gain was not his gain, whose loss was not his loss, the breach in the institution of property was opened up into which has stepped what is now called the capitalist, or economic

middleman, standing between producer and consumer and drawing sustenance from both.

In its primitive form capitalism does not reveal its most characteristic feature, because the manipulator and the capitalist are the same. The primitive cobbler, tailor and blacksmith all owned their tools and worked with them. This form survives, and is indeed common, to-day, and involves some conflict of economic interest, though of a simpler character than in the more developed stages of capitalism. But as the division of function in economic affairs increases, as industrial establishments augment in size and complexity, and particularly as the processes of scientific discovery and invention render more important the part that machinery plays in production, a further division of function occurs. As the first stage in the development of capitalism separated operative from consumptive user, so the second stage separates owner from operator. Thus the evolution of industry, starting with the single family unit in which producer, consumer and owner are united, results finally in a system in which they are separated. In place of a series of individualistic units each of which owns its own means of production, operates it for its own benefit, and consumes its own product, society is divided into three classes: the owners of the means of production, the operators of those means, and the consumers of the products thereof. Not that the individuals composing these classes are necessarily distinct—indeed all individuals belong to the third class—it is the interests which are distinct. In the individualistic stage no such conflict of interest is possible, since owner, operator and consumer in each department of industry are one and the same. In the final capitalistic stage there is a complex conflict of interest, the capitalist or owner bargaining with both producer and consumer, with the one over wages, with the other over prices.

Reversal of the Purpose of Property. But it may be asked, this process of evolution may have produced a conflict of interest in society, but just how has it perverted the institution of property? How has it changed it? To perceive the change clearly, recall for a moment the original purpose of property—security in the use of things to those who use them, union of use and ownership; and then notice the relation between use and ownership of capitalistic property, that is, of property owned by a capitalist in his capacity as a capitalist. Not his hat, his shoes, his furniture, or the house he lives in, but his stocks, his bonds, and the houses and lands he rents to others. You will notice that the original relationship is reversed. Instead of use and ownership being conjoined they are disjoined. The farmer wishes to own his plow for the same reason that the capitalist wishes to own his hat, because he wants to use it personally. But the capitalist does not wish to own his railroads and factories, his rented houses and lands because he wishes to use them, but because some one else wishes to use them. He wants to own his clothes or his umbrella because he wishes to use them, but he wishes to own his stocks, bonds and rentable real estate because he wants to be paid for owning them, and he can not be paid for owning them unless some one else needs to use them. On a desert island they would be valueless to him. Thus the whole value of capitalistic property to the capitalist depends upon the disjunction between use and ownership—upon the complete reversal of the original purpose of property. It seems strange that an institution which started out to place the ownership of things in the hands of those who used them should have ended by placing the ownership of a large class of things, namely the means of production of society, in the hands of those who do not use them, except as they constitute one fraction of the consuming public; but this reversal of

the purpose of property has taken place imperceptibly and without attracting attention, because the forms of transfer of property have not changed. Title to property is secured in the same way it always has been—by direct appropriation from nature, by gift, by inheritance, by purchase, or other legal assignment. It is only the purpose of the institution which has been changed.

Economic Classes Resulting from Capitalism. Although in its evolution property has thus come to assume two distinct forms of opposing characteristics, it is not possible to draw an absolutely sharp line of distinction between them. Some property is held both for use and for income. It is also impossible because of lack of data to separate industrial society into two distinct classes—the capitalists and the non-capitalists. This fact tends seriously to confuse the issue, particularly when those who contend for the reasonableness of the present order of things cite as evidence for their position cases of an intermediate character—which they generally do.

To make plain what I refer to, let us contrast a clear with an obscure case:

A ditch-digger, or brick-layer, or clerk, who works for hire, has no savings bank account which draws interest, and otherwise receives no income from ownership of property in the form of rent, interest, dividends, or their equivalent, is a clear case of a person who does something for a living.

A bondholder who has inherited half a million dollars' worth of gilt-edged bonds from his father, and who pays no attention to business, but spends his life playing golf, living on the interest to which he is entitled because of his property relation to certain pieces of paper (his bonds) is a clear case of a person who owns things for a living.

A considerable number of people in this world belong

to the class illustrated by the bondholder, and a vastly larger number belong to the class illustrated by the ditch-digger or clerk. But between the two classes is another class—in this country it is probably a larger class than either of the others—who get their living partly by doing things and partly by owning things. The existence of this class obscures the issue of capitalism, because, as just remarked, it is from this class that the supporters of that system are accustomed to draw their examples of the typical capitalist. The primitive capitalist, typified by the village blacksmith of colonial days—and of to-day for that matter—belonged to this intermediate class, and this is the reason why society found itself living under the capitalist system without knowing exactly when or how the system began. In more recent times the most conspicuous example of this intermediate class is the business man who helps to manage an industry of which he is owner or part owner. Between the cobbler who uses a few simple tools and in whose operations doing plays so large and owning so small a part; and the so-called captain of industry who owns a vast industrial plant and acts as the figurehead who receives the credit for running it, in whose operations doing plays so small and owning so large a part, there is every intermediate gradation. Therefore, if we wish to see the issue of capitalism clearly it is necessary to define, as well as we can, what we mean by a capitalist and what we mean by a non-capitalist.

Now, one meaning of the word capitalist is a person who owns capital, but this is not what the critic of capitalism means by the word. Uncle Sam would be a capitalist under such a definition. Another meaning of the word capitalist is one who is paid for owning capital, but neither is this what the critic of capitalism means by the word. Under such a definition a ditch-

digger or clerk who had \$7.50 in the savings bank and drew thirty cents a year interest would be a capitalist.

What the critic of capitalism means by a capitalist is one who gains more, financially or economically, by the system of capitalism—the payment for ownership system—than he loses; and by a non-capitalist he means one who loses more, economically, than he gains by that system. We are prevented by lack of data from saying just where the line between these two classes is to be drawn. The researches of Spahr indicate that in 1890 the total income of this country was so divided that 40% was received as the reward of owning and 60% as the reward of doing, and substantially the same ratio was found to hold in other capitalistic countries. Other inquirers have come to slightly different conclusions, but in the absence of more authoritative figures those of Spahr may be accepted as approximately correct. On this assumption the distinction between the capitalist and the non-capitalist in this country can be expressed quite definitely. On the average, a capitalist is one, more than forty per cent of whose income is received as payment for ownership, and a non-capitalist is one, less than forty per cent of whose income is so received.

This clears the matter up some, and yet even on this basis it is not always possible in concrete cases to say just when a man is a capitalist and just when he is not. In the case of a blacksmith or a business man who helps to operate the means of production which he owns it is necessary to know what he could get if he rented or loaned his capital. In the case of the blacksmith we should find this was normally only a small part of his total income, and so it would be necessary to class him as a non-capitalist; and in the case of the big business man we should find that it was normally a large part of his total income, and so we should have to class him as a capitalist. In special cases where fancy salaries or

fees are involved other data would be required, but we cannot go into the minutiae of the subject. Enough has been said to show that the only thing which prevents us from making a sharp distinction between the capitalist and the non-capitalist class is lack of data; and even if this were not the case, the fact that intermediate gradations between the two classes exist should no more obscure the distinction between them than the existence of purple should obscure the distinction between red and blue, or the existence of gray the distinction between black and white.

Let no man who receives a few dollars a year from interest, rent, dividends or other income yielding property, delude himself into the belief that he is therefore a beneficiary of the present system. Capitalism may with some ostentation put a little money into the left hand pocket of the struggling farmer, merchant, clerk or laborer, but what is it doing to the right hand pocket? It is taking more than a little out—but without ostentation. The income which capitalism puts into one pocket of the poor man is in the visible form of cash. The outgo which it abstracts from the other pocket is in the invisible form of increased prices and decreased wages made necessary to pay tribute to the property of others. In general if a man receives more than forty per cent of his income from property, then capitalism is putting more into his left hand pocket than it is taking from his right hand pocket, and he is a capitalist, and gains by the system; but if he gets less than forty per cent, the situation is reversed; he is not a capitalist and he loses by the system. If you want to know whether you are a real capitalist or not, watch your right hand pocket as closely as your left, for capitalism while ostentatiously tossing money into one pocket is stealthily picking the other, and you cannot tell whether you are

the gainer or the loser by the two processes unless you compare the amount received with the amount abstracted.

Conjunctive and Disjunctive Property. Although the rise of capitalism has divided property into two classes of widely different purpose and utility so little attention has been given the matter that no single names exist by which to distinguish them. It is, however, so much worth while to have a ready means of distinction that I shall coin some names for this purpose. We might call property held for use unperverted property, because it retains its original purpose, and to property held for income we might apply the name perverted property, because of its perversion of the original purpose of property; but these names are not ideal because they imply a criticism or judgment; they are not purely descriptive. The names unreversed and reversed might be used in place of unperverted and perverted, these names implying simply the reversal in the purpose of property which the rise of property held for income involves. But the best terms it seems to me are conjunctive and disjunctive, because they express the actual relationship between use and ownership which the two forms of property involve. Thus a man's clothes, furniture and personal belongings are unperverted, unreversed, or conjunctive property. He does not expect to derive an income from their ownership, but owns them because he wants to use them. Stocks, bonds, mortgages and any kind of property for which interest, dividends or rent is received is perverted, reversed or disjunctive property. No one has any object in owning it, except to receive payment for his ownership.

It is commonly supposed that disjunctive is as useful to the community as conjunctive property. Yet should we suggest a specific case of converting the conjunctive to the disjunctive form, I do not think we could arouse

any enthusiasm for it. It is only when the reversed relationship is drifted into that it becomes acceptable. For instance, if it is well to separate the ownership of a public utility from the public which uses it, why would it not be well to separate the ownership of a private utility from the person who uses it? If it is best to have a nation pay some one for consenting to own the railroads and the great industrial plants that the nation uses, why would it not be best to have each man pay some one for consenting to own the hat or the coat he uses? In this way we should have added to the community a new class of capitalists, engaged in the lucrative and useful occupation of owning other people's hats and coats, or at least the hats and coats that other people use, for a living. If the separation of ownership and use is a good thing, as all who believe in capitalism contend, why not push it along, why not extend it? Can we have too much of such a good thing? Why is disjunction so good where it is customary and so bad where it is not?

Democracy and Oligarchy in Property. But another feature of the contrast between conjunctive and disjunctive property is important to notice, namely, that it is the same contrast to be observed between democracy and oligarchy elsewhere. Ownership is but an expedient for controlling or ruling over property. Democracy being the rule of a given group of people over what concerns them, requires that whatever group is concerned with or affected by the management of a given property shall rule over that conduct. Every one is concerned with what they use. Therefore whatever group of men use a given property should, according to democratic principles, rule it; and they cannot very well rule what some one else owns. Conjunctive property therefore conforms to the requirements of democracy and might appropriately be called democratic property, while disjunctive property

conforms to the requirements of oligarchy, and might as appropriately be called oligarchic property. In other words, democracy, whether in the institution of property or of government, involves conjoining the power to rule with the interest of those concerned in the exercise of that power, as oligarchy whether in property or in government involves disjoining them. Thus from whatever angle we view the issue between the private and public ownership of industries the conduct of which materially affects the interests of the public, it resolves itself into the same old issue between democracy and oligarchy. Is there any doubt where consistent Americanism stands on that issue?

Just above I have spoken of "industries, the conduct of which materially affects the interests of the public." As I shall have frequent occasion to refer to such industries, and as this phrase is an awkwardly long one to use in referring to them, I shall hereafter simply call them "public industries," and to those industries the conduct of which does not materially affect the interests of the public I shall give the name "private industries." Thus in the days of the spinning wheel the textile industry was a private industry, while to-day it is a public one. Hence its private ownership in old times was democratic, whereas to-day it is not.

How to Restore the Institution of Property. The consequences of the perversion of the original purpose of property are so vast that I will make no attempt to enumerate them here. They include practically all the economic evils of our day and all of the non-economic evils which have their source in economic ones. Completely to remedy these innumerable ills it will be necessary to abolish the conflict of interest between owner, producer, and consumer, to abolish the practice of payment for ownership, and indeed to abolish the

process of bargaining itself. And this can all be accomplished by restoring the original basis and purpose of property; by re-reversing reversed property, by again conjoining use and ownership; by providing once more that whatever aggregate of society uses any given property, that aggregate shall own it. This of course involves the abolition of the system of capitalism which requires the private ownership both of private and public industries, and the establishment in its place of a system providing for the private ownership of private industries and the public ownership of public ones. Socialism is the commonest name of the system which provides for this, and thus it is obvious that socialism, far from seeking to destroy the institution of property, seeks but to restore it. That which it would destroy is not property but the perversion of property involved in capitalism. It is opposed, not to private property, as its enemies contend, but to disjunctive or undemocratic property only. It seeks to reunite ownership and use on a basis which will combine the harmony of the old individualism with the efficiency of the new collectivism, thus converting property from the disjunctive to the conjunctive form without loss of the benefits of socialized industry. For it is worth while to repeat that the public does not own its industries in order to be paid for owning them, but in order to use them. Uncle Sam has the same kind of use for the railroads that furnish him and his goods transportation and the textile mills that furnish him his clothing, that Uncle John Jones has for the hat and the coat he wears. Public industries bear to the public the same relation that private industries bear to an individual, and therefore when publicly owned, present the unperverted, unreversed conjunctive, democratic form and purpose which all property originally possessed.

Capitalism Inconsistent with Americanism. In this connection, let me once again call to your attention a pertinent incident of American history. In 1860 Stephen A. Douglas, then the leader of the Democratic party, claimed that the attitude of the Republicans toward slavery was subversive of the policy originated by "our fathers who framed the government under which we live." In his famous Cooper Union speech Lincoln replied to this claim, proving conclusively that it was not the Republicans, but Douglas and the other politicians then in power, who were subverting that policy. There is one passage in this speech which I wish to commend to those alleged conservatives who claim that socialism is subversive of the traditions of Americanism. By making the single change noted in parenthesis in this passage Lincoln speaks exactly as a socialist is entitled to speak to the present generation of American reactionaries:

"You say you are conservative—eminently conservative—while we are revolutionary, destructive, or something of the sort. What is conservatism? Is it not adherence to the old and tried, against the new and untried? We stick to, contend for, the identical old policy on the point in controversy which was adopted by 'our fathers who framed the government under which we live'; while you with one accord reject, and scout, and spit upon that old policy, and insist upon substituting something new.

"Again you say we have made the question of slavery (capitalism) more prominent than it formerly was. We deny it. We admit that it is more prominent, but we deny that we made it so. It was not we, but you, who discarded the old policy of the fathers. We resisted, and still resist your innovation; and thence comes the greater prominence of the question. Would you have that question reduced to its former proportions? Go back to that old policy. What has been will be again, under the same conditions. If you would have the peace of the old times, readopt the precepts and policy of the old times.

Consider this passage in connection with the foregoing discussion of old time Yankee property relations. Can

any man deny that it does not apply to the present issue between capitalism and socialism? If so, let him name a single example of the private operation of an essential public function, corresponding to a modern public industry, which was sanctioned by "our fathers who framed the government under which we live." Examples of such misplaced power existed in colonial times. They were to be found in the proprietary and royal governments of the original colonies. But they were not sanctioned by our Revolutionary forbears. Quite the contrary. For it was by overthrowing these examples of the private operation of public functions that "our fathers" got the chance "to frame the government under which we live." In other words, the American system of government originated from the rejection of the very policy which the "conservative" of the present day contends for. By what authority then does he, or any man who advocates the private ownership and operation of public industry to-day, claim to be advocating a policy sanctioned by our forefathers? By no authority whatever can he do it. He no more represents the policy of the fathers than Douglas did. He represents the Tory policy which those fathers rejected. The only difference is that the brand of "taxation without representation" which he advocates is imposed by industrial instead of by political kings. The consistent American policy requires self-government in industry as in politics. For the essential distinction which properly separates public from private functions is not the distinction insisted on by our politicians and economists—between political affairs and economic affairs. It is the far more vital distinction insisted on by Lincoln, between affairs which concern the public and affairs which do not. He who does not recognize this does not know true Americanism when he sees it; and to him the advocate of consistent democracy is entitled with Lincoln to say: "We stick to,

contend for the identical old policy which was adopted by 'our fathers who framed the government under which we live'; while you with one accord reject, and scout, and spit upon that old policy. . . . We still resist your innovation; and thence comes the greater prominence of the question. If you would have the peace of the old times readopt the precepts and policy of the old times."

How Socialism Proposes to Inaugurate the Brotherhood of Man. By restoring property to its original democratic form socialism will once more make of industry a family affair with no conflict of economic interest involved, only the family will be larger than in earlier times. It will include the whole community, and eventually we have reason to hope all mankind. It will reproduce on a world-wide scale the coöperative commonwealth that the primitive family represented in miniature. This is the socialist conception of the brotherhood of man; a brotherhood based, not on exhortations to men to treat their fellow-men like brothers, not founding its faith on the hope that man's heart may be softened and human nature suffer a change by the mere force of good advice; but established on the firm basis of properly constructed institutions, which will tend to harmonize men's interests just as the institution of the family tends to harmonize them; which will produce brotherly feeling among men by bringing them into brotherly relations with one another, instead of setting each man against his brother man, as the competitive system of capitalism does. The policy of trying to make men love one another by telling them to do so has been tried for at least two thousand years. Observe the Christian nations of the world in the year of our Lord 1918 and see how much it has accomplished! Those who propose to wait until men are made good before they attempt to perfect human institutions on the ground

that good institutions require good men to carry them on have a discouraging outlook before them. A thousand centuries will find them where they are now. Human nature can only be changed by setting in operation the causes which can change it, and mere preaching is not one of them. By bringing men into proper relations with one another by means of proper institutions their habits and attitudes can be changed. They have often been changed by such means in the past. The good in human nature can be brought out by harmonizing human interests as the bad can be brought out by antagonizing them. The brand of human nature which makes of the family a successful institution will make a success of any institution as well adapted to human nature as the institution of the family is. It is because capitalism is not such an institution, is not adapted to human nature, that it is such a failure—such a source of unbrotherliness and strife. To place men in such a situation that they must be continually bargaining and contending and competing with one another, and then tell them to practice brotherly love, is to put a strain upon human nature greater than it is able to bear. When ownership and use are divided it takes more than preaching the golden rule to unite them. Socialism by doing away with the contending relations between men does away with the cause of contention; and hence socialists do not need to wait for human nature to change before moving forward. Nor do they propose to. What they do propose to do is to change human habits and usages by exchanging an institution which is not in harmony with human nature for an institution which is in harmony with it. By replacing capitalism with socialism they propose to restore the institution of property to its original unperverted, democratic basis, convert society into one great industrial family of united interests, and thus institute a practical, if yet imperfect, brotherhood among men.

III

WHY THE CAPITALIST IS NOT A ROBBER

What Is a Robber? One of the commonest diversions of the socialist is to forget what he is trying to do, and go "a-goat-getting"—to cast aside his own philosophy for a while and substitute abuse of capitalists for judgment of capitalism. Sometimes he tangles up judgment and abuse in such a way as to make it worth while to disentangle them. Among the favorite charges of socialists against the present system, for instance, is that it supports a set of parasites, that capitalists perform no useful function in society, that they live by exploiting the labor of the working class. In fact, the capitalist is charged with being a robber and capitalism branded as a system of robbery. To many persons this charge is an absurdity, to others it is a puzzle, and to still others it is self-evident. Such violent conflict of opinion suggests that something or other is warping men's judgment on this question, and indeed the truth is that several things are warping it. Feelings and habits of thought are both involved, but the main difficulty is a subtle scholastic one—the issue in fact is largely verbal. That is one reason why people feel so strongly about it, for no issues are more bitterly contested among men than verbal ones.

There may be a sense in which the capitalist is a robber and also a sense in which he is the exact opposite of a robber. It depends upon what is meant by a robber. If we rob the issue of the verbal obscurity which besets it, some interesting aspects of the capitalist's real relation to society are revealed.

Now just what is meant by a robber? Is it a person who takes what belongs to another by illegal means? This is the definition most commonly implied by the word. But evidently in this sense the capitalist is not a robber. It is not illegal to be a capitalist. Literally then the capitalist is not a robber. But, of course, it is not the name which is applied to a thing, but the characteristics which it possesses, that makes it of interest to men, and if we forget this we shall fall into the very confusion which we are trying to avoid. Is it not fair to ask then whether the capitalist does not share some essential characteristic of the robber; not some characteristic which all men share with him, such as possessing two eyes, a nose and a mouth, but some feature essentially related to him in his capacity as a public malefactor?

What is Meant by Earning? For instance the robber takes or acquires wealth which he does not earn. Can we say the same of the capitalist? That again depends upon what we mean by "earn," so our next task in undermining the scholastics of this question is to seek the meaning of that word. Does earning involve active labor, physical or mental? Does it require that the individual who earns wealth shall exert actual bodily or mental energy as a condition of coming into possession of it? And if so, must the energy be in some sort of proportion to the amount of wealth received, or is this not necessary? If it is, how are we to measure human energy in this sense and equate mental with physical? How much ditch-digging for instance is equal to the energy exerted by James Watt in developing the steam engine? If we measure earning by effort, it is possible to answer this question, in a rough way at least, and by this standard what Watt earned was not more and quite likely was less than what is earned by an average ditch-digger in a few years' work.

But the idea of earning is complex and there is another way of measuring the amount a person rightfully earns, namely by the benefit his efforts confer on society. Measured by this standard, the amount Watt really earned was equal to the life labor of many millions of ditch-diggers, for wherever steam engines serve, or will in the future serve, human beings, directly or indirectly, there Watt serves them; and therefore a share of the earnings of every engine working to-day, or in the future, is rightfully his. Moreover what he earned by inventing the steam engine would not be diminished in the least had the inventing of it been no more than a pleasant pastime, as indeed it was, in part at least; for to the inventor inventing is an enjoyable occupation, a fascinating recreation.

There is a third way of measuring what a man earns by his efforts, namely, by what he is legally able to get for them; and measured by this standard, Watt earned very little, and most great inventors earn even less than Watt—less perhaps than the laziest ditch-digger. This is nevertheless the measure in commonest use to-day, and though it has little relation to the other means of measurement it has the merit of definiteness—perhaps the only merit it does have.

Now with these three methods of measuring what a man earns more or less vaguely present in people's minds it is no wonder that there is disagreement as to whether the capitalist earns the wealth that he gets. The question evidently admits of various answers according to the standard of measurement used.

Referring to the pure capitalist, whose income is due exclusively to what he owns, it is obvious that if we use the first method of measurement he does not earn what he gets, and hence shares one of the distinctive characteristics of a robber. If we use the third method of measurement he does earn what he gets, and hence is no

robber at all. And if we use the second method of measurement he may or may not earn it, depending upon whether or not his ownership is a service to society. Now this last question, though the hardest, is yet the most important one to answer, because our whole object is to ascertain how society may be served, and though it is most aggravating that the very thing we need most to know about this question is the hardest to find out, yet it is so much like what we meet elsewhere in life that we probably may become reconciled to it. For if we measure what the capitalist earns by his service to society, we shall be down to the solid basis of utility and can depend on our conclusions.

How the Capitalist Serves Society. And right here it will be well to recall just what we mean by a capitalist, and I will ask the reader to refresh his memory by referring to the distinction made on page 43 in the last chapter. The man we are talking about is not the mere owner of capital, neither is he the man who is merely paid for owning capital, nor does it matter whether he does something in addition to owning something for a living. It is the man who owns for a living in so preponderating a degree that he gains, economically, more than he loses by the system (capitalism) that recognizes ownership as a legal means of income.

If the capitalist is useful it must be because he performs a useful function in society; but can we say that a person who does nothing performs a function at all—or is owning something one way of doing something? We can easily get into more scholastics on such a question, but let us avoid it by showing that the pure capitalist, though he may not perform labor that is measurable in units of effort, yet is a factor in affecting the welfare of society, just as the buildings in a city, although they sustain no form of actual activity, yet affect

the life of the community no less than the active elements thereof.

The function of the capitalist, *per se*, is not to work himself, but to determine by his inclination what kind of work others shall do. It is often said that such and such a capitalist built this railroad or that hotel, and this way of using words misleads us into thinking that he had some active part in it. Of course, if he took active part in planning the enterprise he was one of the builders, just as the architect was, but not in his capacity as a capitalist pure and simple. The capitalist simply invests. He decides or consents to own one kind of property rather than another, and this decision affects the activity of others, sometimes of many others. The capitalist does not actually build railroads or hotels although we say he does. If he did, the architects, engineers, mechanics, laborers, etc., who receive the money which represents his investment would be superfluous—indeed very much in the way. But if his inclination happens to be that a hotel shall be built rather than a railroad this inclination determines that the aforesaid architects, engineers, laborers, etc., or others of their ilk shall expend their efforts in building a hotel instead of a railroad. If he is disposed to have a railroad, then they work at that, and so with other things. Thus the function of the capitalist in society is a very vital one. In his capacity as a capitalist he *does* nothing, but he has preferences as to what he shall own, and these preferences determine what kinds of things others shall do.

A society largely dominated by capitalists then (as ours is) is one the productive activities of which are in that degree determined by the preferences of capitalists seeking the largest possible return on their investment, and as most of the activities of the people of the United States, and countries in a like stage of development, are of a productive nature, it comes about that a very

considerable and increasing part of such activities are directed to doing what will most enrich the capitalists of the country, or rather what they think will most enrich them.

Private and Public Functions. Now productive activities are of two kinds: either they are private—concerned with satisfying the desires of a private individual or family, or they are public—concerned with satisfying the desires of the public in general, or some local section of it. A person's activities in dressing, washing and feeding himself, brushing his teeth or his shoes are examples of the performance of private functions. They do not concern the public except perhaps in a remote and indirect way, and the welfare of other persons is not materially affected by them. Similar services performed for another, as in the case of a valet or nurse, are also private if confined to a single individual or family. A person's activities in assisting to operate a railroad, mine or factory, run a store, or a farm, the produce of which is consumed by the public or some considerable part of it, are examples of the performance of a public function. These activities concern the public because public welfare or happiness is likely to be materially affected for the better or worse by the manner in which they are carried on. A few kinds of activities of an intermediate kind may be cited, but hair-splitting aside, by far the greater part of men's productive activities can be quite readily classified as either private or public.

This classification will help us to understand the true relation of capitalism to robbery, because it will make quite plain how the capitalist is able to get wealth without working for it. We have seen that a pure capitalist affects society and acquires wealth, not by indulging in any activity of his own, but by determining what kinds of activity others shall indulge in. Now the principal

kind of productive activity through which he can thus acquire wealth is public activity. In other words, his preferences as a capitalist cause other men to perform public functions, and these are of service to the public. Money expended for private activities yields no return. It tends to impoverish rather than enrich men. Of course if the capitalist is a rich man he can, and probably will, have preferences which will direct the activities of quite a few persons to the performance of private functions for his benefit. His convenience and service will probably absorb the labor of servants and flunkies of various kinds; but it is not as a capitalist that he determines their activities; it is as a rich man, and such activities do not tend to enrich him—quite the contrary. They are not an investment; they are a luxury which his investments enable him to afford. And right here perhaps is the best place to point out why orthodox political economy cannot perceive anything robber-like in the capitalist.

Abstinence. It is, or used to be, quite usual for economists to explain the return received by the capitalist on his investment as the reward of abstinence. They mean by this that in spending his money for stocks or bonds he is abstaining from the luxuries he might have spent it for, that in causing men to perform public functions through investment he is failing to receive the personal service he might have purchased with the same money. The more a man spends for securities the less he has to spend for servants or other indulgences—or at any rate the less he has to spend immediately. In this way of looking at the matter the capitalist certainly bears little resemblance to a robber. He is a sort of martyr practicing abstinence for the benefit of society, and his profit is merely the reward of virtue—the virtue of self-denial.

But this impression is secured by a common scholastic

trick—the undetected use of a popular word in a technical sense. All the economist means by abstinence is a preference for profit over immediate consumable goods. It is true that when the capitalist devotes his income to investment he in that degree abstains from spending his money on consumable goods, but it is equally true that when he devotes his income to spending he in that degree abstains from receiving profit. He cannot eat his cake and have it too; so he is bound to abstain in one way or the other, and normally he will choose the kind of abstinence he likes the best. And if his preference causes him to abstain from spending rather than from profit, it is hard to see why he is practicing self-denial more than if it causes him to abstain from profit rather than from spending. He cannot avoid abstemiousness of one sort or the other, and the practice of what cannot be avoided can hardly be classed as a virtue.

This concept of the reward of the capitalist then represents him as a person who is rewarded by society for abstaining from what he prefers to abstain from. The very rich man is the great abstainer. The very poor man practices no abstinence whatever, except of course what his poverty imposes on him. As we look about the world and observe the habits of the rich and poor we perceive that this proposition, though true, is not interesting, except to the academic mind. Indeed, it is of such meager interest as a justification of modern capitalism that, outside of academic circles, little is now heard of it. The current explanation of the reward of the capitalist is no longer found in his preëminent abstinence, great though it be. It is found in his preëminent ability.

Ability. Thus it is contended by many economists that what we have called payment for ownership is really payment for ability. They have even coined the term

“rent of ability” to express this award. Of course, in one sense they cannot be mistaken in this view. If a man receives any payment it proves he is able to receive it, because no one can do what he is not able to do. This view of the matter, however, simmers down to saying that a man who receives a payment receives it, and would make everybody’s income a rent of ability—ability to get what he gets.

What the economists must mean, if they mean anything reasonable, however, is that property-income is the rent of ability—or unusual ability—to serve the public in some way; and yet I should like to see any man, however able in this sense, get the income from a thousand dollar bond the ownership of which was vested in some one else. No; payment of dividends on stocks, interest or bonds, rent of houses and lands, and so on, goes to him who owns these things, whether idiot or sage. If you do not think this is so, try to convince some bank treasurer to the contrary. Try to show him, for instance, that he should issue his semi-annual dividends, not according to stock ownership, but according to ability in the public service. If you succeed you will receive a large rent for your ability to convince, for it will certainly be an unusual one.

I do not wish to assert however that men do not sometimes become possessed of large capital through their preëminent intellectual ability in the service of the public. This occasionally happens, but it is a far cry from this to the proposition that he who serves the public most efficiently receives the most income. The reverse of this proposition would certainly be as near the truth. He who would acquire a large income must cultivate acquisitive efficiency, which is quite distinct from productive efficiency.

When the term “rent of ability” is confined to the award of the working capitalist, the promoter or en-

trepreneur, it seems to have a confused sort of justification, and yet the only measure of ability generally available is the amount gained (or lost), and this method of measurement, as already shown, begs the question of ability. It is true that when public functions are left to be performed by private parties, a chaotic condition of things results which calls for the exercise of a peculiar kind of enterprise and ability—the ability to bring order out of chaos in the industrial and commercial world. The entrepreneur sometimes has this ability and uses it in the public service as well as his own, and in so far as his reward is in proportion to his exercise of it, he is paid for doing and not for owning. But under socialism there will be no call for this peculiar ability, because, the chaos of capitalism having been abolished, there will be no need of bringing order out of it.

It is entirely natural that a man who has become rich and successful should attribute his success to his own ability, and he usually does; just as a man who has failed attributes his failure to luck, to the wickedness of his associates, or to something for which he is not at fault. This is human nature. All of us like to blame our successes on ourselves and our failures on some one else. You see ability itself is, after all, a matter of luck, for no man can determine what he is born to. He cannot even determine that he shall be born with the ability to acquire ability. As a matter of fact success or failure depend partly on the luck of possessing ability or the lack of it, and partly on the common or garden variety of luck. The game of life depends more on skillful play than roulette, and more on luck than chess. It is more like whist, which depends somewhat on both, and though it would take too much time to present the evidence, I think, if presented, it would show that, like whist, it depends more on luck than on skill. This is one reason why the world needs a system which will more nearly

equalize the opportunities under which the game of life is played, so that it will resemble chess; so that ability to serve, as measured by success in serving, will mean success in life.

But the important thing is not whether the capitalist is so preëminently abstemious or able as the economist pictures him. That would not mean that he might not have the characteristics of a robber. We might call a robber one who abstains from the satisfaction of being honest, or who has the ability to make dishonesty pay. The important thing is whether the capitalist in causing men to perform public functions is or is not conferring a benefit on society; and it seems quite evident that even the socialist must admit that he is. The admission, however, involves some qualifications, which are the most interesting things about it.

Present Division of Control of Public Functions. In countries like the United States all public functions are not determined by the desire of capitalists for profit. The legislative, executive and judicial departments of government, the public defense, the carrying of the mails, the lighthouse service and many other public functions are not operated by capitalists. These functions are performed by publicly paid officers in the exclusive interest of the public. They are determined by the preferences, not of capitalists, but of the public as reflected by the preferences of their representatives in Congress. They are publicly operated public functions. The control of the capitalist is confined to other public functions, generally of an economic nature—mining, manufacturing, transportation, etc. That is, the capitalist controls the performance of those public functions only which the public does not perform for itself, and hence his existence as a capitalist depends upon the neglect of the public to perform its own functions—to attend to its own

affairs; and as these affairs neglected by the public include very vital ones, it is lucky for the public that private provision for attending to them is made, and if the men who make it are robbers they are a much needed kind of robber who use public service as a means of robbery.

Thus from a new viewpoint we are brought again to the issue of whether it is best for the public to attend to its own business or to "let George do it," and this issue like all others can only be settled by an appeal to the sum of the evidence. In other words, we are led once more to consider whether capitalism as a means of carrying on public functions is more useful than socialism, for the resemblance of a capitalist to a robber depends upon the decision of this issue. Under capitalism the capitalist is a necessity, and this certainly is a characteristic distinguishing him sharply from a robber. Under socialism on the other hand he would be non-existent, and non-existence is a characteristic which robbers ought to have but have not. So that, judged in this way, the capitalist has no resemblance to a robber either under capitalism or socialism.

Necessity of Capitalists. It thus appears that while the capitalist resembles the robber in that he lives upon the labor of others, he differs from him in that, under a system in which the public neglects to attend to its own functions, he is a benefactor even to those upon whose labor he lives. The indirect effect of his inclination to live upon the labor of others is the performance of vital public functions. Imagine what would happen to this country and to the workers in it if the capitalists of the United States should suddenly withdraw from business—should cease to perform their function of determining what the wage-workers should work at—and no other mode of determination should be substituted. Obviously,

the country would be in the position of an infant abandoned by its parents in the wilderness. It would cease to exist as a nation. It would die of starvation. A nation in the capitalist stage is in fact like a child in that its powers are undeveloped. It cannot take care of itself. It can, like a child beginning to toddle, perform a few essential functions, but not enough to sustain its life. It is as dependent upon its capitalists as the child is dependent upon its parents. But the dependence is not of the same character. The capitalist serves the public, not as the father serves his child, for the love he bears it, but rather as the farmer serves his milch cow, for the love he bears good milking. Capitalism indeed is an extreme form of paternalism, albeit more farmerly than fatherly. The United States is as dependent upon its capitalists, the little fathers and mothers of its economic life, as a child is dependent upon its parents, and must remain so until it has matured its own economic functions. The stage of economic maturity is represented by socialism, a system under which the nation will depend upon itself, stand upon its own feet and be self-directing—for the first time free from paternalism. The notion so generally prevailing that socialism is paternalism while capitalism is not, is thus the exact reverse of the truth. Socialism is industrial democracy—it is economic self-government—and self-government can no more be paternal government than a man can be his own father. It is capitalism—industrial oligarchy—which is paternalistic, and whoever is opposed to the genus paternalism must be opposed to its species capitalism.

Risk. Among the many paternal functions of the capitalist there is one classed by economists with abstinence and ability as a justification for his income, namely, the risk involved in the process of investment. This risk is real—as real if not as great as the risk run by the

robber in the process of robbery. It is also assumed from the same motive, to wit, self-interest. But here the resemblance ceases. The risk assumed by the robber serves no public function; that assumed by the capitalist does. While the public refuses to assume the risk itself those who do assume it perform a useful public service, and if the premium which the public pays is excessive it is no more than individuals pay for similar neglect of their own affairs; for it is as generally true of nations as of individuals that they will find their business best attended to if they attend to it themselves. The risk assumed by the capitalist nevertheless is a real public service. It is part of the justification for property-income *per se*, whereas the abstinence and ability of the capitalist are not.

But there is another aspect of the relation between the capitalist and the robber more enlightening perhaps than any yet considered. After what we have just said about the necessity of the capitalist it will be delightfully paradoxical to point out that he resembles the robber in being superfluous.

Superfluosness of Capitalists. That the robber is superfluous everyone will concede. That the capitalist is superfluous is conceded by those stanch supporters of capitalism, the orthodox economists. In any orthodox text book of political economy you will find the statement, or some equivalent of the statement, that the only essentials of production are land, labor and capital. If these are the only essentials, all other things are non-essentials. Therefore capitalists are non-essentials—for capitalists are not capital, much less are they land or labor. It is commonly asserted that land and capital are entitled to their reward, because they are as much factors in production as labor. This assertion may be true, but the trouble is that they are so constituted as to be inca-

pable of receiving any reward. A ten acre lot was never offered \$100 a year to grow corn, neither does anyone ever approach a locomotive with an offer of fifty dollars a week to haul freight. The reward of land and capital is always vicarious. It is necessary to bring in some non-essential of production in the form of a land holder or a capitalist to act as a receiver for what the real essentials are incapable of receiving. No such system of deputation is required in the case of labor. Land can exist without landlords and capital without capitalists, but labor cannot exist without laborers. Landlords and capitalists are non-essentials of production—their payment is not for doing but for owning things. Laborers are essentials of production—their payment is for doing things. Labor, in fact, is the only essential of production capable of receiving a reward for its part in producing. Land and capital require no reward, never receive any, and could not accept it if offered.

Landlords and capitalists are necessary to production only under artificial institutions that make them so. Laborers are necessary under any system devisable. It is said that in certain regions of Asia custom requires that no enterprise shall be inaugurated without the blessing of a lama or Buddhist priest, who receives a fee for his contribution to the success of the undertaking. In those regions the lama blesses things for a living just as the capitalist owns things for a living. Under the system there obtaining he is as essential a factor of production as a capitalist under the system of capitalism. In the one case as in the other it is the peculiar institution that custom has developed, not the necessities of production, that have converted a non-essential into an essential. Under the proper system of industry, living in the same town occupied by an industrial establishment might entitle properly qualified persons to receive payment from its treasury, for *a priori*, it is as reasonable to pay a man

for a spacial relation like this, as for a legal relation like ownership.

Capitalists then resemble robbers in being superfluous. It is true they are not superfluous under capitalism any more than kings are superfluous under monarchy or slave holders under slavery, but they are superfluous under a system of production which eliminates all non-essential factors. And after all, why should a system of production include any non-essentials any more than a machine should be encumbered with superfluous parts? Such a system surely must be imperfect. It cannot be stripped down to its most efficient terms. A system of industry which permits a large fraction of its product to leak into the hands of non-essential elements, as capitalism does, certainly cannot be considered efficient, except through some conception of efficiency which itself is leaky.

The Most Useful Aspect of Capitalism. We have discussed a number of resemblances and divergences between the capitalist and the robber, each having a value in throwing light upon the true nature of capitalism. It remains to point out a divergence which reveals the capitalist, particularly the great capitalist, in his most useful relation to the community; and it is a very useful relation—as useful as the robber's is harmful. I refer to his value as a teacher. Of all his paternal functions this is the most important. To show plainly this aspect of the capitalist's place in the community it will be best to point out some features of the development of a closely related form of paternalism—the institution of monarchy.

Kings as Teachers. In primitive times there existed no such thing as political government among men. The human animal was as individualistic as his brute neigh-

bors, the bear and the wild cat. This was the age of anarchy. This stage was followed by one in which men associated together in larger family aggregates or in tribes, yielding a limited obedience to a patriarch or chief whose office was generally hereditary. By tribal alliances larger aggregates were formed headed by a principal chief, and by like stages petty nations and kings innumerable were developed, each seeking its own interest and fighting with its neighbors in the effort to achieve it. In these fights the interests of the kings generally prevailed over that of their kingdoms, and this relation between kings and kingdoms has survived to this day. In the process of wars and alliances little kingdoms were swallowed up in big ones, petty kings became the subjects of great kings, huge dynasties arose—and most of them fell—until the institution of monarchy as we know it to-day was evolved; the rule of the game being that a king is entitled to rule his people and pass the rule on to his children until some one comes along with ability enough to take his power away from him; in which event the job of ruling is taken over by the newcomer, another dynasty is started, and in turn becomes hereditary.

In order to overcome their adversaries and extend their power it was necessary for kings to organize the people of their kingdoms, to make them stop fighting one another and cooperate in the common purpose of serving the king's will and augmenting his power. Thus the evolution of monarchy and government proceeded together, and thus out of anarchy arose the complex governments of modern monarchies with their highly developed machinery of political cooperation. In the development of this machinery kings and their ministers played the principal parts, because both their interest and their power was paramount.

The institution of monarchy was a great improvement

over that of anarchy from which it was thus gradually evolved. The organization of a community into a body politic, even in the service of a king, was a much better way of promoting happiness than the "each for himself and the devil take him who would serve his fellow men," as in the cave man stage of existence. Under monarchy with all its iniquities a man's life, liberty and property were far safer than when at the mercy of any neighbor with the power and inclination to assail them; and with all its wars there was far more peace than when each man's hand was against his neighbor. It is true these benefits were merely incidental to the service of the king and his family and court. The king in governing his people and imposing discipline upon them was performing a useful public function, but its utility to the people was merely a by-product of its utility to him. The king's service to the people was merely an incident of his service to himself. He performed a public function as a by-process of private self-seeking.

Now in the life of the more advanced and intelligent monarchies there comes a time when this by-process becomes the principal process. "When in the course of human events" experience has taught people the benefit of government in the service of kings, it tends in intelligent communities to go further and suggest to them the benefit of government in their own service. In other words, when kings have once taught a people how to run the machinery of government for kings, they are likely to discover that the people have been taught to run it for themselves, and in time will get around to doing it, and thus render kings superfluous. Thus monarchy tends to develop into democracy, thus public political functions come to be performed as public functions instead of as by-processes of private power seeking, thus the people learn to attend to their own political business instead of letting power seekers attend to it for them.

Sometimes the change from monarchy to democracy takes place suddenly as in our own revolution or in that of France. More frequently it occurs gradually by the slow process of encroachment of the public control of government upon the power of the monarch, as in the case of most of the countries of Europe, best illustrated by the political history of England, where this encroachment has proceeded further than in other monarchies. But in all cases the process has been essentially the same. Kings in the process of learning how to govern their people have taught the people how to govern themselves, and thus by their service as teachers have tended more and more to destroy their own functions, until when the stage of democracy or self-government is reached they become entirely superfluous and disappear altogether as in France, or remain mere symbols—a sort of rudimentary organ or vermiform appendix to government—as in England.

Capitalists as Teachers. Now the evolution of the economic institutions of the human race proceeds along lines parallel to that of its political institutions, only it has not yet proceeded so far. The production of wealth in primitive communities is originally purely individualistic. It is industrial anarchy. Each family produces for itself. Gradually a division of labor evolves specialists in production, each working for himself without regard to the operations of others. Later workers in special lines tend to get together, especially in the cities, a rude coöperation begins, the relations of master, journeyman and apprentice appear, until with the coming of the age of machinery the master class develops into the capitalist class. Through economic wars and alliances essentially similar to the familiar political kind, larger capitalists arise who tend to swallow the business of the smaller ones, barons, captains and kings of indus-

try evolve of various degrees of power, comparable in practically all respects to the barons, kings and emperors whose doings fill our books of history; and not inferior to them in power over the lives of the people. For the kings of industry, little and big, having raised the economic life of the people out of its primitive anarchy, having imposed economic system and discipline upon the people, proceed to control the organization they have created, and govern the economic machinery of the community, not of course primarily for the communities' benefit, but as an incident of private profit seeking. The great capitalist is thus an accurate counterpart of the monarch, performing public functions as by-processes of private self-seeking, and it is through no faulty analogy that our Rockefellers, Carnegies, Baers and Harrimans are referred to as oil kings, steel kings, coal barons, railroad kings, etc. Their power over the life of the people is that of kings, they receive the homage which in monarchies is accorded kings, like kings their power is hereditary, and their dynasties survive or perish according to their ability to out-manuever their rivals and opponents. The Houses of Rockefeller and Morgan are established on as firm a basis as the Houses of Hapsburg or Hohenzollern—and perhaps a little more so. If their subjects are somewhat discontented with their arbitrary exercise of power it is no more than can be said of the subjects of other kings. In both houses the reign of John the Second promises to be at least as beneficent, and even more widely extended, than that of John the First.

But the resemblance between capitalists and kings extends still further. In economic as in political affairs the ruler of the people is also their teacher. In serving himself he serves the public in more senses than one. Not only does he cause the performance of public functions as an incident of his money making, but in so

doing he teaches the people how to perform these functions for themselves. Sometimes he does this in his capacity as a capitalist, sometimes perhaps in his capacity as an organizer, his ownership of capital providing him with the opportunity. Just as the political king by revealing to the people the value of political organization as a means to personal power incidentally reveals to them its value as a means to national well being, so the great capitalist by revealing to the people the value of industrial organization as a means to private profit, incidentally reveals to them its value as a means to public service. And just as the king by teaching the people the art of political government finally renders himself a political superfluity, so the capitalist by teaching them the art of economic government will finally render himself an economic superfluity.

Thus political and industrial evolution follow the same lines, from anarchy, through oligarchy to democracy. Essentially the same process which develops monarchy into political democracy will develop capitalism into industrial democracy or socialism. The great value of the capitalist, as of the king, is as a teacher. Through him the people will learn to operate public functions as public functions and not as by-processes of private profit-seeking. By his efforts they will see that though it is well to have capitalists attend to the public business for them, it is even better for the public to attend to its business for itself.

Need of Regulation the First Lesson Learned. At the present day we are living in an interesting stage of economic evolution in this country. It is the stage corresponding to that in which absolute monarchy evolves into constitutional monarchy. The European monarchies are passing through this stage to-day, England having about completed it, and Turkey just begun it. Our fore-

fathers in this country skipped this stage of political evolution, accomplishing by seven years of war what it has taken England seven hundred years of "regulation" to accomplish. We are not going to follow in their footsteps to the extent of skipping entirely the corresponding stage of economic evolution. We are already well launched upon a policy of industrial regulation designed to convert our system of economic absolutism into one of a controlled, constitutional, or limited condition. It is true some of our confused leaders are attempting to go back to the old condition of economic anarchy. They would establish an artificial competition and abolish the trusts. A good many indeed would abolish and regulate them at the same time. But the talk of abolition is now for political purposes exclusively. Few really take it seriously. The course of economic evolution is not going to be reversed. We shall continue and extend our "regulation" until we have rendered economic kings as superfluous as political ones. In the first chapter I have discussed this parallelism between our policy of regulation and the European policy of constitutionalism. Both result from the reaction of an intelligent people to oligarchic institutions. Both are highways to democracy, even though men's love of makeshift and muddle render them needlessly devious and long.

The Most Dangerous Aspect of Capitalism. There seems only one force capable of suspending the course of this evolution, and that is one capable of suspending the power of intelligence in dealing with it. There is a genuine danger here, because the same system which gives our class of major capitalists their control over the activities of men in general gives them control over their educational activities. It is all a question of how they are going to use that control. Those great agencies of

education, the press and the universities, are almost exclusively in their hands. They can be used as well to miseducate as to educate the people and their leaders, and in industrial affairs they are largely so used. True, it is a prodigious task for them to nullify the education furnished by the actual events and facts of industrial life, but they can accomplish much even against such opposition, for, within limits, they can control what facts and events shall be brought to public notice and emphasize their capitalistic interpretation. Needless to say, they rather consistently do this. How could they be expected to do otherwise? For the most part it is done honestly, since not only self-interest but the traditional way of regarding economic institutions sustains them. Reason alone opposes them, and reason in matters like this is a force of feeble intensity. It is only its persistence which makes it formidable and causes it to prevail in the end. When Thomas Paine, referring to the conversion of the colonial Whigs from the support of monarchy to that of democracy, said that time makes more converts than reason, he was merely paying a tribute to the persistence of reason in time. Time alone makes no converts. But reason, with the help of the events which time brings forth, makes them.

Thus the greatest danger to the triumph of democracy is not the control of our industrial oligarchs over the wealth of the country, but over its education. Happily this control is not complete. The public through the public schools and libraries and state universities is, in some considerable measure at least, attending to that public education which is so imperatively and vitally its business, to the extent of being the chief instrument of its salvation. Nowhere is the extension of the public control of public functions more important than in the realm of education, for plutocracy is more valuable as an unconscious than as a conscious teacher. Particularly

to leave the power of the press exclusively in its hands, as at present, is to trifle with the whole future of society. It is taking a chance which no people would take if they realized the chance they were taking. While the truth may be mighty there are odds over which it may not prevail. Public indifference in this as in so many other matters is due to public ignorance.

An Issue Involving not Men but Institutions. But it is time to close this discussion of the capitalist and the robber. They have their resemblances and their differences which may be summed up by saying that while they are alike in living upon the labor of others, the capitalist differs from the robber in that his power to do this depends upon his performance of public functions, whereas that of the robber does not. And while they are also alike in being superfluous under ideal conditions, the capitalist is no more superfluous under the institution of capitalism than the robber is superfluous under the institution of free robbery. We have abolished the latter institution, so we look upon the robber with disfavor, but it should not be forgotten that among cave men robbery was as honorable a pursuit as profit-seeking is now, and the most successful robber was the most respectable and powerful man in the community, a position held among us by the most successful capitalist. The fact that eminent respectability and power, whether among robbers, kings or capitalists, is alloyed with a certain unpopularity should not side-track us into taking a personal view of the institutions of robbery, monarchy or capitalism. Honesty is a matter of institutions. Being a robber under the institution of robbery is as honest as being a capitalist under the institution of capitalism. It is no use calling a capitalist a robber unless there is something to be learned by it. If by doing so we are enabled to see more clearly the true nature of this insti-

tution of capitalism which plays so large a part in all our lives, well and good; but if all we express by it is a sentiment of dislike or disapproval for a class of normal fellow beings, we are only engaged in deceiving ourselves and others; we are barking up the wrong tree, and are blaming men for ills which can only be blamed upon institutions.

IV

APPLYING ENGINEERING TO POLITICS

Why the World Advances Materially and Stagnates Morally. The great accomplishments of our age are due to the methods of engineering. Digging the Panama Canal, navigating the air, talking across the Atlantic, abolishing typhoid fever, are achievements which typify what engineering can do in the service of mankind. Although the kinds of things accomplished by engineers are infinitely varied the method of accomplishment is always the same—it is the method of science directed to doing, instead of merely knowing, things. No advances comparable with those of science are to be discovered in the realm of morals, including religion, or in politics, in its broader sense—the realm in which the method of science does not prevail. There is a reason for this and a simple one. In order to achieve anything it is necessary to know how to achieve it. Advance in the knowledge required for successful achievement is only accomplished by the scientific method—at any rate no other method of learning how to do things has ever been described. In the material world science is applied. Therefore man advances in material achievement. In the moral world—the world of religion and politics—science is not applied, or at most very feebly. Therefore man fails to advance in moral achievement. That seems to be the explanation of the whole matter.

This disparity between the physical and the so-called moral sciences is illustrated by the type of “expert” who

applies them in the world to-day. If we want to be cured of diphtheria we employ a physician; if we want to build a railroad we employ a civil engineer; and if we want to find out if our well water is safe to drink we apply to a chemist. But when we want laws made and institutions designed, do we go to a political engineer, who is skilled in these arts? By no means. No such person exists, because science has not been applied to such matters. We go to a politician, whose only expert qualification is his skill in acquiring office. Although there are some notable exceptions, the methods of the average law-giver in America to-day bear no resemblance to the methods of the scientific professions. They resemble rather the methods of the medicine man, the rain-maker, the soothsayer or the whirling dervish who are the primitive counterparts of the doctor and the engineer. We select political medicine men for our law-givers because we apply science to politics in much the same way that the savage applies it to medicine.

The obvious thing to do if we wish to accomplish anything in the realm of morals is to apply science there, and it is the purpose of the present chapter to discuss some aspects of the application of science to politics, which is the department of morals in which it is at present easiest for the scientific or engineering method to get a foothold—though this is not saying it is easy, even there.

Characteristics of Applied Science. And first a few words about the characteristics of the engineering method. There is nothing mysterious about them. Engineers learn how to dig canals, talk across the ocean, navigate the air, and abolish disease by the same method used by intelligent persons in learning how to cook an apple pie, or tend a furnace, or manage a boat or a wheel-barrow. The broad characteristics of the method

can be observed about as well in the kitchen as in the engineer's laboratory. What does an intelligent girl do when she wants to learn how to make an apple pie? She first reads the matter up in the cook book and gets her mother to show her all she can about it, and then she tries her own hand at it, making a poor pie at first, perhaps, but learning by her mistakes, until the relations of cause and effect in pie-making are so familiar to her that she no longer has any trouble in selecting the means which will accomplish her end.

Now the business of adapting means to ends—the business of engineering—is carried on in just this way everywhere when it is carried on successfully. The engineering laboratory, whether mechanical, electrical, chemical, or medical, differs from the kitchen only in the degree of refinement practiced. The engineer learns how to build a bridge by the same sort of procedure that is used by the school girl in building a pie. He first learns from books, teachers, laboratory exercises in the engineering school, and practice as assistant to more experienced engineers all he can about the theory of bridge-building, and then he goes out and tries his hand at it.

Two Elements of the Engineering Method. There are thus two elements or stages in engineering method. First, learning as much as possible from past experience—for sound theory is merely past experience boiled down. And second, learning the rest by trial or experiment. In many familiar engineering undertakings in which past experience has been ample, the second stage may be unnecessary. The theory of the thing is so complete that it is sufficient to tell the engineer all he needs to know. The experimental stage is confined to determining only the local conditions to be met.

In many other undertakings, however, the second stage assumes great importance. This is particularly the case

perhaps in mining and chemical engineering. But it assumes its largest importance in the great creative triumphs of the engineering method—in the discovery of how to navigate the air, talk across space or rid the world of a pestilence. Discoveries are seldom evolved exclusively out of the inner consciousness. To accomplish creative advances in engineering, theory is but an imperfect guide. The wise engineer of course uses it for all it is worth, but when it has done all it can, and still he needs more knowledge in order to achieve his result, what does he do? Wait for it to come to him? No, he goes and gets it—and the only way to get it is by experiment. When in this way he has got it the new knowledge, now a part of past experience, is incorporated with the old, correcting, modifying and augmenting it, a process which keeps scientific theory continually up to date. The theory thus perfected affords a more perfect guide to further research, suggesting new lines of inquiry perhaps, the fruit of which is again incorporated in theory, and in this way theory and experiment, the first and the second elements of the engineering method, act and react upon each other, each guiding and checking the other, and thus science and the achievements of science advance together.

Unscientific Methods. This method is so obviously sensible that one would think mankind would not care to use any other—perhaps it may be thought no other is used—but this is a mistake. In addition to the scientific, three other methods of attempting to identify truth and guide conduct are very common among men—the scholastic, the emotional and the dogmatic.

The scholastic method is characterized by the use of insufficiently defined words, the emotional by the use of feeling, or of self-interest, and the dogmatic by the use of mental habit, as agencies to these ends. They con-

stitute the three great sources of intuitionism or illogic, each of which is characterized by mental processes as distinct as those of the scientific method; but as this is not a philosophic essay it would be out of place to enlarge upon these methods here.

Nevertheless, brief examples of their application may indicate how they differ from the engineering method.

Two earnest Americans, A and B, sit down to discuss democracy, but neither defines (either to himself or the other) what he means by it. A asserts that great corporations are democratic institutions, because everyone has equality of opportunity to buy their stocks in the open market, and thus share in their ownership and control. B denies they are democratic, because their employees and those who consume their products are not represented in the management. A replies that from "one point of view" perhaps B is quite right, but that from another he is not. B cannot deny this proposition. Hence the conclusion they come to is that great corporations are democratic and also not democratic, depending on the point of view. The dispute is bound to be an idle one because there has been no agreement about the meaning of a vital word used (the word democracy) but the earnest Americans do not perceive this. Therefore, each quits the discussion knowing exactly as much about the relation between great corporations and democracy as he did when he began it. In other words, there has been no progress toward discovering the truth about the issue discussed. This is an example of logomania or the scholastic method.

An undogmatic but patriotic German workingman is asked why he supports the Imperial German government in its effort to destroy the struggling socialist republic of Russia, and to impose autocracy upon the world. He replies that although he regrets the harm done the rest of the world, an overwhelming love of his Fatherland

and flag and a feeling of fealty toward them proves to his satisfaction that it is his duty to serve his country right or wrong. In other words, he takes his conscience as his guide, and his conscience, in tones of the deepest conviction, urges him to assume a position of consistent patriotism, and act upon it. In this case emotion has usurped the place of reason as a judge of right and wrong, but the patriotic German is not aware of it, and therefore confuses a wrong course of action with a right one. This is an example of pathomania, or the emotional method.

An unemotional but pious Arab is asked why he believes that there is but one God and Mahomet is his prophet. He replies that it is not a question of belief, but of knowledge on his part. His parents and grandparents and all his countrymen have always believed it. All intelligent people believe it. The Koran says it is so, and all the evidence he has ever heard confirms it. His conviction of its truth is so deep that it must be true. How could he be so completely convinced of it if it were false? Indeed he is absolutely unable to entertain a doubt of it. Therefore it must be so. In this case early and persistently entertained conviction has usurped the place of reason as a test of truth and untruth, but the pious Arab is not aware of it, and therefore mistakes a false belief for a true one. This is an example of proteromania, or the dogmatic method.

These three forms of mania are not used in science (except sometimes by mistake) but are in almost complete possession of present-day morals, and its application in politics. This condition of things must be changed before a real moral science can come into existence.

To Adapt Means to Ends We Must Know What the End Is. To apply engineering methods to politics

requires that the essential conditions under which they are applied in mechanics, electricity, etc. be realized, and this requires in the first place a sufficiently clear idea of the object to be accomplished. No engineer would undertake to build a structure if he did not know what structure he was called upon to build—he would not attempt to adapt means to an end without knowing what end he was aiming at. While it is not practical here to enter into an elaborate discussion of what the end to be attained by human effort ought to be, yet with some confidence it can be said that the end is determinable by the scientific method.

One distinction, however, must be kept in mind if we are to think at all clearly about this matter, and that is the distinction between a means or proximate end, and an intrinsic or ultimate end. A proximate end is of interest only because of what it is a means to. An ultimate end is of interest because of what it is. Ultimate ends are attained by selecting the proper proximate ones. To illustrate:

A boy eating a peanut is engaged in seeking an ultimate end through a proximate one. Eating the peanut is the proximate end. The pleasure caused by eating it is the ultimate one. The eating of the peanut is of interest to the boy only because of what it is a means to; namely, pleasure. It is of no interest in itself. The pleasure, on the other hand, is of interest to the boy because of what it is, and not because it is a cause of anything else. This is shown by the fact that a boy who does not like peanuts does not eat them. He is not interested in that particular proximate end. Why? Because in his case it does not lead to an ultimate one.

Before he can eat peanuts, of course, the boy who likes them has to take steps to get them. He has to get some money, go to the peanut-stand, and buy the peanuts. These several steps are also means or proxi-

mate ends, less immediately related to the ultimate one than the actual eating of the peanuts, but having the characteristic common to all merely proximate ends of being interesting as causes, but not as effects. The final intentional effect of taking the several steps, however—the pleasure which ultimately results therefrom—is interesting as an effect, and not as a cause.

In this simple example, perhaps, it is easy to distinguish proximate from ultimate interest, but in less simple cases it is not so easy. Hence one of the commonest mistakes made both by the average man and by moralists is to mistake the means for the end, and therefore to sacrifice the end to the means. We shall point out a little later how men and nations are continually doing this to-day.

Although it is too long a story to go into this whole matter profoundly we can get a pretty good idea how to handle it for the practical purpose we are seeking by going back to the original sources of American political ideals.

The End Sought by the Fathers of the Republic. If we hark back to the early period of American history we find a set of political thinkers of an unusually philosophical kind. They got down to fundamentals in a way that unhappily does not characterize so generally the statesmen of to-day, either in this country or Europe. They did not think that in order to be practical it was necessary to be superficial. They had theories and sound ones as to why government existed among men, and what society is, or at any rate ought to be, attempting to accomplish by all its mighty efforts.

Perhaps the earliest of these exponents of Americanism was the Reverend John Wise of Ipswich, Massachusetts, who contended as far back as 1687 that "taxation without representation is tyranny," and was put in

jail by the royal governor Andros for expressing the sentiment. Writing about 1717, he informs us that:

"A civil state is a compound moral person whose will . . . is the will of all, to the end it may use and apply the strength and riches of private persons towards maintaining the common peace, security and well-being of all which may be concerned as though the whole state was now become but one man."

He then proceeds to show how this "compound moral person" may be "anatomized," classifying its characteristics under eight headings, the sixth of which is as follows:

"(6) *Salus Populi*, or the happiness of the people, is the end of its being; or main business to be attended and done."

Thus the idea expressed by this earliest of American political philosophers is that "the strength and riches" of the members of the body politic should be directed to "maintaining the common peace, security and well-being" of the body as a whole. But it is obvious from his later specific statement that "the happiness of the people is the end of its being," that peace, security, and well-being are to be maintained, not because they are of interest as ends in themselves, but because they are means to that common happiness which is the true end. In other words, he distinguishes between proximate and ultimate interest—between means and ends.

About sixty years later we find the same idea expressed in the Declaration of Independence—still the best expression of Americanism extant—where among mankind's inalienable rights are specified "life, liberty and the pursuit of happiness." Again the last word is the key to all the rest, for life devoid of happiness is valueless to him who lives it, liberty is worth nothing if it is only liberty to be miserable, and what is the use of pursuing happiness if the pursuit is unsuccessful?

Once more in the constitution of Massachusetts the idea is made still more explicit, and the fact that the end of government is a collective or social, and not a mere individual end is re-emphasized:

“Article VII. Government is instituted for the common good; for the protection, safety, prosperity, and happiness of the people; and not for the profit, honor, or private interest of any one man, family, or class of men: Therefore the people alone have an incontestable, unalienable, and indefeasible right to institute government; and to reform, alter, or totally change the same, when their protection, safety, prosperity, and happiness require it.”

Here the means coupled with the real end happen to be protection, safety, and prosperity, but the same principle applies to them as to all other means. As means alone they are worthless. Take away the happiness to which they normally lead, and the people's right to, or use for, them would be an empty one.

This idea that public happiness is the end for which governments are instituted among men is repeated with endless variation of phrase in the declarations of rights and the constitutions adopted by the original states of this union, and when happiness is not mentioned by name, one or another set of means to it are, as for instance in the Constitution of the United States it is asserted that the purpose of its adoption is to “form a more perfect Union, establish Justice, insure domestic Tranquillity, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our posterity.”

Now the end which justifies the establishment, modification or destruction of government is the same end that justifies the establishment, modification or destruction of all other institutions among men, the end indeed which justifies means in general. It is simply the end

of greatest interest to mankind* as a whole, namely the happiness of mankind as a whole. To this end all means should be directed and subordinated; a fact which incidentally gives us the answer to a question which vexes a good many people—the question of whether or no the end justifies the means. The answer is that the end of greatest ultimate interest to mankind* justifies all means, but that no end opposed to it justifies any means.

The moral code which sets before men the greatest totality of happiness as the ultimate object of human effort is called the code of utility. It teaches that under all circumstances the course of conduct which tends most to increase happiness (or to decrease unhappiness) is the right course among nations as among individuals. It is the scientific basis of morals, because the proposition that the end of greatest interest to mankind is the happiness of mankind, rests not upon any one's opinion, but exclusively upon evidence. And this is true of no other code. As already intimated it would be out of place to go into this great subject here. It must suffice for our purpose to indicate how consistently the traditional American code of political conduct conforms to that of utility. To seek the course of greatest usefulness is to practice sound Americanism.

Political Engineering. To apply the engineering method to the attainment of the end of greatest utility is as reasonable and feasible as to apply it to any other end. Indeed to fail to apply that method is to fail to attain the end of all ends most important. The science which directs human conduct to this end, therefore, is as much entitled to the name of engineering as those which direct it to merely proximate ends, as the common

* Absolute accuracy requires the word *sentiency* in place of *mankind* at this point, but this is not the place to discuss the reason why.

branches of engineering do. Human experience already affords the material for the formulation of such a science. Indeed, it is already formulated in a fragmentary manner. Its parts are found scattered through all the social sciences. They only require the coördination and unification obtainable from the recognition of a common end to constitute a starting point for the most important of all branches of engineering—that which guides men in adapting their means to the end of greatest interest to them. This science I shall call political engineering.

What I mean by saying that many of the parts out of which a science of political engineering may be constructed are scattered through other sciences may be illustrated by the invention of the automobile. For years before its invention, the elements out of which it might have been constructed were familiar. Wheels, axles, pneumatic tires, gasoline engines, gears of all kinds, steering wheels, seats, dashboards, etc., were familiar to mechanics and others, but they had never been assembled, coördinated and adapted to one another in such a way as to constitute a self-propelled vehicle for traveling on a road.

In the same way, great numbers of observations, laws and speculations relating to human nature, human institutions, and human experience in general are to be found in the records of history, and in the sciences of psychology, sociology, economics and others, which are well adapted to help in a search after usefulness; but they have never been assembled, coördinated and adapted to one another in such a way as to constitute a science devoted to the sole object of adapting men's means to the end of greatest ultimate interest to them—to wit, the end of utility. The formulation of such a science is infinitely more important to the happiness of man than the invention of the automobile, and it is to be hoped that the efforts of many competent men which present educational methods

tend to scatter in doubtfully useful directions, may in time become focused upon it. In the pages to follow some applications of such a science will be illustrated.

To make mankind's pursuit of happiness successful then is the object of political engineering, and it is the task of the political engineer to invent means of doing it. Being a special case of adapting means to ends, the general methods of engineering are applicable. Inventing, whether mechanical or political, is an engineering process and involves the two stages or elements of the engineering method, the theoretical and the experimental. The political inventor first uses his knowledge of theory to guide his imagination to some plausible expedient for accomplishing his end, and having perfected it as much as possible as a theoretical solution of his problem—having, like the mechanical engineer, made it look as plausible and practical as possible on paper—it is next necessary for him to try it out on an experimental scale, so as to correct mistakes of theory and work out details by the method of trial and error.

Dogma as an Obstacle to the Application of Political Engineering. Illogically enough the first step of this process—the use of the imagination to devise a theoretical plan, and the elaboration of this plan on paper—is generally discredited when applied to expedients for making mankind happy. The name usually applied to the process is utopianism, and it is supposed to be an occupation confined to impractical visionaries. Just as if there was any other way of going about the solution of the problems which actually confront men. This so-called utopianism is an essential part of the method of applied science. Every invention ever made, mechanical, electrical, chemical, social or political, has required it. Without it man's material condition would be that of a naked and homeless brute. Not only is it practical, but

every other method is impractical. And yet so-called practical men seek to discredit it, and talk sapiently of "expedients that are all very well in theory," or "look well enough on paper," as pretexts for avoiding examining them on their merits. What is the consequence? Stagnation and the triumph of dogmatism. The victory of custom over common sense—of drifting over doing. For, of course, when confronted with a difficulty (and every situation which interferes with human happiness is a difficulty) if we refuse to invent our way out of it there is nothing to do but to stay in it—to sit down and wait for something to turn up—to trust to Providence or evolution or time to do it—to have faith that it will cure itself—in short, to "sit on a stile and continue to smile" in the hope of softening the heart of fate.

Utopian Failures No Arguments for Inaction. Such an attitude of mind appears to receive some support from reason, because many social schemes and inventions can be cited which have been tried and failed—that is, they have not accomplished what their inventors expected them to accomplish. The tendency of these failures is to make men distrust all attempts to solve the more stubborn problems of human life, a distrust which has some rational basis when it does not degenerate into dogmatism, for it cannot be denied that the more frequent the failure to achieve a result the greater the presumption that the next attempt will fail. But as a matter of fact the obstructive, dogmatic attitude of mind is the most potent cause of the failures in social reconstruction which are cited as justifications for that attitude. Where there is a will there is a way, but the way is hard where the will is weak. It is supremely hard where the will is opposed. Social inventions require the coöperation of society to make them succeed. If society refuses coöperation it is itself responsible for the failure it con-

demns. If failure to accomplish a given result were a proof that it could not be accomplished then little or nothing would be possible. For it is rare indeed that failure does not precede success. This however should not teach us to give up trying. It should only teach us to conduct our failures on a small scale, so that we shall gain in knowledge more than enough to compensate for what we expend in effort. This is the principle of engineering experimentation. It is the principle of the efficient manufacture of knowledge, and right here political engineering can receive one of its most important lessons from engineering practice in general.

Engineering Failures No Arguments for Inaction. The failures which can be cited in social inventions—the fiascos of communists and the wrecked hopes of redeemers—can be duplicated a thousand-fold in the failures of more mundane engineering efforts. There is more than one reason for this, but the principal one is that for every social or political experiment undertaken by men, there have been a thousand mechanical or material ones. All the great inventions which have revolutionized the industrial world have been preceded by disastrous failures, usually many of them. This was particularly so in the earlier days of engineering science before men had learned to make their mistakes on a small scale. Scores of men had tried to make a practical steam engine before Watt. Stephenson's locomotive was not the first that ever attempted locomotion. Many primitive steamboats had floundered and foundered in the waters of Europe and America before Fulton's *Clermont* made its memorable maiden voyage up the Hudson. Dozens of pioneers had clicked intelligible communications over wires before Morse sent his first telegraph message—"What hath God wrought"—from Baltimore to Washington. And the history of the auto-

mobile, the airship, the submarine, of electric locomotives, wireless telephony and painless surgery, all reveal many failures previous to success. The public seeing only the successes forget the failures or suppose there were none, and conclude that nothing comparable can be accomplished in politics because they see nothing comparable accomplished. The lesson they should learn from the comparison is that the method which they see so successful in the world of material things—the engineering method—is the very one to apply to politics in order to make it successful also.

Ease of Collective Experiment. And there is not the slightest reason why it should not be applied there. Indeed, society in seeking the common ends of men has a vast advantage over the solitary inventor struggling alone with the perversities of inanimate nature. It is in an ideal position to make such mistakes as must be made on a small scale. It can experiment almost without effort. It is even better designed to increase knowledge than to increase wealth, and indeed, for that matter, it can increase wealth most rapidly by giving far more attention than it does to the increase of knowledge.

The advantage of collective over individual effort in the creation of wealth is a matter of common knowledge. By applying the principle of the division of labor—the division of function between a number of individuals and their coöperation to a common purpose—far more can be accomplished than by each individual working alone. The output per man in our great socialized industries like steel, textile and packing industries averages many times what it did under primitive individualist conditions. This method of division of function is even more advantageous in the creation of knowledge than of wealth. By superseding individual by collective effort all the ad-

vantages arising from the application of the principle to the creation of wealth are secured, and several more.

There are at least two reasons for this advantage of knowledge over wealth as a collective product.

First, in distributing knowledge among the individuals of a community the gain of one is not the loss of another, as it is in the case of wealth. If one person divides equally one hundred dollars' worth of wealth with another he is poorer by fifty dollars' worth, but if he divides a hundred dollars' worth, or any other quantity, of knowledge he is not a particle poorer in knowledge himself. He is indeed likely to be richer, for knowledge gains in clearness to him who imparts it to another.

Second, there is no such thing as the consumption of knowledge—there is nothing corresponding to the destruction of wealth by use. Wealth has to be continually renewed; it is produced only to be consumed. But any portion of knowledge once created is permanent; it does not have to be renewed; and constitutes an enduring element in the structure of human enlightenment, only to be destroyed by some cataclysm which would wipe out the records of human intellectual achievement. When a farmer by hard labor produces a bushel of wheat he has created something which will disappear by consumption within a year or so; but when an agricultural experimenter by hard, or perhaps easy, labor has discovered a method whereby two bushels of wheat may be grown by the same effort which formerly produced but one, he has created something which will endure and can be utilized by farmers for all time, and may be distributed throughout a community at trifling cost and without loss by division. He has also made it easier to create methods for producing three or four bushels of wheat with the effort formerly required to produce one.

Moreover, should a single farmer set out on the individual plan to discover a method of doubling his wheat

yield without increasing his effort he would probably make but little progress and what he did make would benefit himself alone, but should each member of a nation of a hundred million people contribute a tenth of a cent toward the solution of the problem by a set of experts, working in conjunction with a national department of agriculture, an excellent chance of solving it partially or wholly for a whole nation or world of farmers would be presented. That is, by using the individualist plan an individual by giving up many years of his life would be able to accomplish little toward the progress of such technical knowledge, and what he accomplished would benefit one family only; whereas by using the collectivist plan every individual in the nation could be benefited to a far greater extent through assigning this special work to experts working in the national interest, and it would only cost each of them the amount of life represented by withdrawing a tenth of a cent from his income. This illustrates the possibilities of the collectivist method applied to the creation of useful knowledge and this method can be applied in any field where it is possible to create knowledge. Applied to the development of discovery and invention in the field of political and industrial institutions it is capable of becoming an engine of progress of undreamed-of power.

The Coöperative Commonwealth. The ideal of any great community, preferably the world community, coöperating to any useful end has an element of inspiration in it, but the ideal of such coöperation to the end of greatest interest to humanity, to the accomplishment of the greatest possible output of happiness on earth, is the most inspiring ideal which can be presented to the practical political philosopher. This is the goal of political engineering. It is the problem set before the engineering method when it is applied to politics, and its most

successful solution will be achieved when the whole community, preferably the world community, conducts its activities just as the activities of a well organized factory are conducted, on the principle of coöperation between units of differing functions; only instead of aiming at the most efficient production of cloth or shoes or steel rails, it is the most efficient production of happiness that is aimed at; an aim which requires the application of the collectivist method as consistently to the creation of knowledge as to that of wealth.

The Human Organism a Coöperative Commonwealth. Such a coöperative commonwealth finds its counterpart in the human body. Just as the aggregate of cells constituting the body coöperate for the good of the body as a whole, so the individuals constituting the body politic should coöperate for the good of the community as a whole. And just as the various groups of cells are assigned different functions, nervous, digestive, vascular, etc., each working in harmony with all the others, so the members of the community should be divided into groups and sub-groups with specialized functions, each working in harmony with all the others for the common end. Such a concept is, to the engineer, more than an abstract analogy. It is a practical working guide. There are probably few who will not admit that the relation of individuals to the body politic should be that of cells to the body corporeal, but to make such an admission useful it must be translated into concrete terms. The important thing to determine is whether such a relation between individuals and society now actually exists, and if not what steps should be taken to attain it.

When thus translated into concrete terms this analogy is very useful in throwing light upon the relations at present obtaining in human society, and it is particularly

applicable to the general theme of this book—the issue between the private and public operation of public industries.

In the first place the analogy helps us to understand in what sense the function of individuals in society is a social one. That it is a social function follows from the fact that the object of human activity is the greatest happiness of society, an object which is defeated whenever the interest of individuals is permitted to prevail over that of society. The proper relation is found in the human body, in which the cells perform their functions solely with a view to the well-being of the cell community as a whole. Any other condition is a diseased one. And similarly in the body politic, when the interest of individuals prevails over that of society we have a diseased society. Present day society, indeed, is permeated with the disease of excessive individualism. There is nothing corresponding to it in the healthy body corporeal. Should the cells of the human body attempt to practice such individualism, seeking their own immediate ends irrespective of the effect upon the rest of the body, the result would be the death of the whole body. Only among unicellular organisms in which there is little inter-cellular organization is such individualism possible.

In the second place the analogy helps us to understand the nature of a public function. It is simply any activity affecting the interest of the public as a whole. All the cells of the human body while in health are engaged in performing public functions, functions, i.e., affecting the welfare of the body as a whole. Whether they also perform private functions we do not know. But there is certainly nothing in the body of any animal, or in any normal organization of cells to be found in nature, corresponding to capitalism; that is, to the performance of public functions as by-processes of private self-seeking.

Suppose the Principle of Capitalism Applied to the Human Organism. To make this matter clear just suppose the practice of capitalism were to be introduced into the human body. Suppose, for instance, the vascular system of the body was controlled by a set of stock-holding cells scattered through the body, and operated with the primary purpose of diverting as much of the body's nutriment as possible to these particular cells, the function of the system as a means of circulating the blood being incidental to this primary and private function—only performed, that is, as a by-process, imposed by the necessities of the situation. What kind of health would a body whose public functions were performed on this principle enjoy? How would you like to have your body operated on such a principle—the principle of capitalism? Not only the vascular, but the nervous, the digestive, the various secretive functions, etc., all operated with the primary purpose of increasing the flow of nutriment (which is the wealth of the body corporeal) to the stock-holding cells of the body, producing fatty degeneration among the capitalist, and anæmia among the non-capitalist cells. Would you accept such a method of conducting your bodily functions if it were offered you? Of course not. And yet in modern communities it is precisely on this principle that most public functions are carried on. Is it any wonder that there is perpetual trouble—that the symptoms of the chronic disease from which the body politic is suffering are everywhere evident? The wonder is rather that society is tough enough to survive. Were it as delicate as the human body it never could do it. Such a system as capitalism would kill a highly organized society. As it is, it only retards the growth of a loosely and crudely organized one—corresponding perhaps to a primitive community of protozoan cells just beginning to evolve from the unicellular condition.

Adapting Design to Working Material in Engineering. Another comparison of political with industrial engineering methods will help to throw light on the scientific treatment of political problems. The industrial engineer whether he is dealing with dead inanimate matter as in mechanics and electricity, or whether the material he has to work with is living, as in the case of agriculture and biology, or whether it is partly the one and partly the other, as in sanitation, aims to adapt his means to the characteristics of the materials he is dealing with—to take advantage of the qualities of his working substances, so designing his apparatus and procedure as to adapt them to these qualities. In so doing he must reckon with their limitations, not imposing upon any force or structure a task or a strain beyond its capacity to bear, and yet making the qualities available to him do all that is possible toward the end sought.

Thus in designing a railroad bridge the engineer uses steel girders because they possess the qualities he wants. He does not attempt to use cornstalks. And in his design he reckons to use, without abusing, all the qualities of steel adaptable to his end. He does not overlook the density, the tensile, or compressive strength, the elasticity, the expansion by heat, or any of the other pertinent characteristics of his working material but, at the peril of failure and disaster, adapts his design to them. Thus in agriculture the sensible, and therefore scientific, farmer does not attempt to fertilize his crops with salt, to feed his cows on sawdust, to use his sheep for plowing, to plant corn in swamps or water-cress on hill-tops. He adapts his procedure to the characteristics of the materials he has to work with, and, within the limits imposed by his knowledge and environment, adjusts the conditions of life to the qualities of the living beings with which he works in such a way as to secure in the best way possible the ends he is seeking.

Human Nature the Working Material of Political Engineering. Now the material with which the political engineer builds is human nature. This is his working substance. And he must reckon with its qualities as the mechanical engineer reckons with the qualities of steel, wood and cement, or the agricultural engineer with the qualities of soil, wheat, horses or cows. He must consider what qualities or properties of human nature are adapted to his end—the production of happiness—and the limitations of those qualities; and he must so design his apparatus and modes of procedure—human institutions—that these qualities will be used and not abused; that tasks or strains will not be imposed upon them that they are not fitted to bear, and yet as much accomplished by them as possible. Methods of applying such qualities of human nature as intelligence, self-interest and conservatism to useful, instead of harmful, or partially harmful ends, will be illustrated in the chapters following.

Complexity of Human Nature not an Obstacle. It may be contended that we cannot compare human nature with the working substances of applied physics because of its complexity, variability and uncertainty; and hence the analogy between machines and institutions is a misleading one. Of course, if we note only the resemblances while neglecting the differences between the two terms of an analogy we shall often be misled. But I have no intention of doing it. Complex things may be as subject to rule as simple ones. A sheep is far more complex than a brick, but it is no more impractical to count upon sheep as means of raising wool than upon bricks as means of building houses. If human nature were utterly lacking in uniformity it could not be counted upon to react in any particular way to any particular

stimulus, and no rules for its guidance could be laid down. But it is not lacking in uniformity. Even the insane who depart most from uniformity of conduct, by no means depart completely from it. The complexities of human action are usually but slight irregularities superimposed upon more deep-seated uniformities. Were it not so orderly life of any kind would be as impossible among the sane as among the insane. If the departure of human nature from uniformity were so great as to render all rules of political engineering impractical, then it would not only render all government impractical, but it would mean that starting a grocery store or a hotel or a railroad would be impractical, because men would be so variable and uncertain in action that you could never tell whether or not they would use them. Men may not act with unerring uniformity under given man-determined conditions, but then, neither does anything else. In general, the rules of political engineering will no doubt be subject to exception. But what of that? The same can be said of all other branches of engineering. An institution will not always work in just the way its designers intended. But neither will a machine. No, the general methods of adapting means to ends are the same amid complex as amid simple conditions. In either case there is nothing to do but follow the evidence. Of course, it would be very pleasant if human nature were so very simple and certain in action that a few easily discovered rules could be universally depended upon to make it work properly. But since it is not so, and since in any event those who would improve human conditions have nothing else to work with, there is nothing to do but formulate rules as nearly universal as we can, and then by degrees subject their exceptions more and more to rule. A similar procedure is necessary in all other branches of engineering. Why not in political?

Tradition no Substitute for Reason. Again it may be contended that custom and tradition are very good substitutes for political engineering; that they embody the experience of past generations and automatically adapt human institutions to human nature; and man's continued existence upon this earth may be cited as proof that tasks greater than human nature is adapted to bear have not been imposed upon it. But this contention, and it is one I have often heard made, proves the wrong conclusion. For the object of human action is not mere existence—it is happy existence—the happiest existence compatible with terrestrial conditions. The fact that man still exists on the earth merely proves that he has not so ill adapted his practices to the conditions of his life as to cause his extinction. The mole and the beetle have done as well as that. They exist also and mere existence is enough for them. But it is time man raised himself above moles and beetles; time he became dissatisfied with mere existence; time he learned what the object of existence is, and adapted the means available to its attainment. Many human institutions are wretchedly adapted to the attainment of that object, and among them the institutions of monarchy, slavery and capitalism are not the least. I have already suggested some of the reasons for this, and in the case of capitalism will later become more specific.

WHAT IS EFFICIENCY?

Man as an Adapter of Means to Ends. There is probably nothing in the field of human experience more familiar than the process of doing things or attempting to do them. Life is made up of one task after another. When we look about us and observe how sensible men go about this business of doing things, we notice that they always try to find the shortest, easiest, least risky and troublesome way of doing them. That is, in adapting means to their ends they do not take the first means which happens to occur to them. They use discrimination, and select from among the means available those which will secure the object they seek with the least effort and risk.

This faculty of effectively adapting means to ends is almost exclusively a human quality. Animals have it in a primitive form only. They are good at it only in those cases in which their ancestors were good at it also. Their operations are in the nature of inherited instinctive reactions: and as long as an animal meets those conditions alone which his instincts are designed to meet he gets along very well. In meeting all sorts of new and complex conditions, however, a higher, more complex and flexible faculty than instinct is needed, and man is the only animal which possesses it in any marked degree. This faculty is intelligence or reason, and ability to adapt means to ends depends upon its possession. Unintelligent men when they meet new conditions act much like animals. They are guided by mere habit of mind instead

of by reason, and hence are less successful in adapting means to ends.

Greatest Human Happiness a Special Case of an End. This unique power of adapting means to ends is a characteristic of human nature of peculiar value to the political engineer. It is one of his greatest assets, just as for instance the high tensile strength of steel is one of the great assets of the mechanical engineer. And just as the mechanical engineer should learn as much as possible about how to use this physical asset in accomplishing his ends, so the political engineer should learn as much as possible about how to use the great asset of human intelligence in accomplishing the end of human happiness. For the greatest possible happiness of society in this world is merely a special case of an end; it is an object to be accomplished by the proper selection of means, the same as making good griddle cakes, or raising a bumper crop of corn on the farm; and, as in the case of any other end, man's success in attaining it will depend upon how consistently and persistently he uses his reason to select the means best fitted to attain it.

Efficiency a Measure of Success in Adapting Means to Ends. Now the mental processes of science are usually no more than refinements of the mental processes of every-day life. They are more accurate, more discriminating, and more practical ways of thinking about things. And this idea of success or effectiveness in adapting means to ends has, in the engineering sciences, been refined into the idea of efficiency.

For instance, it is important for the man who is running a steam plant to get as much energy out of his coal as he can. It is possible to calculate the maximum energy which a ton of coal of given quality will yield through the agency of a boiler and steam engine. The

ratio or relation between the energy actually obtained from a ton of coal in a given steam plant to this maximum possible energy is called the efficiency of the steam plant as a whole. It is the efficiency of utilization of coal. This is, of course, only one of numberless kinds of efficiency with which engineers have to deal, but wherever met with, efficiency possesses an invariable characteristic, well illustrated by this example. It is always a ratio or relation between two magnitudes, and is actually or theoretically representable by a number, a number increasing as means are better, decreasing as they are worse, adapted to their end.

The end of the political engineer being merely a special case of an end in general, the concept of efficiency in adapting means to it is entirely applicable, and I wish to point out in this chapter how this concept may be usefully applied to our particular issue. I wish to try to present a clear, discriminating and practical way of thinking about the great task of men in directing their efforts to producing useful means and applying them to the generation of happiness. This is the more important because the prevailing methods of presentation are in many respects quite misleading, obscure and impractical, often indeed leading men away from their end instead of toward it.

And at the outset three points require particular attention, because under prevailing methods of thinking, they do not get it.

First: There is no use adapting means to the wrong end, even if it has a direct bearing on the end sought. In seeking his goal the political engineer cannot be content with side tracks or way stations. He must go through to his terminus. He cannot stop half-way and trust to chance for the rest of it. He cannot, like the political economist, for instance, point out the (commercially) best ways of producing wealth, and stop there, leaving the

question of the application of wealth to the production of happiness unattended to. If he does this, if he, like the economist, adapts his means to a proximate end only, if he mistakes a way station for his goal, he is going to fail in his quest as completely as the commercial economist fails. He will be like the miser who starves in a garret worshipping his gold, forgetting what might be accomplished by its use; he will sacrifice his end to his means; he will be so intent on attaining an intermediate point in his journey that he will fail altogether in attaining the end of it.

Second: There must be no mistaking the means to be employed. Those means are human efforts. It is human labor as measured by time and trouble, human life in terms of its duration and toilsomeness that must be expended economically—made to accomplish all that is possible. It is no mere material thing. It is not money or wealth or land or anything of that kind which is to be economized, except as economy and efficiency in the use of such things represents economy and efficiency in the use of human life and labor. These material things are not in themselves representable in terms of happiness or unhappiness. Therefore they do not enter into either term of the ratio which represents the kind of efficiency the political engineer is after—the kind that is of primary interest to society.

Third: If success is to be attained, thoroughness in political engineering is as necessary as in mechanical or civil engineering. In the one case as in the other, rule of thumb precepts cannot take the place of the scientific formulation of principles; and the principles of utility like those of mechanics must be expressed in terms, not of sentiment, but of reason. They must represent judgments, not opinions. They must express not what some one feels, or believes, but what the evidence indicates. For thousands of years men have tried to make pious

precepts take the place of a scientific system of morals. In the western world for generations such precepts have been daily impressed upon the attention of youth, in the home, in the church, and in the school. Most of these precepts are admirable, and should continue to be emphasized; but they do not themselves constitute an adequate education in morals, any more than analogous mechanical precepts, however admirable, would constitute an education in mechanical engineering. Nothing is more essential to-day than moral education, but it is not to be had by increasing the frequency of iteration of the precepts of the past. If a thousand iterations per annum have not brought the results desired, ten thousand iterations will not bring it. As adequate guides to the conduct of nations and of society these precepts have been weighed in the balance and found wanting. To take but one example in a multitude, they have proved inadequate to prevent the present war, and they are inadequate to prevent another one. To render morals as effective as engineering we must build it upon the same foundations of reason. We must learn to think about the problem of generating happiness by means of effort in the same cool, calculating and scientific spirit that we think about the generation of power by means of coal.

Efficiency of Utilization. The kind of efficiency of primary interest to society is efficiency of utilization of effort, which to save words may be called simply efficiency of utilization. It is the ratio between the happiness obtainable by human effort, and the price which humanity pays for that happiness in terms of time and trouble. It is a ratio well adapted to measure society's efficiency in the utilization of means, and it is one of the duties of the political engineer to show how it may be advantageously increased.

In order to see the whole matter clearly, however, it

is necessary to decompose this efficiency into others more concrete; to discriminate the factors of which it is made up; just as in figuring on the total efficiency of a steam plant it is necessary to decompose it, and thus discriminate between the efficiency with which the boiler makes steam, and that with which the engine uses it. In this chapter no effort will be made to carry this decomposition very far, although it is capable of indefinite decomposition, reaching finally to the kinds of efficiencies familiar to engineers to-day. All that will be attempted here will be to show the first division or two, enough to serve as a guide in certain discussions soon to follow, and to reveal certain fundamental defects in prevailing methods of thinking about these problems.

The Factors of Efficiency of Utilization. The most convenient division of efficiency of utilization is into three parts, each corresponding to a stage in the process of producing happiness through effort. While in some cases the first or third of these stages can be left out, there are in general three:

First, wealth (and other man-created means to happiness follow the same rule) must be produced. The ratio of the amount of wealth produced to the effort or labor required to produce it, represents efficiency of production.

Second, the wealth so produced must be applied to generating happiness, or to the equivalent object of preventing unhappiness. In thus applying it wealth is consumed, sometimes quickly, sometimes slowly. The ratio of the amount of happiness secured in the consumption of wealth to the amount of wealth consumed in securing it, represents efficiency of consumption.

If there were only one person in the world, or if the individuals of the human race were completely isolated from one another, each consuming what it

produced, these two kinds of efficiency would constitute the primary division of efficiency of utilization.

But the existence of society as a more or less interdependent assemblage of beings giving rise to the possibility of transfer and exchange of service (or dis-service) brings another factor into the problem. The wealth produced by the efforts of mankind can be distributed for purposes of consumption in a numberless variety of ways, and obviously the happiness produced by consumption under these varying modes of distribution will vary. Therefore a third kind of efficiency enters into the problem of utilization, of an importance equal to the first two, namely efficiency of distribution, which is the ratio of the usefulness of an actual distribution to that of the distribution of maximum usefulness.

To illustrate concretely the connection between the factors of efficiency of utilization of effort, let us compare them with similar factors of the utilization of coal.

Thus the most convenient division of efficiency of coal utilization is into three parts, each corresponding to a stage in the process of producing mechanical energy from coal. While in some cases the third of these stages can be left out, there are in general three:

First, steam must be produced. The ratio of the amount of steam produced, at the pressure required, to the coal required to produce it represents the efficiency of production of steam in the boiler.

Second, the steam so produced must be applied to generating energy in which process it is condensed, or its capacity to produce energy otherwise consumed. The ratio of the amount of energy secured in the consumption of steam to the amount of steam consumed represents the efficiency of consumption of steam in the engine.

If a given steam plant consists of only one boiler and one engine, these two kinds of efficiency constitute the primary division of efficiency of utilization of coal. But

if there are a number of boilers and engines, so that the steam may be distributed in a variety of ways among them, a third kind of efficiency enters into the problem of utilization, namely, efficiency of distribution, which is the ratio of the energy-producing capacity of an actual distribution to that of the distribution of maximum capacity.

The three ideas of efficiency of production, efficiency of consumption, and efficiency of distribution can be used in as practical and concrete a way by the political engineer to increase the happiness resulting from human effort as they are used by the mechanical engineer to increase the energy generated from coal. To permit subsequent illustration of some ways of doing this, and also to correct some prevailing misconceptions, a brief discussion of each kind of efficiency will be desirable.

Commercial Efficiency. But first it will be best to say a little something about a kind of efficiency more familiar than any yet mentioned, a kind which is commonly confused with efficiency of production.

Under capitalism most productive operations are carried on for the purpose of making money and, other things being equal, money will be made most successfully when a product of maximum money value is produced at a minimum money cost. From this ideal of money making arises the idea of what may be called commercial efficiency, namely, the ratio of the value in money of a product or service, to the cost in money of producing or procuring it. This is the kind of efficiency that we hear so much about to-day. This is what all the efficiency engineers and manufacturers are striving for.*

*They seek commercial efficiency only because it is one of the factors of acquisitive efficiency; but as the analysis of the latter is not necessary in this particular discussion, it will not be undertaken here.

At first glance it might appear that this is just what society as a whole should strive for. Surely it seems best for the community that things should be made as cheaply as possible, so that profits may be liberal and prices be low; and you will find that everywhere among business men, statesmen and economists the opinion prevails that the commercial efficiency which is such a good thing for the business man is the best possible thing for the community as a whole.

But let us pause a moment and look into the matter a little further. Unless money is the ultimate object of human effort there is likely to be a leak in the logic of commercial efficiency; for remember that whenever a means is pursued as an end the end itself is likely to be overlooked, and if money is not itself the end of human effort it is best not to be too keen in the pursuit of it, lest we get the shadow instead of the substance of life.

Productive Efficiency. Suppose in order to get a further insight into the nature of human efficiency we select an example where money does not enter. Suppose we go back once more to colonial times in America and consider the efforts of a farmer of those days to get a living for himself and family by direct coöperation with nature. These farmers' families practiced individualism in production—they produced for themselves alone (just as society, taken collectively, does), and the question of money was practically eliminated from consideration.

Suppose now that farmer Jonathan, having spent his youth in plowing with a wooden plow inherited from his grandfather, secures a fine iron affair from the village blacksmith, making payment, as was the custom in those days, in corn, cider or flax, or in the labor of himself and oxen. He is willing to pay the price because with his new plow he is able, let us say, to plow twice as much ground in a day and plow it deeper and easier than with

the old one. Thus with a less amount of labor, he is able to accomplish twice as much as before toward raising a crop. He has evidently made a gain of some kind, but can we say he has gained in efficiency? Not in commercial efficiency certainly, for no question of money is involved. What he has done, however, is to secure a greater consumptive value at a less cost in time and trouble, an increased power of supporting life and its enjoyment at a decreased expenditure of life and labor. He has thus increased the ratio of the consumptive power of his product to the labor cost of producing it, and this ratio is that to which we have assigned the name productive efficiency.

Comparison of Commercial with Productive Efficiency. There is thus a marked difference between commercial efficiency and productive efficiency. One is the ratio of a money value to a money cost; the other is the ratio of a consumptive value to a productive cost. One places a sum of money in the numerator, and another sum of money in the denominator; the other places a power to produce human happiness in the numerator, and an expenditure of human effort in the denominator. One is expressible in terms of dollars, the other in terms of life and of the well or ill condition thereof. It is obvious then that productive efficiency is more closely related to what men are really seeking, to the true end of life, than commercial efficiency; and hence it is important that statesmen, economists and the people generally should cease confusing the two.

The most important difference between the two kinds of efficiencies is that the commercial kind recognizes no difference between inanimate things and human beings as agents of production. Man is classed simply as one kind of a machine. No distinction is made between the sentient and the non-sentient factors of production.

Cheapness is sought at any cost—at the cost of the things that make life worth living if need be. Of course, if wealth or money is all we are after, commercial efficiency is all we need consider, but if we are after happiness we must turn our attention to increasing productive efficiency. The two kinds of efficiency have a relation to one another, but that should not lead us to confound them. An increase in productive efficiency can, if proper means are taken, always be reflected in an increase in commercial efficiency; but the reverse is not the case. Indeed an increase in commercial efficiency may represent an inevitable decrease in productive efficiency.

Examples of the pursuit of commercial at the cost of productive efficiency are to be met on every hand, but they are especially common where labor is cheap. This is natural, because where the human machine is to be had at a low money cost a non-human machine which will do the same work at a lower labor cost but a higher money cost is not acceptable under our system of commercialism, which regards money as more important than the only thing that money is really useful for.

In China for example there is no demand for coal loading machinery because the cost of coolies for loading the coal is less (in money, but not in labor) than the cost of operating the required machinery.

One great problem before political engineering then is to replace the ideal of commercial with that of productive efficiency; to so organize social affairs that society as a whole may have, not only the incentive which farmer Jonathan had to seek productive efficiency, but may be able to reflect any increase in that efficiency in an increase of leisure and power of consumption throughout the community, just as any improvement in farming methods gave farmer Jonathan's family not only more time to do other things than work, but more to eat and wear as well.

There is no reason why the great human family should not follow the plan practiced in the family of farmer Jonathan. In collective, as in individualist, production an increase of consumption should be made to accompany a decrease of human effort. Improved machinery and methods should replace human toil. This can be done, but the way to do it belongs to another chapter.

Productive Efficiency and Americanism. It must be admitted that productive efficiency is not a traditional American ideal. It is no part of Americanism as yet. But then, it is not the traditional ideal of any other country either. As a collective ideal it is unknown to the world. There is no reason why the United States should not be the first great nation to consciously adopt it, as she was the first to adopt democracy. Indeed, there is every reason why she should do so, since it is one of the kinds of efficiency essential to successful democracy. All capitalistic countries, it is true, have adopted the ideal of commercial efficiency, because that is a kind well adapted to serve oligarchy, industrial or political. Germany has been particularly successful in its pursuit, and well indeed has it served her oligarchs in war, as in all other branches of industry—at least temporarily. What it has done for the rest of the world is so obvious as to require no comment. But while Germany has delusions of her own, and has suffered and inflicted suffering on account of them, she has never been subject to the delusion that governments should not attempt to interfere constructively in the economic activities of nations. This is the main reason why she has so far outstripped in efficiency England and America, who are just beginning to emerge from their subjection to that disastrous theory.

In learning the lesson of efficiency, however, America must discriminate between the productive and commer-

cial varieties. Not otherwise can she apply the lesson to the service of democracy. Oligarchy is interested in productive efficiency only as a means of serving oligarchs. Hence the expression of it in the warped terms of commercialism. By the practice of a little thought and discrimination the people can turn to their own service the instrument now so successful in the service of capitalists and kings. The pursuit of productive efficiency may not be an American nor a European practice, but it is a reasonable and a useful practice, and should therefore be made characteristic of Americanism. And this statement applies as much to consumptive and distributive efficiency as it does to the productive kind.

Efficiency of Consumption. There is nothing corresponding to the idea of consumptive efficiency to be found in books treating of political economy, nor in those on scientific management, so many of which have been issued in the last few years. This is because the economist and efficiency expert, fixing their attention on wealth, have somehow got the whole problem of usefulness reversed. To them consumption is merely a means to production. That is why the efficiency engineer advises the capitalist to see that his employee is well fed and housed and made contented. It is for the same reason that he would advise him to feed and shelter his horse well and keep him contented. It is a means of making the employee work and make money faster for his employer. It is "good business" as the saying is, as good as keeping an engine well oiled and cared for. That is also why the economist emphasizes the distinction between productive and non-productive consumption—a distinction which needs great emphasis when producing wealth is the end and consuming it the means, but not otherwise.

Of course it is unfortunate that the economist has

this matter so badly turned round, but it teaches a valuable lesson. It illustrates what happens when men try to direct human effort without knowing what end it is to be directed to. Even if by some happy chance they start in the right direction they get side-tracked at some way station and stagnate there.

In political engineering, consumptive is as important as productive efficiency, just as in steam engineering it is as important to have the engine consume steam efficiently as to have the boiler produce it efficiently. For the steam engineer to stop half way, to consider only the efficiency of steam production and leave the efficiency of its consumption out of account, would be a very unreasonable proceeding, as unreasonable as the proceeding of the economist when he considers only the efficiency of wealth production, ignoring the efficiency of its consumption. It is another problem of the political engineer then to do what he can to remedy this further oversight in modern political thinking—to point out the most useful ways of consuming wealth as well as the most useful ways of producing it.

Contrast between Productive and Consumptive Efficiency. Although both productive and consumptive efficiency are essential to efficiency of utilization they are as a rule (having some exceptions) to be sought by quite distinct methods.

To produce efficiently, highly developed and complex machinery is required, and the operatives thereof, during working hours, must consult, not their own individual desires, but the necessities imposed by their coöperation with the machinery of production, mechanical and social. Production by complex machinery is necessarily socialized, and in socialized production the producer must submit himself to discipline, and become a cog in the machine.

To consume efficiently, on the contrary, the simpler the means the better, and the reasonable immediate desires of the individual must determine his acts. He must do as he likes, instead of what the loom on the lathe or the office boss likes. To be a cog in a machine would spoil the fun which is the object of consumption—for consumption aims at ends, while production aims only at means.

Efficiency then requires socialism and complexity in production, and individualism and simplicity in consumption. Socialism in consumption is as inefficient as individualism in production. And the crude and simple wooden plow of farmer Jonathan is as poor an instrument of production, as the luxurious and complex steam yacht of a modern plutocrat is an instrument of consumption.

In seeking individualism and simplicity in consumption the socialist is not doing anything required by orthodox socialism, but he is doing something required by consistency. For if socialism is to be sought because it is useful, then individualism and simplicity in consumption must be sought because they are the utilitarian supplements to socialism and complexity in production.

Relation between Consumptive Efficiency and Consumptive Rate. Having seen that it is as important to consume as to produce wealth economically let us consider a little further one of the foregoing factors of consumptive efficiency. Other things being equal, it is obviously best to produce wealth with the least effort possible: and similarly, it is best to produce happiness with the least effort possible also. The easier it is produced the more we all can have of it, and the less in time and trouble we shall have to pay for it. Hence the maximum production of happiness with the minimum consumption of wealth represents the ideal efficiency of consumption.

The higher the efficiency of consumption the more of life can be spent in producing happiness and the less in producing mere wealth, for the less we have to consume in order to be happy the less we shall have to produce. This is the philosophy of the simple life. Simple, easily satisfied tastes are the most useful. Luxurious life is inefficient life. It is wasteful of human effort. A high rate of consumption requires a high rate of production to maintain it. Luxuries of high labor cost ought never to be produced, because while they may be sources of much happiness to the few who can afford them, the same effort directed to the gratification of the simpler tastes of the many would produce a greater sum total of happiness.

Very high rates of consumption then are generally inefficient. And very low rates are inefficient also, but for a different reason. At very low rates of consumption, at rates too near the starvation or privation level, man produces unhappiness instead of happiness, and every member of the community who is consuming at such low rates is therefore a debit instead of a credit factor in the great business of producing happiness. A nation which has enough such debit factors in its population is a total failure; it is worse than no nation at all,—unless of course it redeems itself by a more than compensating contribution to the happiness of other nations or to that of posterity.

Good reasons then can be given why both high and low rates of consumption among men are inefficient; from which it follows that efficient rates are to be found only among moderate ones. Here is another practical guide to the political engineer. Institutions which affect society in such a way as to produce in any marked degree either very high or very low rates of consumption, or both, are not well adapted to attain the object of society. They are inefficient in accomplishing one of

the essential steps in producing happiness through effort. They are weak in a vital spot and require to be replaced or reconstructed; as much so as a steam plant so designed as to waste a large part of the steam which has been produced by the boilers at the cost of much time, labor, fuel and money.

Efficiency of Distribution. This brings us to the question of efficiency of distribution, and illustrates how important it is that wealth should be distributed in an efficient manner. For without proper distribution there can be no efficient consumption, and hence production, whose only ultimately useful object is consumption, is simply so much labor lost. In particular an institution which tends to distribute wealth among the community in a very uneven manner will be inefficient distributively, because it will lead to just those conditions of high rates of consumption on the one hand and low ones on the other which make for low consumptive efficiency.

Suppose for instance there were in a given steam plant a larger number of engines, and boilers with steam capacities to match, and suppose the plant were so run that the steam produced in the boilers were distributed to the engines in such a way as to give a few engines a very much greater amount of steam than they could efficiently consume, and to the great majority an amount considerably less than required for efficiency. Would it not be plain that the total efficiency of the plant would be low, and equally plain that the trouble was not necessarily either with the efficiency of production or consumption of the units involved, but with the efficiency of the method of distribution? If this method were so changed that instead of giving some too much and some too little, each engine received a moderate amount, an amount adapted to its capacity for consump-

tion, the same plant would obviously deliver a far greater output of energy per ton of coal burned.

Relation of Capitalism to Efficiency of Utilization.

Now capitalism is an institution which produces just this kind of inefficiency among the human happiness generators which constitute society, and produces it not through any accident, or because of some defect in detail, but on account of a characteristic inherent in its very nature. This result is a direct and inevitable consequence of the system of payment for ownership—a system which tends to make those who own most get most and those who own least get least, and so intensifies inequality of ownership, and hence of consumptive rate. Those who say that if wealth were equally distributed to-morrow it would in a few years be back in the same condition of inequality which prevails so conspicuously to-day, speak truly; but they are much mistaken if they think this follows from some necessity of human nature. The defect is not in human nature, but in a human institution; not in man, but only in his present way of doing certain things.

Imagine a farmer who in spreading fertilizer over his fields follows the practice of capitalistic communities in spreading wealth (when moderately applied an excellent fertilizer of happiness) over the community. Whenever he comes on the field with a fresh load of fertilizer he looks about, and noting the irregularity of distribution resulting from his former operations, proceeds to emphasize that irregularity by adding most to those parts of the field that already have most. Wherever he sees a particularly large heap he adds a particularly large fraction of his load to it, and wherever he sees a small one he makes a small addition to it, and if it is particularly scanty (which it is in most places) he scoops up some of it and adds it to the larger heaps. We

can easily predict that such a method would soon produce a tremendous and constantly increasing concentration of fertilizer in a few places and a corresponding scarcity over the bulk of the field. Any farmer who practised this method of distributing fertilizer as a means of raising grain we should perhaps set down as about as unreasonable and inefficient a farmer as could be found. And yet there is a higher degree of unreason than this. Suppose on perceiving the poor results of his efforts to distribute his fertilizer efficiently our irrational friend should be heard to comment thus:

“I’ve got plenty of fertilizer to cover this field so that no square foot of it need want enough to grow a plentiful crop and yet, confound it, most of it has too little. What can the matter be? I figure the trouble is in the nature of things. It’s simply a law of nature that some parts of a field will get more than their share and other parts less, and I might as well give it up. It’s true some claim it’s due to my method of putting the stuff on; that if instead of putting it on thickest where it was already thickest, I put it on thickest where it was thinnest before, I’d get what I’m after. But I don’t believe in such new fangled notions. My father did it this way and my grandfather did it this way, and that proves it’s the only practical way. You can’t get around the laws of nature by any such artificial devices, and inequality in the distribution of fertilizer is a law of nature.”

Now I will admit if you wanted to find a farmer who reasoned like this you would have to go a long way, simply because it is hard to find one whose father and grandfather reasoned so; but if you wanted to find an economist, or a so-called “practical man” who reasoned like this, you wouldn’t have to go very far, because you can find many whose father and grandfather reasoned so. It’s simply a matter of custom. The principle of

distribution under capitalism is that employed by the irrational and inefficient farmer—the more a man has the more he gets. If we take six per cent as an average rate of interest the man who already has \$100,000,000 invested gets \$6,000,000 a year, the man who has \$1,000,000 gets \$60,000, the man with \$1,000 gets \$60 a year, the man with \$100 gets \$6 a year, and the man with nothing gets nothing a year.

Moreover it is those who own little or nothing who by their labor, mental or physical, create the wealth which is absorbed by the owning class. Hence they are not so fortunate as merely to get nothing for owning nothing. They get less than nothing for owning nothing. As shown in the second chapter, if, on the average, they own so little as to receive less than forty per cent of their income from ownership the sum total of the process is an actual subtraction from their income, and the less they own the greater the subtraction.

A popular way of expressing this fact, so conspicuous in every day experience, is in the phrase "Them as has, gits." But there is a better expression of it than this. You will find it in the fourth chapter of Mark, the 25th verse: "He that hath to him shall be given, and he that hath not from him shall be taken even that which he hath." Applied to knowledge this is the Gospel according to Mark. Applied to wealth it is the Gospel according to Mammon; and capitalism, the creed of Mammon, so applies it, providing that he who owns to him wealth he does not produce shall be given, and he who owns not from him wealth he produces shall be taken to be given to him who owns. This is about as close as capitalism gets to Christianity.

This in fact is the inevitable result of paying a man for owning and in proportion to what he owns. Perhaps it may be thought that any one who deems such a method of wealth distribution an efficient one as a means of

producing happiness is a very unreasonable person, but there is a further degree of unreason, and that is the unreason of a person who says that because this method produces vast inequalities in wealth that no method can be devised that will not do so—who claims inequality to be an unescapable law of nature because it is unescapable under a system peculiarly well adapted to secure it. Moderate inequalities in the distribution of wealth probably will occur under the best of systems. The variations in human abilities and habits will inevitably cause them, but they are as harmless as the slight inequalities to be found in the distribution of fertilizer in a careful farmer's field. The great and injurious inequalities found in our society to-day are clearly due to the method of distribution which is followed, and can be abolished by abolishing the method and instituting one that does not make a man's income proportional to what he already possesses.

The fact is that owing to the application of modern science to production, and the partial and incidental identity between commercial and productive efficiency, the present day system of production, which includes capitalism, is the best system of production known in history, but owing to the non-application of science to distribution, and to the total lack of identity between any kind of efficiency sought by capitalism and distributive efficiency, it is the worst system of distribution known.*

* In this connection it should be emphasized that when I speak of capitalism as increasing productive efficiency I am really guilty of a verbal inaccuracy and my statements should be interpreted accordingly. I take this course, however, to avoid circumlocution. It is not capitalism—the system of payment for ownership—but the application of science, which happens to be at present associated with capitalism, that increases it. There is no necessary connection between the two systems. Capitalism is not the cause of the application of science to wealth production.

Viewed in the light of this antithesis, it contrasts strongly with the primitive conditions of colonial times. Individualism provided a wretched system of production but an admirable system of distribution. Under individualism distribution takes care of itself, each family consuming what it produces, but it cannot produce much. Under capitalism each family can produce vastly more, but it can no longer consume what it produces nor the equivalent thereof. Thus the present system, while enormously increasing efficiency of production, destroys efficiency of distribution.

Individualism is comparable to a method of crop cultivation which can apply fertilizer very evenly to the land, but spreads it too thinly and scantily to get a good crop; whereas capitalism is comparable to a method which can apply fertilizer abundantly to the land, but piles it in heaps instead of spreading it evenly. Both methods observe one of the two essential rules of cultivation, but neither observes them both, so neither is successful. A successful system of cultivation must combine the even distribution of the first method with the abundant application of the second.

Hence to solve the economic problem, to free mankind from poverty, what is wanted is a system which will combine the productive efficiency of capitalism with the distributive efficiency of individualism, a system which will apply science not alone to production but to

Almost the reverse is the case. The application of science is the cause of the present great development of capitalism. That system had existed in an undeveloped condition for ages prior to the industrial revolution of the 19th century, and science which in that century revolutionized industry incidentally caused capitalism to develop from a child to a giant. The best we can say of capitalism is that it is a system which permits of efficient application of science to the arts, and this is greatly to its credit, but it is not the only system, as evidence readily available can sufficiently indicate.

distribution. Now socialism is simply the name of an industrial plan which has this for its object, and which moreover is particularly well adapted to the attainment of its object if its details are worked out properly.

Capitalism seems to us an admirable system of production only because we compare it with the old individualistic system which was so very wretched. The stage coach similarly seemed an excellent system of transportation compared with the ox cart, but it seems very different when compared with the railroad.

To enumerate the sources of the productive inefficiency of capitalism would require a very long list, but they have been classified by Bellamy, who divided them into four categories as follows: "First, the waste by mistaken undertakings; second, the waste from the competition and mutual hostility of those engaged in industry; third, the waste by periodical gluts and crises, with the consequent interruptions of industry; fourth, the waste from idle capital and labor at all times."

I know of only two attempts which have been made to compute the waste due to capitalism in this country, by which I mean the loss of human effort which, even without any further improvement in mechanical processes, would be avoided by the substitution of socialism for capitalism in the United States. Reeve in "The Cost of Competition" figures out that the waste is about 75%. Simons in "Wasting Human Life" estimates it at about 80%. Both estimates no doubt are open to criticism. Perhaps the best we can say is that they probably represent at least the general order of magnitude of the productive inefficiency of capitalism.

Compared with a reasonable economic system, capitalism is inefficient productively, distributively and consumptively. It wastes human effort in the production of means, it distributes those means in such a way as to make impossible their effective adaptation to ends, and

it tends continually to increase man's needs instead of decreasing them. Its efficiency of utilization is therefore very low. In seeking the ideal of commercial efficiency it perverts science, and subordinates the end to the means instead of the means to the end.

Science has demonstrated that it can make the productive rate of human beings high, and if this be so it is only necessary to so manage distribution that this high rate of production is reflected in a corresponding rate of consumption, and the possibility of the abolition of poverty itself is in sight. It is the crowning indictment of the present economic system that, with science standing ready to abolish poverty among men, capitalism through its wretched inefficiency of utilization blocks the path, and dooms the majority to lives little less laborious than in the day of individualism. It denies mankind the economic liberty which science has proved its power to bestow on any people with intelligence sufficient to remove the obstacle which it interposes.

Efficiency and the Abolition of Poverty. In closing this chapter it will be well to indicate briefly the general relation of efficiency to poverty, since the abolition of poverty is the primary purpose of socialism.

Poverty is merely the name for a defective rate of consumption, and a rate of consumption is defective when it is insufficient to maintain a normal human being in a condition of happiness which reasonable management of human affairs on this earth would permit.

For the abolition of poverty in a populous community the four following conditions are necessary and sufficient:

- (1) High efficiency of production.
- (2) High efficiency of distribution.
- (3) High efficiency of consumption.

(4) Limitation of the population to a point which will allow a moderate consumptive rate without requiring an inordinate expenditure of labor to maintain it.

The first and fourth conditions will insure that an abundance of readily produced wealth will be available for consumption, the second that each individual receives his share of this abundance, the third that the individual's tastes and needs shall be such that a moderate (or preferably a low) rate of consumption shall suffice to make him happy. It is obvious that the higher the efficiencies involved the greater the poverty-free population which can be supported on a given portion of the earth's surface.

Achievement of the conditions enumerated requires the application of science not only to production but to education. The discussion of the kind and quantity of education required to secure the results aimed at, however, is beyond the scope of our discussion. It would of course need to be both technical and cultural, and should of necessity include a training of the tastes and aspirations of the people which would make their happiness depend upon things far removed from the pursuit of luxury, frivolity and ostentation. Other things being equal, the more a people's happiness depends upon a love of nature, of knowledge and of usefulness, the less will they need to fear poverty. Education as a means of preventing over-population is also necessary.

Compared to individualism, capitalism tends to the attainment of the first of the four conditions enumerated, but it is an active obstacle to the attainment of the other three. Both theoretical considerations and common observation make it plain that capitalism can never abolish poverty. Socialism tends directly to the attainment of the first and second conditions, but only indirectly and incidentally to the third and fourth. Unaccompanied by

the proper kind and degree of education, socialism will also fail to abolish poverty. High consumptive efficiency and proper restriction of population are subjects which socialists tend to ignore, but they are as essential to the abolition of poverty as high efficiencies of production and distribution.

The Adaptation of Material Means to Moral Ends. It is clear enough, not only from the foregoing brief discussion, but from every day observation of men and nations, that the unique power of man in adapting means to ends, while holding vast potentialities for good, holds equally vast potentialities for evil. It all depends upon the end to which it is directed. It can augment as much the horrors of war as the blessings of peace. It is a two-edged sword, and therefore requires the more careful handling. Directed to a wrong or a half-way end, it is a power which can make of man a more miserable species of animal than any of those who have it not. It can be used to enslave as well as to liberate. And to direct it wrongly is not only possible but easy. In fact it is continually done. Shallow, uncritical thinking can easily sidetrack men and nations and make their most laborious efforts vain. Indeed, care and foresight and painstaking thought alone can prevent it. Drift and custom are no substitutes for intelligence as guides to human action. Labor is lost if not directed aright. We cannot afford to guide our conduct by a half thought-out philosophy of life. It may save mental exertion but it will multiply physical exertion a hundredfold. It will leave us stranded at some half-way station like the pursuit of wealth, and make a mockery of life. By all means let us cultivate efficiency in individual as in collective action, but it behooves us to make sure it is not an efficiency which sacrifices the end to the means of utility.

VI

WHAT IS DEMOCRACY?

Self-Interest as a Useful Quality of Human Nature.

In previous pages I have been guilty of some reiteration in seeking to emphasize the fact that the most conspicuous examples of productive efficiency thus far developed are misdirected; that they are devoted not to promoting the happiness of the people, but to augmenting the wealth and power of capitalists and kings. The problem of misdirected effort thus presented to the political engineer requires for its solution the use of another characteristic of human nature, a characteristic thus far left, not only almost unutilized as a source of public service, but actually perverted to the uses of evil and converted into a source of public disservice. This characteristic is self-interest, a force not so useful as some that might be imagined, but capable, because of its universality and intensity, of being made one of the most potent servants of man. Much of its present ill repute is due to its widespread perversion, a result of the character of the institutions through which it has been forced to operate. Properly handled, the selfishness so prevalent in human nature is capable of becoming a veritable gold mine of utility. Indeed, were it to be abolished, and no motive of comparable power substituted for it, the political engineer would lose one of the most valuable means in his possession for making successful the pursuit of happiness. It is a great driving force, subject, like other forces of nature, to perversion, but like them capable of being harnessed in the service

of man. It is only a case of proper institutions in the one case as of proper mechanism in the other. Selfishness turned loose to operate through oligarchic institutions, political, industrial or otherwise, is like a river flood turned loose to devastate a valley which, under a proper system of flood control, it would serve as a useful highway of commerce. By means of the proper institutions self-interest can be made to serve the society it is now engaged in devastating, and America has already developed the beginnings of such institutions. The institution of democracy is nothing less than one such beginning. Let us see just why this is so.

Democracy an Institution for Utilizing Self-Interest. However inconsistently they may apply it, Americans are committed to the principle that the people should rule over their own affairs. This is the foundation stone of the American system of government. The Declaration of Independence is the declaration of this principle. Now why is it a sound principle? Is it because the people in ruling their own affairs will serve themselves worse than if some autocrat ruled their affairs for them? Is democracy designed as a means of public disservice? No, clearly not. Public service is the only legitimate object of government, as of all other institutions, and the only excuse for the people's tolerance of their own rule is that it will be more in their interest than the rule of some one else. Now, why will it be more in their interest? Simply because it is the nature of human beings to seek their own interest. Therefore, if the people rule their own affairs they will try so to direct them as to serve their own interest; whereas if some autocrat rules them he normally will so direct them as to serve himself. This is easily predictable from our knowledge of human nature, and the prediction is confirmed by all human history.

Democracy then is an expedient to make human selfishness a means of serving society, instead of making society serve the selfishness of rulers as autocracy does. This is the reason and the only reason for democracy; and seen in the light of this reason, it is clear why democracy must include the principle called by Lincoln "the principle of generality and locality," — "Whatever concerns the whole should be confided to the whole; to the General Government; while whatever concerns only the State should be left exclusively to the State."

This indeed is the reason why the affairs of any group of men should be controlled by that group only, and not by some other group whose self-interest will not impel it to serve those whose interests are concerned. Present-day democracy, it is true, is but a beginning in the harnessing of the great force of self-interest; it is only an isolated and partial application of a much broader principle of political engineering which may be expressed thus :

Institutions should be so designed that the interest of individuals will coincide with that of society.

Democracy, as we have seen, is an institution designed to conform to this principle by making the interest of rulers coincide with that of the ruled; but in its present development it meets the requirements thereof very crudely and imperfectly. Its structure is so full of defects and inconsistencies that many people doubt the soundness of the principle itself, just as they would doubt the soundness of the principle of the use of steam for generating power if the only steam plants with which they were familiar were so full of leaks and weaknesses that they operated with wretched efficiency and continually broke down when put to unusual strain. In the one case, as in the other, it is not the principle, but the details of putting it into practice which are at fault, which

details, once perfected, will reveal the working of the principle in all its possibilities of power.

Superiority of Political Democracy not Demonstrable by Citation of Examples. From these considerations it is easy to see why inferences drawn from the actual workings of the principle of democracy are not conclusive, and why at the present stage of its development, theory is even a better guide than practice. It is because the principle has never been applied in a scientific manner. If, for example, we consider the crude democracies of Haiti, or Costa Rica or Guatemala, or most of those of South America, we cannot perceive that they are any great improvement as means to human happiness over the average oligarchy like Spain or Morocco, or Turkey or Austria. In other instances such as the United States, France, Switzerland and the British Colonies we find the principle more successfully applied, and in these countries the chances are that the results are better than have been obtained even in the highest development of the principle of monarchy, such as we find in Germany. Such constitutional monarchies as Denmark, Norway, Holland and Italy can hardly be placed in either class, since they are intermediate in form. It is then difficult to come to a final decision in the attempt to judge between oligarchy and democracy by an inspection of actual examples, though it seems safe to say that when we compare the best examples of each the superiority of democracy seems clear. At any rate, there are few if any examples to be found in history in which a people, having given each principle a fair trial, have deliberately chosen oligarchy. Many instances might be cited in which free peoples have had oligarchy imposed upon them, but few, if any, in which they deliberately and consciously imposed it upon themselves.

Unsuccessful Democracy Leads to Oligarchy. But though it is probably never deliberately self-imposed, it is very commonly done inadvertently. Indeed, this is practically always the case in those so-called democracies most generally cited as examples of the failure of the principle, such as some of those in South and Central America. In other words, these are not democracies at all, in spite of the form of their government, and hence if they are failures they are failures of the oligarchic principle. For democracy cannot survive among an unintelligent people. It automatically reverts to oligarchy. A people who cannot or will not rule their own affairs will not remain unrulcd. They will be ruled by oligarchs in one guise or another. They will become the victims of despots possessed of the power if not the name of kings. In Latin America these rulers generally go by the name of presidents or generals. They correspond to what in ancient Greece were called tyrants and in the United States are called "bosses." We quite commonly hear the fear expressed that some people unfit for self-government will become subject to its sway, but no such fear is justified. A people unfit for self-government cannot maintain it. Theirs can only be a choice of oligarchies, and whether the one imposed from without, or through incapacity self-imposed, is the better cannot be decided on general theoretical grounds.

Superiority of Industrial Democracy not Demonstrable by Citation of Examples. Now what is true of the comparison between political oligarchy and democracy is true of the comparison between the industrial kinds. It is difficult to come to a final conclusion by a comparison of actual examples. And for the same reason. Examples of public ownership of public industries are usually crude and imperfect. It is easy to find defects among them. They are often characterized by great

inefficiency of operation, and if we focus our attention upon this alone we shall probably come to the conclusion that they are failures and object to the extension of the principle. This is quite generally done in this country. The only test generally applied to the operation of public industries is that of commercial efficiency. The test of productive efficiency seems never to be considered, and that of public service very seldom. This seems strange and inconsistent if we consider that public functions should be performed for public service, but it is not inconsistent if we consider that their performance is for private profit. And this latter view has, by habit, become the prevailing one in capitalistic countries.

Commercial efficiency of course is no proper test to apply to the workings of a public industry, but even when thus tested it is very doubtful whether private can prove its superiority over public operation. This whole question of course is one which can be decided only by an appeal to carefully compiled statistics. It is too huge a subject to be discussed here. Many books and reports have been published about it. Some claim to prove that private operation is cheapest, others that public operation is. As they are usually written by partisans of one side or the other they are likely to be misleading. It is easy to compare statistics which are not really comparable. It is also easy to select examples which tend to prove what it is desired to prove and disregard those which tend to prove the contrary. It is a habit of partisans to do this. Partisans of the oligarchic principle like to cite as examples of public operation the graft-ridden departments of our great cities. Partisans of the democratic principle prefer to cite, what their opponents prefer to ignore, namely the operations of our state and national governments, particularly such achievements as the building of the Panama Canal, the reclamation projects in the west, and the post-office service. In their comparison

of private operation the same method is used. As a rule the proponents of a principle cite the best examples and ignore the worst, while their opponents adopt the contrary tactics.

There is much to be learned from these comparisons but, taken alone, they do not constitute any foundation for a final conclusion so far as the public welfare is concerned. The main thing they prove is that both public and private operation is, as a rule, very inefficient, even from a commercial standpoint. They also prove that nothing conclusive can be inferred from citing existing examples of industrial democracy, any more than in the parallel case of political democracy. The operation of the municipal electric and gas plants of a city may be very bad, while the operation of the sewerage system, the water works and the highways of the same city may be very good, just as we can in Nicaragua and Mexico find inferior examples of the democratic form of political control existing on the same continent with superior examples like the United States and Canada.

Preponderance of Evidence Favors the Democratic Principle. While it would be too long a story to go into a detailed comparison of the recorded results of private as compared with public operation of public industries, there are two pieces of empirical evidence so significant and so readily verified, as to merit citation here, even though they may not be completely conclusive.

First: When the industrial machinery of the nations of the western world was put to severe strain by the great war, it was found necessary, in order to get satisfactory results, for the various governments to take over the control of one after another of the industries upon whose efficient operation the success of the war depended. Even countries like England and the United States, wedded to the theory of the superior efficiency

of private operation of industry, when confronted with the actual conditions, were forced to shelve their theory or lose the war. Railroads, telegraphs, mines, many lines of manufacture, not to speak of wages and prices in various instances, have become subject to government direction, and the process continues to spread. This direction is much more drastic (and successful) than the "regulation" of the pre-war days. It is positive, not negative. It deals with what must be done, rather than with what must not be done. It approaches much more closely the status of government ownership. The chaos, conflict, uncertainty and general ineffectiveness of capitalism could not be tolerated when it became necessary to focus the nation's efforts on a single vital object; and so a sort of substitute for socialism had to be improvised and hurriedly applied to the situation. And lo, even this hasty, half-baked substitute is giving such results that the nations, despite their theories, continue to extend it.

It is claimed in some quarters that this poor showing of capitalism is due to the abnormal conditions peculiar to war and this claim is probably in some measure justified; but it by no means explains away the observed facts, which plainly indicate that the unity in public service which renders industry so much more effective in war will render it more effective in peace, if in peace the ideal of unity in the public service is retained.

Second: What is true of experience with political, is also true of that with industrial, democracy—although we can easily point out unsatisfactory examples of its application, the fact remains that communities familiar with the results of both private and public operation of any great public industry seldom, if ever, deliberately impose private operation upon themselves, or return to it once it has been replaced by public operation. So far as the test of actual practice, as decided by the people

affected is concerned, the decision is practically unanimous that the principle of democracy, whether in the political or industrial field, is more in their interest than that of oligarchy.

But even assuming that this all but unanimous judgment is erroneous, it would not settle the matter, because the principle of industrial democracy as a means to public service has never been given any really adequate trial—certainly no such opportunity to prove its worth as capitalism has had during the century and more of its developed existence.

The Potentiality of an Undeveloped Institution a Better Test Than its Performance. It is not of so much importance, however, what the oligarchic and democratic principles applied to industry have so far done in the service of humanity as what they are capable of doing when their latent powers are developed. Capitalism and socialism should be judged on their merits in the long run, and not on superficial and removable defects. The best mechanisms, either material or social, can be so mismanaged as to appear no better than the worst. The superficial citation of actual performance in an unperfected method of doing things leads to superficial judgments, like those of the conservatives of the good old times when the railroads first appeared in the country. They were then of course crude affairs with many technical difficulties unmastered. The country stage often used to beat the steam train from one town to another, and these failures of the new method were cited by persons averse to innovation as proofs that the stage coach was, and always would be, the better mode of transportation; the railroad being all right in theory perhaps, but impractical in practice. Their judgment was based upon the observation of non-essential and removable incidents of the more modern method. He whose

judgment of industrial democracy rests on the same basis is in danger of falling into the same error.

If the critic of socialism assumes, as he usually does, that publicly operated industries will necessarily be utterly mismanaged his conclusion that the system will fail logically follows, but if the same assumption is made with regard to any other new proposal the same conclusion will follow. The mechanical engineer would not judge of a machine by some accident occurring in a test, or some mechanical difficulty which a reasonable amount of patience or ingenuity would remove; but by the soundness or unsoundness of the principles involved, and the political engineer can profit by his example. When it comes to an issue between a correct plan poorly executed, and an incorrect plan well executed, we should not reject the correct plan and worry along as well as possible with the incorrect one. We should retain the incorrect one only as a temporary make-shift, and devote ourselves to the improvement of the execution of the correct one. There is no use in taking great pains to perfect a mechanism, either mechanical or social, which is vitally defective in principle. We may accomplish a little by so doing, but the same pains taken to perfect a mechanism having the proper principle would accomplish vastly more. No amount of improvement of the stage coach could make it the equal of the railroad when perfected, and similarly no amount of improvement of capitalism can make it the equal of socialism when perfected. Industrial, like political, oligarchy is defective in principle, and though both at their best may be superior to democracy at its worst, if the two systems are both judged at their best democracy will be found immeasurably superior.

Successful Socialism Must be a Growth. Nor can we fairly require industrial democracy in its present

stage to lay down to the last detail the mode of its procedure, and the extent of its application when completely matured. As well require the builders of the earliest railroads to draw plans of modern high power locomotives, and to trace on the map the exact routes which the extended railroad system of to-day actually takes. All highly efficient mechanisms of any complexity are growths. Their design cannot be fixed once for all, but must be modified and improved by experience.

The fact is that no example of pure socialism can be cited. The present examples of publicly operated public utilities are along the lines rather of state socialism than of industrial democracy. They have not completely renounced operation for profit in favor of operation for use. Many of them seek a profit directly, thus being used as means of taxation; none of them distinguish clearly between low money cost and low labor cost, or between the sentient and non-sentient factors of production. In fact, they all seek to imitate capitalism in greater or less degree, and hence are at best poor examples of the possibilities of true socialism.

Again as to the exact extension of socialism we cannot predict. Its aim in regard to socialized production, however, is identical with that of capitalism. It would extend that mode of production as far as it could be conveniently and practically extended but it would first democratize it. The railroad has not completely abolished the stage coach. In many a remote or hilly locality the stage coach holds its own to-day. To such places it is not at present feasible to extend the more modern method; but as time goes on the relative number of these places tends to diminish. Similarly, socialism will perhaps never entirely replace capitalism, even though it is as superior to it as a method of usefully producing and distributing wealth as the railroad is to the stage coach as a method of transporting freight and passengers.

Local circumstances may reverse the conditions of superiority in the social as in the material mechanism. Socialism proposes to operate the coal mines and the steel mills of the country as public monopolies. It may not do the same thing with the push carts and the peanut stands. The extension of socialism into the domain of capitalism, like the extension of the railroad into the domain of the stage coach, must be determined by growth and experiment, and the gradual improvement of details of operation.

How Does Industrial Oligarchy Propose to Deal with the Evil it Creates? It is a well known fact that destructive criticism is much easier than constructive. And while the prospects of industrial democracy may seem disappointing when compared with perfection, they seem much brighter when compared with the only proposed alternative. Assuming we do not lapse into the anarchy of individualism again, the only alternative to socialism is capitalism—and how does capitalism propose to deal with its own weaknesses? Perhaps socialism may seem unsatisfactory when compared with perfection, but compare capitalism with perfection and see what kind of a showing it makes. For instance, how would capitalism, avoiding socialistic methods, go to work to remedy some of the following evils readily observable all about us to-day? The various evils of bargaining, including labor troubles, the productive and consumptive inefficiency of competition, the corruption of political life by the money power, the inequality of the distribution of wealth, the maladjustment of production to consumption, the evils of overpopulation and poverty.

These are by no means all the evils associated with capitalism, but they will do to begin with; and if any one will take the trouble to inquire how, under capitalism, they are ever to be remedied, he will better appreciate

the necessity for some alternative. Those who criticize socialism usually confine themselves to criticism. They focus attention upon the weakness of socialism in dealing with these evils. They ignore the tenfold greater weakness of capitalism in dealing with them. Socialism, to be sure, cannot see its way to their complete removal. Further knowledge is required to see as far as that. But capitalism cannot see its way to do anything fundamentally effective about them whatever. It cannot even make a start. This is shown by the fact that whenever any real attempt to reform these evils is made, socialistic methods of one sort or another are adopted. Consequently reform of the evils of capitalism usually takes the form of a half-baked socialism, because capitalism by its own methods is helpless. *Similia similibus curantur* does not apply to capitalism. The cure for the ills of democracy is more democracy, but no American has ever explicitly claimed that the cure for the ills of oligarchy is more oligarchy. That is why even the sturdiest among the American opponents of socialism has never openly ventured to propose more capitalism as a cure for the ills of capitalism.

What is the ideal of capitalism anyway? What does the advocate of that institution think it is trying to do? Where is it going and why? Is it going anywhere? Isn't it merely drifting? And if so where? If any ideal is discoverable it surely cannot be very inspiring. What can we expect to make of a system the essential feature of which is to take from him who serves and give to him who owns? Suppose such a system perfected, what would it be like? It is not very pleasant to think about. Such an ideal is not one to cherish, much less to realize. Were capitalists as men not superior to capitalism as an institution, its fatal defects would become obvious to the least observant. The institution is bad enough

in its imperfection, tempered as it is by humanity. Deliver us from its perfection!

Use of Engineering Methods to Render Democracy Efficient. The task immediately before the political engineer then is not so much to deal with capitalism and socialism as they at present exist, as to discover how the defects of industrial democracy may be avoided without loss of its merits, how its strong points may be retained and its weak points eliminated; in short how democracy may be combined with efficiency so that the driving force of individual self-interest may be made to serve mankind by promoting productive and consumptive efficiency throughout society as a whole, instead of serving a small class by the promotion of commercial efficiency merely. To accomplish this requires the deliberate design of institutions, which, among other things, will make the interest of the individual coincide with that of society, a design requiring to be worked out at least as carefully as the device for the same general end invented and adopted in 1789 by the fathers of this republic, which made it possible for the people to select their own rulers. The constitution builders, in devising this application of democracy, used the "Utopian" method—and no one has ever suggested a better one. In building the structure of industrial democracy the practical socialist must use the same method. In rejecting the bad he must not reject the good of the old institution. Thus he may dispense with the need of raising the question whether the present system of public operation of public industry is better than the private system by raising a new and more important question, namely, whether it is not possible to devise a system which will retain the advantages and avoid the disadvantages of both.

VII

HOW TO COMBINE DEMOCRACY WITH EFFICIENCY

A Method of Applying Socialism. In the last chapter it was shown that democracy is a special example of the application of self-interest in the service of public interest. It is an expedient for putting a premium upon rule in the interest of the public instead of in the interest of oligarchs or of an oligarchic class. It was also indicated that the somewhat disappointing results of democracy were due, not to any fault of the principle, but to its incomplete and crude application. By leaving the oligarchic principle in control of so many kinds of conduct which concern the public, modern democracies place a premium upon public disservice instead of public service.

The first step in remedying the situation is to make democracy consistent in its application by applying it to economic as well as to political conduct. But while we are about it, why not extend the application of the premium system from democracy to efficiency in the public service? To do this requires some modification of existing methods, both in political and industrial affairs. Those required in political affairs will not be here discussed; but one of several possible methods of applying a premium to efficiency in economic democracy will be proposed and tested by the rules developed in previous chapters.

The broad principles of the method are as follows :

Public ownership and operation of important industrial activities.

Fixation of wages and prices by disinterested and expert public authorities.

Annual (or semi-annual) division of the surplus in industry between producers and consumers.

It is not easy to explain how socialism will work out unless something is assumed about the method of applying it. The method here proposed is not the only method adoptable, but for the sake of definiteness I shall assume it to be the method adopted, and shall illustrate its presumable operation by answering a series of hypothetical questions about it. If the Marxian wishes to call this procedure utopianism, I am ready to acknowledge the charge. Names are not substitutes for reasons, and practical tactics cannot be rendered impractical by calling them Utopian any more than impractical tactics can be rendered practical by calling them scientific. The catechism which follows is necessarily fragmentary, the answers of course are subject to all kinds of correction, and many doubts and objections must remain unresolved, but within the limits imposed by the space allowable, the questions most commonly asked about socialism will be given at least a provisional answer.

How Will Wages be Fixed Under Socialism? One of the first questions generally asked about the program of socialism is how wages will be fixed. There are various methods, but one well adapted to the purpose is as follows :

The public department charged with this function, consisting of experts who are in possession of the proper information, fix wages provisionally according to the principle of similar wages for similar work ; subject,

preferably, to recognition of length of service as a factor. It is understood that positions will be open to those persons only who, by civil service examination or otherwise, have proved their ability to perform the duties required. If the wage fixers gauge correctly the wage required to attract qualified candidates to the various positions to be filled, this principle will suffice. If they do not, their failure will be automatically revealed by a scarcity of candidates for positions the wages of which have been fixed too low, and an excess of candidates for those the wages of which have been fixed too high. Revision of wages to keep supply and demand of labor proportional to one another will then be necessary and the work of wage fixing will consist of this periodic revision required by the actual facts of the case.

This method of wage fixing is not materially different from that employed to-day by the United States Government, except that under a properly directed socialism, labor will be kept chronically scarce so that wages near the starvation level will attract no candidates. Hence such wages will not be offered. If labor tends to become plenty it will be made artificially scarce by reducing the hours until surplus labor is absorbed. This expedient will insure work for all, on the one hand, and increased leisure for all on the other. Under socialism conditions will be the reverse of those in India and China, for example, where there are always a horde of starving wretches willing to do anything to earn a crust of bread. It will be very hard to get people to do the "dirty work," and those who do it will be paid in proportion to its unattractiveness. This will not be because employers have become benevolent or repentant and learned to love the poor laboring man, but because when a people are their own employer, they will have no more to gain by exploiting their employees than farmer Jonathan would have in enslaving himself for his own benefit. It is the

automatic operation of the wage fixing system that insures the willing but humble worker a decent wage under socialism. This will be a better insurance than the uncertain sympathy with the down-trodden which is all capitalism has to offer.

To illustrate the working of the system, imagine for a moment the official wage fixers to fix a uniform hourly wage for everybody. There being no compulsion forcing men to take particular jobs, and labor being scarce, there will be a rush for two kinds of positions: First, those in which the work is very easy to do; second, those in which it is easy to qualify. To attract labor to the other kinds of positions, then, it will be necessary to raise the wages attaching to them, so that wages will tend to be highest in two kinds of positions: First, those characterized by the difficulty or disagreeableness of the work to be done; and second, those requiring unusual preparation or ability. In other words, the high rates of wages will tend to go to those with unusual ability, perseverance and willingness to do arduous and unpleasant labor; the low rates to the poorly qualified and lazy; and the intermediate rates to the intermediate or average man. This condition of things results automatically from the system employed, and it puts the premium where it is most useful to put it.

The duties of the wage fixers then are as follows:

- (1) To fix wages provisionally.
- (2) To revise provisional wages to the extent required to keep supply and demand in adjustment.
- (3) To keep labor scarce by shortening hours when necessary.

This, of course, is only a sketch of the wage fixing system. It obviously admits of great variation, and its flexibility adapts it to meet any situation which may arise. Flexibility in the mechanism of a social system is very important, particularly of a new social system.

In this, as in so many other respects, social are similar to mechanical systems.

How Will Prices be Fixed Under Socialism? The theory of wage fixation under a system of free labor, rendered scarce, artificially if necessary, is fairly clear, so that the main principles as laid down in the preceding section will probably not require a great deal of modification by experiment. The theory of price fixation is not so clear, and therefore more experiment will be required to make its practice satisfactory. However, under the system here proposed the following principles would seem to be sound:

Prices must be fixed: (1) By disinterested officials (perhaps the same that fix wages). (2) Sufficiently high so that the surplus going to the operatives will normally amount to a material fraction of their total annual compensation. (3) On definite principles to be formulated after the required knowledge is acquired by experiment.

A brief discussion will make the object of these principles clear.

First: Fixation of prices, as of wages, by disinterested parties is necessary to avoid the evils of bargaining. These evils, common to mature and immature capitalism, have already been touched upon. Disinterested fixation of prices is as necessary in an orderly community as disinterested settlement of other matters likely to cause dispute. To-day disputes about the boundary of property in land or the ownership of a house or a cow are settled by a disinterested judge or jury. Wages and prices should be settled in a manner no less disinterested, and for the same reason. Only they should be fixed to forestall any possibility of a dispute instead of waiting for it to arise. Under a completely coöperative commonwealth there is reason to believe a plan can be de-

veloped for abolishing altogether the divergence of interest between producer and consumer. In the less matured stages of socialism the identification of interest cannot be made complete. Therefore we must do the next best thing. We must make the identification complete where we can, and where we cannot, we must put the power to decide in the hands of disinterested parties because it is the best alternative left. This is the policy of socialism in its unperfected condition, before a method of complete identification of interest can be worked out experimentally.

By the fixation of wages and prices by disinterested experts, those who manage industry will be able to devote their undivided attention to achieving the highest productive efficiency. All fiscal matters being taken out of their hands, they will have no interest in commercial efficiency, and hence no dispute about wages can arise between them and the worker, and no dispute about prices between them and the consumer. This separation of the function of management of production from management of finance is essential to efficiency in production. The fact that it cannot be effected under capitalism is one of the main causes of the inefficiency of that system.

Second: The surplus going to the producer should be sufficient to stimulate him to activity in the effort to increase productive efficiency both for his own benefit and that of the consumer. The amount of the surplus cannot be determined accurately beforehand, but it will in any event depend upon the productive efficiency of the workers, and prices should be so fixed that the maximum encouragement be given them to increase that efficiency. If prices are fixed too low the workers will be discouraged by the poor prospect of making their share of the surplus a material addition to their wages. If fixed too high the increment of the total surplus due to their

efforts will be too small to interest them as much as desirable. Experiment is required to settle the best compromise between these tendencies.

Third: Definite principles of price fixation must be worked out in order to avoid making the decision arbitrary. The trouble with the present methods of arbitration in labor disputes is that they are arbitrary. They depend upon the influence which the contending parties can exert rather than upon the force of any definite principles involved. In fact, there are no recognized principles. The decision turns on what the judges think is "fair." It is generally a compromise between forces instead of an application of any rule of right. What is sought is not the most just decision, but the decision which will most promptly settle the dispute. Consequently one dispute is hardly settled before another arises, and there is no end to the process.

But when definite principles are laid down, disputes are forestalled. If the price-fixers are required by law, for instance, to fix prices which will presumably produce a surplus of say 40% of the total wages or 30% of the total receipts for the year, or some other definite rule or set of rules is prescribed, then the decision will turn on the force of fact and evidence, and not on the force of political, economic, personal or financial "pull" or other kinds of "influence." In short, socialism will place questions of wages, prices and all similar matters on the same basis that our forefathers placed all questions of political power. It will not leave them to the play of arbitrary forces, but will make them matters of law; just as the constitution does not leave political office and political functions to the arbitrary caprice of a king but makes them matters of constitutionality. The abolition of arbitrary decisions is as essential in economic as in political affairs if we are to be successful in achiev-

ing the ideal of the fathers of the republic to establish a "government of laws and not of men."

How Will the Surplus of Industry be Divided Under Socialism? The problem of the division of the surplus, like that of price-fixing, is a technical one, and can only be touched upon briefly here. Experiment is required to work it out. The division between producer and consumer can be equal, or it may be in some other proportion found to be more satisfactory. The division among the several producers should probably be in proportion to the wage received, and among the several consumers in proportion to the purchases made. A coupon system for supplying consumers with receipts for purchases is easily devised. These can be cashed at the end of the year.

The objection is sometimes made that the consumer is not entitled to a share in the surplus because his efforts have not been instrumental in creating it. The answer is that if the principle is right then he is entitled to it anyway, because the public is entitled to the benefit of any principle that is right. If the retention of the entire surplus by the producer is a better way of conducting industry than to divide it up with the consumer, then it should be adopted. A critical series of experiments would tell whether it was or not. Such experiments should be tried, and the community govern itself according to the results secured. It is quite likely that in the more mature stages of socialism this expedient would be found satisfactory, but much less so in the earlier stages.

Another objection is that to fix prices so high as to make a surplus possible is a hardship to the consumer, since it makes him pay more than the actual cost. The answer to this is that, as a general thing, people will gain as much in their capacity as producers as they will lose in their capacity as consumers by this system—

indeed they will gain much more. For all increase in productivity which this method of compensation promotes is bound to accrue to the people in one capacity or the other—every bit of it—since there is no capitalist class to absorb any of it. Hence there is nowhere else for it to go.

The objects of dividing the surplus between producer and consumer are two: (1) To provide incentive to the producer to increase his productive efficiency, and (2) to identify the interests of producer and consumer by making the latter a sharer in the benefits of increase. In other words, it is a device to insure, so far as possible under a system of collective production, the same relation between producer and consumer that obtains under the individualist system of farmer Jonathan, where producer and consumer are the same person or belong to the same family. Theoretically it should insure such a relation, and until actual practice refutes the theory, we are entitled to regard it as sound. If practice should refute it then the claims of the economists about the incentive furnished by profit are refuted likewise, for the system here proposed provides the same kind of incentive, only it directs it to public instead of to private service.

How Will Deficits be Avoided Under Socialism?

In the last section it was noted that the existence of a surplus in industry is, by some persons, accounted an objection. Other persons—or perhaps the same ones—are likely to account a deficit an objection also. It is rather hard to guess a year beforehand exactly how a given industry is coming out as respects income and outgo. Hence to avoid either a surplus or a deficit would be, to say the least, difficult.

Nevertheless, many people are much concerned about deficits in government operation, particularly in the post

office. They seem to think it necessarily implies a public loss of some kind. There is no such necessary implication. Deficits in public service are made up from the public treasury and are paid out of taxes. The taxpayer pays them, but whether he is a loser thereby depends upon whether or not he gets his money's worth. The payment for public service out of taxes is not necessarily a loss. If it were, payment for public streets, schools, etc., would be a total loss, for it is all deficit. It is all paid out of taxes. If the deficit in a public service, which, like the post office, charges the individual consumer of service, can be traced to some inefficiency, then indeed there is a loss to the community; but it is the inefficiency, not the deficit, which constitutes the loss and should bear the criticism. Indeed, the loss would be the same if it did not cause any deficit at all, just as any waste of labor in a community is a loss to it.

If on the other hand the deficit is not caused by any inefficiency it merely means that the consumers of service receive more service than they pay for. And surely they cannot complain about that. If the consumers of service of the post office, which means the people in general, are dissatisfied because they are likely to receive more than they pay for, they ought to be very well satisfied with our great monopolies, like the Standard Oil Company, which are careful to insure them against any such calamity. There are no deficits in the operation of great monopolies. The consumer is required to provide against that. The man who complains because the post office does not charge enough to provide against an occasional deficit ought not to complain of the methods of the trusts. It is a mistake they never make.

But, although a deficit is not *per se* an evidence of loss, it may be a source of inconvenience, and in industries

conducted according to the premium system of socialism it would be. The method of fixing prices would, in all but the rarest cases, provide against deficits, but occasionally, from some unforeseen circumstance, a deficit might occur in an industry, and in order to keep the system running smoothly means of preventing it should be devised.

A device which would seem to accomplish the result desired is that of deficit insurance, which would insure an industry against all unavoidable causes of deficit instead of against specific causes only. Such an expedient could not be applied to capitalism because it would give the capitalist both the incentive and the opportunity to create artificial deficits for purposes of profit, on the same principle that certain persons burn down property which is over-insured. But under the premium system of socialism the entire operating force would have the same motives to avoid deficits that the ordinary house owner has to avoid setting his house on fire, and hence deficit insurance could be applied. Of course, precautions in its application would be required, just as with other kinds of insurance. For instance, there should be only a temporary insurance against deficits arising from a falling off in the demand for the products of an industry, and there would be no need of any other, since the fall in wages in such understimulated industries would automatically transfer a suitable portion of the operating force to overstimulated industries where overtime work would tend to prevail, and where wages would be high. These matters, however, are details and rather technical for discussion here. It is safe to say that socialism can avoid deficits in industry whenever it is necessary or desirable. They need constitute the least of its worries. It is efficiency deficits, not money deficits, which menace the welfare of a community.

How Will Socialism Deal with the Lazy and Incompetent? Another matter that gives people concern is how socialism will deal with the incompetent and the willfully lazy.

The redeemably incompetent will be redeemed by suitable vocational training open on equal terms to all. The irredeemably incompetent will have to be maintained at the expense of the community in one way or another, just as they are to-day. Probably the best way is to maintain them at public rather than private expense. Such a policy, like that of insurance, distributes the burden and increases the security of the individual.

The willfully lazy will either work or starve. They will not be able, by choosing the proper parents, to avoid doing either as they can under capitalism. Under socialism each person, competent to do so, will have to do his share of the work that must be done. He cannot live merely by owning something. If he does not care to consume much he will not be called upon to produce much; but in order to live he must consume something, and socialism does not propose to permit any able-bodied adult to "eat the bread that some one else has toiled and worked to produce." If necessary, a work-house system can be installed to take care of those who wish to sponge on society. The work there will be of a character to enhance the attractiveness of other jobs. It will therefore tend automatically to empty itself into other places of employment. Under socialism the idle poor will not tramp the railway-track, nor the idle rich the golf-course, as they do under capitalism. The plans do not call for it, and there is no reason why they should not be carried out.

How Will Socialism Insure the Thrift Necessary for the Accumulation of Capital? As pointed out on page 63, there are two ways at present in vogue for per-

forming public functions. The democratic way—let the public attend to its own business, and the undemocratic way—“Let George do it.” The provision of the capital necessary for the operation of public industry is a public function, and socialism takes the democratic, as capitalism takes the undemocratic, way of performing it.

Under socialism, therefore, capital for the operation of public functions will be raised, as it generally is by the government to-day, by taxation. The provision of capital to be used for the service of the public is the public's business; so the public will attend to it. Capital will not be borrowed to be paid back with interest unless some emergency not easily foreseeable makes it necessary. Interest is payment for ownership, and any enterprise, peaceable or warlike, financed by interest-bearing bonds, pays tribute to a non-essential factor of production. When money for public purposes is raised by taxation the public pays for what it gets and no more. When money is raised by bond issues the public pays for more than it gets. If the bonds bear interest, say at 4%, and mature in twenty-five years, it pays just twice as much for what it gets as it needs to pay.

The people in order to raise the capital required under socialism will, of course, need to practice the thrift necessary to pay for it, but they will not need to practice the thrift necessary to pay for it two or three times over, as they do under capitalism. They will have to pay for the capital, but not for the capitalist, which means that they will have to pay those engaged in producing capital, but not those engaged merely in owning it. Thus they will provide themselves with capital, but not some one else with interest.

The relation of thrift to the production of wealth is worth a little extended discussion, because the modern tendency to confound the function of capital with that of the capitalist tends to confuse the subject.

Wealth may conveniently be divided into two classes—that furnished by nature, which is called land, and includes natural forces and raw materials in general—and that created by man. Man-created wealth may be again divided into two classes. First, that which is consumed directly, in other words, devoted immediately to human uses, such as food, clothing, dwelling houses, furniture, etc., called consumable goods. And second, that which is used indirectly, in other words, is devoted to the production of other wealth, such as plows, locomotives, looms, and machinery in general. Also factories and the unfinished goods they work upon. Indeed all useful man-created wealth not suitable for consumption. This is called capital. Sometimes consumable goods devoted to the uses of man in his capacity as a worker or machine are also called capital, but there is no need of entering into these refinements.

With the above broad distinction between consumable goods and capital in mind the relation of thrift to the production of wealth may be easily illustrated.

Suppose two old-time farmers, A and B, start in the fall to thresh their crop of wheat. Suppose A goes immediately to his barn, places the cut wheat stalks on the floor and begins to tread out the grain with his feet, as was the fashion in Bible times. B, on the other hand, instead of going directly to the barn, goes to the woods, cuts a couple of hickory saplings, makes one into a staff, the other into a club, binds them together with a leather thong, and thus fashions himself a flail. He then proceeds to the barn, and instead of treading out the wheat with his feet, he uses his flail to thresh it. Both A and B seek the same end—the separation of the wheat grains from the rest of the plant, but in achieving it, B has used thrift, while A has not. B has made preparation, while A has not. B has provided himself with capital in the form of a flail, while A has worked without capital.

What is the consequence? If we assume that it took B all the morning to make his flail, it is clear that by noon time A has threshed quite a little wheat while B has threshed none because he has been working on his flail. Hence at noon A is ahead of B. But in the afternoon B, by the use of his improved means of threshing, is able to gain rapidly on A, and by the second day of threshing will be well ahead of him. A, by not bothering to make a flail, has got ahead of B in the short run, but B, by postponing his threshing operations until he could get capital to help him, gets ahead of A in the long run. He has denied himself consumable goods (wheat) for the time being, it is true, but in the long run he will get his wheat threshed quicker and easier by this process of thrift than if he rushed into his threshing without any preparation.

This is the function of thrift as a means of procuring capital wherever it is exercised. The principle applies to the building of a factory or a railroad in just the way it applies to the building of a flail. It is a process of postponing the immediate procuring of consumable goods in order to get them easier, or in greater quantity, at a later time. The postponement is longer, the number of persons involved is greater, and the scale of production is vaster in the case of the shoe factory or the steamship than it is in the case of the flail, but the principle is the same. The community which exercises thrift in keeping itself well supplied with capital will, in the long run, be better supplied with consumable goods than the one which fails to exercise it.

Now the provision of capital for public purposes is a collective and not an individual function. Therefore, under a democratic system, collective thrift must be substituted for individual thrift in providing it. Thrift is necessary to the provision of capital merely because it takes labor to produce capital. Hence the community

instead of devoting all of its labor to producing consumable goods directly must divert a part of it to the production of capital, and this diversion of its labor is thrift. If there were no compensation for it, there would ensue an actual diminution of its possible rate of consumption. But consumable goods are produced more easily and quickly by the help of capital than without it. So in the long run the easiest way for the public, as for an individual, to produce consumable goods is to divert a portion of its labor to the production of the capital used to produce them—to divide its labor between direct and indirect production of the goods it wants to consume. In this way it will be able finally to consume more by immediately consuming less. It will be able to avoid the necessity for less thrift in the future by practicing more of it in the present. By the pursuit of this policy collectively, instead of individually, the community saves all interest, profit and other payment for ownership charges, and yet provides all the capital it needs. Thus it will practice thrift, but not the pinching thrift imposed by capitalism.

How Will Socialism Avoid the Perversion of Property? Wherever it is applied socialism vests the ownership of property in those who use it, both productive and consumptive use being considered. By thus rendering property conjunctive, payment for ownership is abolished. Democracy is reintroduced into the institution of property and its perversion rectified. Disjunctive property would practically disappear under maturely developed socialism except where too unimportant to be bothered with.

There is probably at least one exception to this rule, however. I refer to the development of new processes and inventions in general. The public authorities should labor in this field and under a properly designed system

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of socialism will surely do so. But they should not discourage private efforts. If any man, or group of men, independent of government support, can develop new and useful methods of doing things, by all means let them do so. Only, by the time their enterprise reaches the stage of a public industry its operation should be assumed by the community, at a liberal compensation, and those who developed the beneficent innovation cordially invited to repeat their performance.

There is a proposed institution often confused with socialism which should be mentioned at this point. It resembles socialism in some respects, but its resemblance to capitalism is greater, because it retains the principle of disjunctive property. I refer to what is commonly called syndicalism, which proposes to place each industry under control, amounting to ownership, of those who operate it. This expedient does not conjoin ownership and use but only ownership and operation. It confuses the operator of a means of production with the user of it, and hence fails to democratize property. The distinction between the user and operator of capital is pointed out in Chapter II. He who ignores it does not understand the complexity of the defects of capitalism. Syndicalism recognizes only one aspect of the evil of capitalism, the so-called class-conflict or labor problem. Hence it only proposes to patch the system instead of eliminating it. Syndicalism is only one form of capitalism and gives little promise of material improvement over present conditions. It only substitutes one set of capitalists for another. To get results we require an abolition, not an exchange, of oligarchies. It may very well prove wise under socialism to vest much of the internal management of an industry in the operating force thereof; but the power thus vested in the operators must be a delegated and not a sovereign power if democracy is to prevail. The people must be the only

sovereign. It is useless to abolish a conflict of classes only to replace it by a conflict of sovereignties.

How Will Socialism Solve the Labor and "Trust" Problems? By the labor problem is meant the series of evils which, under capitalism, arise from the conflict of interest between employer and employee, and by the trust problem the evils which arise from the conflict between producer and consumer. To him who understands capitalism these two symptoms are seen to be due to the same disease, and socialism solves them both by the same remedy. It abolishes the capitalist, and as nearly as the limitations imposed by the principle of division of function permit, makes employer and employee, producer and consumer, the same; and thus identifies their interests.

It is important that the method by which socialism proposes to avoid the conflicts of interest which are so obvious in industrial society to-day, should be thoroughly understood. Therefore, I will recall to your attention the bearing of previous discussions on this question. In Chapter II it was pointed out that capitalism developed from individualism through three stages: 1st, division of function, 2nd, bargaining, and 3rd, payment for ownership. The last two stages grew out of the first one and are the causes of modern industrial conflict. Now socialism proposes to retain the first stage but take steps to prevent its development into the second and third stages. The change from individualism which it proposes to compass may be compared to the change of a unicellular into a multicellular organism.

In a single-celled organism, as in farmer Jonathan's family, all functions necessary to life are performed by the same unit, the family corresponding to the cell; but in an organism composed of many cells, such as the human body, there is a division of function, some cells

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performing nervous functions, others digestive, others reproductive, etc. This corresponds to modern society with its diverse division of function among the various individuals and families. But recall this, please: No cell of the human body practices bargaining or receives payment for ownership. The body performs its functions not according to the capitalist, but according to the socialist plan. It is a coöperative commonwealth of cells and bears to the unicellular organism the same relation that the coöperative commonwealth of socialism bears to the miniature coöperative commonwealth typified by the family of farmer Jonathan.

Now it is important to prevent active conflict of interest arising out of the division of function in a community, but it is also important to retain the active identity of interest characteristic of individualism. What I mean is this: Every time farmer Jonathan puts in a stroke for himself as a producer he puts in a stroke for the consumer. He cannot help it, because he is consumer as well as producer. Now how shall we retain this active identity of interest under socialism where producer and consumer, owing to division of function, are not the same person or within the same family? One expedient for doing this is illustrated by the third feature of the premium system of socialism (page 144)¹—the division of the surplus of industry between producer and consumer. The larger the surplus is, the better for the producer—and the better for the consumer also. Hence every time the producer puts in a stroke which improves efficiency, saves waste, or otherwise tends to increase this surplus, he puts in a stroke for himself, and a stroke for the consumer also; just as farmer Jonathan does when he works for himself alone. To benefit both producer and consumer by improvements in the means and efficiency of production there should be a simultaneous increase of income to the one and

decrease of outgo to the other. This result is secured by the proposed premium system, which automatically causes prices to fall as wages rise.

Briefly, this is the method by which socialism proposes to solve the labor and trust problems. If a better solution is available, what is it? How for instance does capitalism propose to solve them?

How Will Socialism Promote Productive Efficiency?

The problem of promoting the productive efficiency of society is a vast and technical one. Only a suggestion of general methods can be touched upon here.

The first essential for avoiding the productive inefficiency of capitalism is to substitute plan for planlessness and coöperation for competition throughout the field of industry. By causing men to pull together instead of apart, by systematizing the work of society, converting its productive forces from an industrial mob into an industrial army and applying to the wealth-producing system as a whole the scientific coöperative methods practiced in a well managed factory of to-day, the product per capita is capable of being augmented in a degree unimagined by those who have not studied the subject. Some beginnings in this direction have been made by our giant corporations, but as is inevitable under capitalism, they are largely perverted to harmful ends. In a bungling way government operations are groping toward the light also, but are handicapped, not only by the precedents of capitalism which are followed wherever they well can be, but by two peculiar disadvantages which would be absent under socialism.

First, they are the victims of the corrupt politics characteristic of countries dominated by capitalism. They are particularly hampered by legislatures, which are notorious for their subservience to the money power. The opposition of these bodies far more than the ineffi-

ciency of administrators is responsible for the disappointing results of public operation. Our law makers are pledged to capitalism. They support it both from interest and training. How then can they be expected to exert themselves to prove the efficacy of an opposing principle? It is well known, for instance, that the express companies of this country prevented for many years the adoption of the national parcels post, thereby imposing an enormous tax upon the people. They did this through Congress, and similar influences are at present seeking to prevent further beneficent extensions of the same service. This crippling of the public service where it is to the profit of private interests to cripple it is characteristic of the conduct of legislatures when public opinion is not strong or alert enough to change the usual situation. Public operation is not generally resorted to until private operation has become so tangled as to be objectionable even to the owners of the wrecked properties. Then things move quickly, because public operation then means government salvage of private property. It is all a part of the baneful effect of oligarchy in contact with democracy. Our notorious political corruption is merely a reflection of the capitalistic ideal pursued in industry. It is business applied to politics.

Second, they are mere fragments of coöperation floating in the midst of a chaos of competition instead of organic parts of a coöperative commonwealth, and so cannot attain the efficiency they would assume in a consistent system. Consider a single illustration of this aspect of the matter. Suppose the post office were used only for conveying printed matter, the carriage of all other mail and express matter being left in private hands. How much do you suppose it would cost to convey printed matter under these circumstances, the entire revenue of the postal service being derived from

the carriage of such matter alone? How well could you judge of the real possibilities of a postal system from observation of such a fragment? The rates would necessarily be many times those now prevailing, and shallow critics would cite this fact as an example of the inefficiency of public service. Now the present postal service is the same kind of a fragment of a far more extensive system of which it should be an integral part, and under socialism would be. Not only could express, telephone, telegraph, insurance and banking operations be included in the postal service, as is done with great success in such countries as New Zealand, but it could be expanded into an instrumentality for carrying on practically all distributive functions of the country, co-operating through publicly owned railroads with national productive agencies in the service of the public. And in such an expansion it would make the same sort of gain in efficiency which would be made by expanding it from an agency for the conveyance of printed matter into a complete mail-carrying agency. In other words to make coöperation efficient it must be made consistent, and it will be most efficient when complete.

Another great advantage of centralized control of industry is the ability to adapt production to consumption and thus avoid overproduction and the consequent "gluts and crises" mentioned by Bellamy. In the saving of transportation, bookkeeping, collecting, advertising, dickering, litigation, etc., etc., incident to competitive private operation there is opportunity to cut the cost of goods and service very materially. The whole chaotic system of getting products from a mob of competing producers through a mob of competing middlemen to a mob of bewildered and bamboozled consumers would give place to a system as direct and efficient as that by which postage stamps are distributed. It probably costs on the average fully half as much to sell goods in this

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country as to produce them. Centralized and coöperative distribution would avoid the wastefulness implied in such a high cost of selling.

The restriction of productive powers due to trade secretiveness and patent monopoly would disappear under socialism. These practices constitute a tremendous tax upon human ingenuity. They cause inventors to waste perhaps three-quarters of their time, either working out methods already worked out unknown to them, or seeking to get around patents, not from technical but from legal necessity. In place of this planless and wasteful system, socialism would institute a nation- or world-wide system of coöperating laboratories and experiment stations, conducted by expert specialists whose sole function would be to devise improvements in the productive arts. Their ingenuity would be stimulated by bonuses, and the advances in knowledge made by one would be at the service of all. No secret or monopoly restrictions would be allowed to put one industry at a disadvantage for the benefit of another, as under capitalism. The technical knowledge of the world would be unhobbled, and a discovery or method of procedure made once would not need to be made again. Here is another source of untapped productive power whose magnitude is unimagined by any save those familiar with the present appalling waste of technical effort.

Perhaps no criticism of socialism is so common as that directed to its alleged failure to provide "incentive" for efficiency in the production of wealth. Yet where under capitalism can be found a system of incentive to be compared with the premium system, whereby every operative in an industrial establishment from director to lumper is given a personal financial incentive to increase his efficiency and that of his fellows to the utmost, and whereby the interests of manager and operative are rendered identical with one another, and with those of the

consumer, so that all pull together? The incentive which stimulates the private business man working for his own exclusive profit, the incentive so lauded by economists, is here applied to every operative in industry and directed to public service.

The nearest approach to the premium system of socialism to be found in private industry is profit-sharing, which seeks to apply the same principle. But when so much of the product of labor must be diverted to payment for ownership the principle cannot be consistently applied. The worker's share is usually too small to compensate for low wages, and the consumer seldom receives any share at all. Capitalism puts the capitalist in such an antagonistic position with respect to both producer and consumer that even such a good principle as that of profit-sharing is spoiled in application, since before the capitalist can share his profit either with producer or consumer he has got to extract it from them. Thus the sharer becomes a sharee.

Consider also the vast waste in strikes and other labor disturbances under capitalism. All this will be saved under socialism. A self-employing people will not strike against themselves any more than farmer Jonathan strikes against himself. When wages and prices are determined, and the whole management of industry is conducted, on a non-arbitrary basis, by the people themselves, through those to whom they have delegated power, labor disturbances will cease. The worker will not need to struggle against an oppressor, because he certainly will not try to oppress himself, and there is no one else to oppress him.

Besides the general premium system of socialism, individual or group bonus systems, such as those used by efficiency engineers, can be employed to stimulate incentive; and as the interest of all persons in an establishment is the same, no such opposition to the introduction of

scientific management would be encountered as under capitalism. In short, there is not a single method of increasing productive efficiency to be found in the present system which cannot be applied to socialism, usually with far greater effectiveness; while there are several expedients for increasing it which socialism can employ and capitalism cannot. Moreover, even those which capitalism employs as incidents in its zeal for commercial efficiency are applied primarily to the increase of private profit, whereas those employed by socialism are applied exclusively to public service. This is a point worth remembering when comparing the two systems.

The present war has taught the public much about the relation of profiteering to public interest. Profiteering is universally recognized as wrong in war time. But it is only wrong in war because it is opposed to the public interest. Well, it is as much opposed to the public interest in peace. Therefore if it is wrong in war it is wrong in peace. Profiteering is only another name for capitalism in action. It is a normal product of the disjunctive property relation. It has no necessary relation to the application of science to production despite the efforts of many economists to confound the two principles. Socialism will eliminate the one principle while retaining the other, thus preserving the advantages of the present system of production while discarding its disadvantages.

How Will Socialism Promote Distributive Efficiency? Socialism will avoid the distributive inefficiency of capitalism by abolishing the disjunctive form of property which causes it, and retaining the conjunctive form which does not cause it. As shown in Chapter V, when men are paid in proportion to what they own, wealth soon becomes concentrated in a few hands, and the tendency to consume either at too high or too low a

rate for efficiency continually increases. Riches and poverty make equal progress. But when men are paid in proportion to what they do, the only departure from equality of income is that required to supply the demand for those who do the difficult work of society—difficult either from its arduousness or from the thought and application required to perform it. Such a departure will be but moderate. Moreover, high incomes under socialism will represent large service to society. Under capitalism they usually represent a large investment only. In many cases they represent actual disservice, and are proportional to it. In other cases, to be sure, they represent service, but under capitalism there is no necessary connection between service and income, whereas under socialism there is. The distribution of wealth under socialism clearly tends toward equality and hence toward that moderate rate of consumption which leads to high efficiency. (See page 118.) Instead of a system tending constantly to a condition of extreme wealth accompanied by extreme poverty, as under capitalism, socialism will tend to a condition where there are no very rich and no very poor, but where practically the whole population will have enough, and be secure in it. Only the willfully lazy, incompetent or extravagant need suffer from poverty under socialism.

How Will Socialism Promote Consumptive Efficiency? As noted on page 128 the subject of consumptive efficiency is usually neglected by socialists as by most others. It is, however, as worthy of attention as productive efficiency. Indeed the relation of productive efficiency to utility cannot be grasped without some attention to it, because it is as important to use wealth efficiently after it has been produced as to produce it efficiently. How then will socialism tend to promote its efficient use?

In the first place, by making impossible the amassing of excessive fortunes, socialism will render impossible the indulgence in excessive luxury. This will increase consumptive efficiency. But further results will follow. Under present conditions the bad example of the rich is a greater evil than their indulgence, because it spreads inefficiency so widely. The effort to imitate or keep pace with the idle rich is infectious and demoralizes even the poor. It breeds luxurious habits, not only among those who can afford them, but among those who cannot. Obviously this has a very depressing effect on consumptive efficiency throughout the community.

Socialism would in very large measure remove this evil, because not only would it make excessive luxury impossible, but it would remove from luxury and opportunity for idleness the respectability which it so conspicuously enjoys to-day. This would be an effective means of discouragement, for nothing is more generally prized than respectability. The ambition set before every youth in the nation to-day is to accumulate wealth in such a manner as to be able to live on the income from it, and thus be supported in idleness if he wants to be. Those who most successfully attain this goal are most honored and respected under capitalism. For this ambition socialism would substitute public service as a goal, and those who most successfully served the public would be most honored and respected. Thus would luxury and the love of luxury be discouraged.

In the second place the same expedient which eliminates the evil of luxury eliminates that of its counterpart, squalor. This has been emphasized in previous pages and needs no further comment.

To attain really high efficiency of consumption a deliberate system of education, beginning very early in life, is essential. The methods of such a system cannot be specified, because they are as yet undeveloped. But the

objects are plain. The qualities to be cultivated are simplicity and variety of taste, scantiness of need, and the power to easily adjust desires to the available means of gratifying them. For happiness can be secured more cheaply if wants can be easily adapted to circumstances, than if circumstances must always be adapted to wants. If a man can be so trained that he can get a steady supply of happiness by merely walking in a pasture, as Thoreau could, it is clear that he will be a more efficient agent in securing it than if his happiness depends upon eating rich food, riding in expensive motor cars and wearing jewels. The development both of simplicity and luxury in taste is principally a matter of education, and the usefulness of the reasonable system of production which socialism proposes can be greatly increased if it is accompanied by a reasonable system of education in consumption.

How Will Socialism Provide Leisure? The fact that socialism provides no method of living by ownership tends to create the impression that it will doom mankind to a life of grinding drudgery, with no hope for leisure even in old age. Such a view is natural to those who gauge the possibilities of other institutions by those of capitalism. Under the present system it is true, only the capitalist can enjoy leisure in anything but very small doses. The worker's life is a steady grind without hope of cessation. If socialism is to convert all men into workers only to present them with the life of workers under capitalism, it cannot justify itself. As a cure for capitalism it will be worse than the disease. But it proposes no such thing. It proposes to convert the whole people into a working class and then convert the working class into a leisure class. Not that life under socialism will be all leisure; but it will in a high degree be emancipated from compulsory drudgery, always as-

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suming of course that the principle of the institution is carried out properly.

Socialism will produce leisure throughout the community by automatically shortening the hours of labor as the efficiency of production and consumption increases, its aim being to let machinery do the producing while man does the consuming. Thus inanimate things will attend to the unpleasant part of production, while man will attend to the pleasant part, and to the consumption. At least this is the ideal to be approached. With society organized into a coöperative commonwealth every increase in the rate of production and every decrease in the rate of consumption can be reflected in increased leisure throughout the community, as readily as it could in the miniature coöperative commonwealth of farmer Jonathan's family. The automatism with which leisure is produced can be realized by examining the working of the system discussed in previous pages of this chapter. It is not necessary to redescribe the process in detail. Moreover, each individual can take his leisure in large or small doses, according to his tastes. If his tastes are expensive, he will have to work longer to get the money to gratify them, and then his leisure will be curtailed. If they are simple, he can save his money, and take long but inexpensive vacations when he wants to, supporting himself on his savings, not on the interest on them, as under capitalism. Actual savings come from a man's own labor. The interest on them comes from the labor of other men, and under socialism no man will be permitted to live the consumptive part of another man's life for him. Division of function will not take the form it takes under capitalism, where one class absorbs most of the leisure, and another class most of the labor, of life. The consumptive inefficiency of such a system is too low to be tolerated under a scientific way of conducting society.

The best method of insuring leisure in the latter part of life is by old age insurance. This takes a load of care off men's earlier years, and permits them to spend their money for leisure or recreation without worrying about the security of their declining years. Insurance against accident, sickness, and indeed all unavoidable risks should also be provided under a sane system of society. Indeed it probably should be compulsory, because without it a man would risk becoming a burden to his friends, as well as to himself. Socialism would provide all these forms of security at cost, and thus at a minimum of expense.

Society can be emancipated from drudgery only by emancipating itself. It cannot, like an individual, live upon the labor of others. The general methods of emancipation have been suggested, but it is important to point out that society should take steps not only to increase leisure, but to utilize it efficiently. The best way is to utilize it in the creation of knowledge, or in some other form of pleasurable production, for it seems fair to classify work that is pleasurable under the same head with leisure. It might be called productive leisure to distinguish it from the consumptive kind. Both kinds should be prepared for by appropriate education in youth, but the subject is too detailed for discussion here. Suffice it to say, that socialism can secure leisure for society, instead of for a small class thereof, as capitalism does, that it can turn it to more useful account than capitalism does in the lives of its idle rich, and that it can do it without resorting to the destructive expedient of payment for ownership.

How Will Socialism Keep the Population Within Safe Limits? It is clear that under no system can the population of a country increase indefinitely and remain happy. The law of diminishing returns will

sooner or later operate too effectively to be nullified by any attainable effectiveness in the operation of the law of increasing returns, and the result will be increasing poverty. Most economists recognize the threat of overpopulation. In Europe, and even more so in Asia, it is much more than a threat, it is an actuality. Nowhere, of course, has overpopulation reached its limit, but in eastern Asia it has approached it closely enough to satisfy all but the wildest opponent of the Malthusian principle. Most economists also recognize that capitalism cannot prevent overpopulation. At any rate it has thus far shown no signs of doing it. Moreover, its tendency to produce poverty in large masses of the people makes it a direct cause of overpopulation, since it is among the poor and ignorant that the birthrate is most excessive. Socialism, on the other hand, by doing away with poverty and ignorance will do away with the excessive birthrate which accompanies them, and thus keep the population within safe limits.

Most socialists and reformers seem to think that by sufficiently increasing the efficiency of production, danger of overpopulation can be avoided. This is an error, and a dangerous one. Increase in productive efficiency is a necessary condition for the abolition of poverty, but it is not a sufficient one. The invention of agriculture in ancient times in India, for instance, caused a vast increase in the efficiency of food production there. Before its invention, the inhabitants lived by the crude methods of the chase. But did it prevent poverty? No. It increased it by increasing the number, if not the per capita misery, of the poor. Before the invention of agriculture perhaps the number of starving wretches in India was 2,000,000 or so. After its introduction the number of starving wretches was 200,000,000. Instead of increasing the per capita rate of consumption, it merely increased the population. Thus one of the greatest of

improvements in the productive arts made matters worse instead of better in the community it should have served. It increased misery instead of decreasing it. And this will always be the effect of such improvements in the long run if means are not found for preventing an excessive birthrate. Socialism by its tendency to abolish the poor, and therefore fast breeding, class among the population supplies such a means. The chances are it will be sufficient to accomplish the desired result. But should it prove otherwise, some form of birth control would be necessary to prevent the ultimate conversion of socialism from a blessing into a curse to mankind.

How Will Socialism Abolish Poverty? On page 126 the conditions necessary for the abolition of poverty are enumerated. In the five sections preceding this one the general methods which socialism would, or at any rate could, adopt to attain these conditions, have been briefly discussed. These are the methods therefore whereby socialism proposes to abolish poverty. There is hardly room to challenge the soundness of the principles invoked. The only issue is that of details of application. Indeed there is little disposition to question the basic principles of socialism. Even those economists who profess to do so, do not really do it. Examine any serious argument against the program of socialism and it will be found to assume some fault in the method of application, some failure in the use of incentive, some oversight in provision for saving, some bungling in the prevention of bureaucracy. All such matters are details which the patient application of intelligence can master. They are not defects of principle. The proper working out of details is, of course, as essential to the success of socialism as the adoption of sound principles. If, however, socialism makes possible the application of principles which will abolish poverty, then it is a proposal of great

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promise, and it is the duty of all those interested in the service of humanity to help work out its proper application. Capitalism can never abolish poverty because its principles are wrong. To perfect its details with such an object in view then is but labor lost. It is a waste of time. As well seek to convert a wheelbarrow into a flying machine by perfecting its details. Socialism, on the other hand, has possibilities. It is like Stephenson's first locomotive which, though crude, embodied sound principles and only needed proper details to be a success. The purely mechanical difficulties of an institution as of a machine can be overcome, if not by one expedient, then by another. Socialism as an unperfected institution cannot abolish poverty. As a perfected one it can. Let us therefore labor to perfect it.

VIII

THE TRANSITION TO SOCIALISM

Making Conservatism the Ally of Caution. There is an obstacle to the substitution of democracy for oligarchy in industrial affairs in this country, not without some basis in reason. It is the aversion of the average man to taking a momentous step, the consequences of which cannot be predicted with certainty. It is that characteristic rooted in our common human nature which "makes us rather bear those ills we have than fly to others that we know not of." This aversion to change made our ancestors hesitate to substitute democracy for oligarchy in political affairs until the pressure of events forced the issue upon them. It is a trait shared by Americans with the rest of the world, and its influence in delaying the progress of democracy in the past is acknowledged in our Declaration of Independence: "Our experience hath shown that mankind are disposed to suffer while evils are sufferable than to right themselves by abolishing the forms to which they are accustomed."

Conservatism, like those other characteristics of human nature, intelligence and self-interest, can be used both for good and evil ends. It may be used to obstruct all change, in which case it is reactionary and harmful; or it may be used to obstruct change for the worse only, in which case it is rational and beneficent. Too commonly conservatism of the reactionary type is mistaken for caution. As a matter of fact, it is rather an extreme form of incaution. It is the commonest cause of revolutions. The American Revolution was caused by the

conservatism of the House of Hanover, the French Revolution by the conservatism of the Bourbons, and the Russian Revolution by that of the Romanoffs. Caution is not a blind aversion to change. It is a capacity to avoid dangerous courses, whether they involve change or not. It does not confuse inactivity with safety. It does not wait for necessity to force action. It only waits for utility.

In the previous crises of American history methods of applying conservatism cautiously were available, but they were not adopted. The counsel of the really foresighted and cautious conservatives was not heeded. Blind conservatism had its way and adopted the dangerous and costly, instead of the safe and economical, policy. In the approaching crisis of capitalism history is quite likely to repeat itself. But there is no need of it if conservatism, instead of acting as the ally of reaction, becomes the ally of caution. If we apply to the situation the reasonableness characteristic of engineering operations, the transition to socialism can be accomplished not only peacefully, but without the slightest inconvenience to the people or danger to their prosperity. In other words, a good political engineer should be able to displace one institution by another with little or no inconvenience to the life of the community; just as a good civil engineer can displace an old railroad bridge by a new one without disturbing the operation of the road.

It is only a matter of using the same planning and foresight in the one case as in the other. The sections which follow are intended to suggest, very briefly, a line of policy which is presumably adapted to do this.

What is the Best Way to Introduce Socialism?
The safest, best and quickest method to successfully substitute a new and improved institution for an old one is the method employed in engineering to substitute a

new and improved structure or machine for an old one. No one can tell exactly how a machine of new design will work, and after it is installed there is generally required quite a bit of alteration and "tuning up" to make it work smoothly. So the engineer in charge of a big plant does not shut down the whole establishment, junk all the old machines and install new ones at one fell swoop. He might be making a mistake in putting in the new machines, and it would be disastrous for him to make it on a large scale. So, in order to take no chances, he first tries a few samples of the new machines. He gives them a try-out in practical competition with the old ones, under comparable conditions, and carefully notes the result. If they fail to stand the test he has only the expense of the experiment to his debit—he has made his mistake on a small scale, and the information he gets is generally worth what it costs him. If, on the other hand, they stand the test, he is then in a position to install the new machines in place of the old ones, taking no chances of failure and knowing beforehand most of the alterations which will be required to make them work smoothly. Moreover, he can make the change without shutting down the plant, replacing a few machines at a time, until finally the whole concern is operating with the new and improved machine, and no disturbance has been caused by the transition. Thus successful and undisturbed operation are both assured by employing the experimental method of procedure.

Now this method will be as successful as a means of substituting socialism for capitalism in industry as it would be for substituting turbine for reciprocating engines in a power station.

Suppose, for example, a few standard and widely differing types of industry to be selected; say coal mining, cloth making, shoe making, meat packing, and large scale farming, and the premium method of com-

binning efficiency with democracy—or a better method if such is available—tried out on them. Suppose these plants to be subjected to the same regulations of safety, sanitation, hours of labor, etc., to which private plants of the same kind situated in the same region are subject, so that the comparison is made under the same conditions. Each publicly operated industry then will have to stand on its own feet and make its own way in competition with private enterprise, subject only to such advantages as its special mode of organization and operation provides. We should then have some means of really knowing which of the two methods was the better. We could decide the question, not by speculating about it as is done to-day, but by appealing to actual and concrete practices.

When the speed of two race horses is to be compared they are made to race together under equal conditions. No comparison would be worth much if one were attached to a gig and the other to an ice wagon. The same rule holds if the relative merits of two methods of industrial operation are to be compared. They must be raced together under equal conditions and the question decided by results.

A general plan for making such a comparison along the lines suggested is a matter of public record.* Its main departure from the plan presented in the last chapter is in the method of determining prices, which, under competition, require to be competitive. There are reasons for believing that it constitutes a practical method of transition to successful democratic collectivism, because it is a safe and sure, a cautious and conservative, method. It requires looking before leaping. It applies to public business the plain wisdom and true conservatism practised by every wide awake business man in

* See Final Report and Testimony submitted to Congress by the Commission on Industrial Relations. Volume 9, p. 8053.

the conduct of his private business. It is the best way possible to apply in the concrete the maxim "In industry let private enterprise do the things it can do best, and let the government do the things it can do best," since it offers a means of really deciding which agency can carry on the public business best. Moreover, by the use of this method "best" will not be mistaken for "cheapest," because the political engineer, unlike the economist, does not confound commercial with productive efficiency.

And what would be the expense of trying such an experiment? What would be the debit charge? Would it be anything which would cripple the country if it failed? Let us see.

Some of the enterprises suggested would require more capital than others, but, on the average, practical, self-supporting, working scale, plants should not cost more than \$2,000,000 apiece or \$10,000,000 for the five—less than the price of a single battleship. Then if the experiment lasted, say five years, it would cost the people of this country about two cents per capita per year for five years to acquire the information desired. Of course, if the tests failed the people would have nothing but their information to show for their expenditure—and it would be well worth the money, if only to stop the vast waste of time now expended in guessing and speculating about the matter. A nation that spends every year many dollars per capita for superfluous luxuries can afford two cents for vital knowledge. If, on the other hand, the tests succeeded the public would be well on its way to settle the principal industrial problems now before it for settlement, namely: how to make labor and the tools of labor pull together in the interest of the public in peace or in war, how to make wages rise as the cost of living falls, and how to successfully substitute democracy for plutocracy in the conduct of industry. If an industrial

policy can be proposed by the adoption of which the public will have less to lose and more to gain than by this one, let us hope some one who has the ear of the people will propose it. But why not cease taking it out in talk? We have already had nearly thirty years of theorizing on this question of public vs. private operation of industry. Why not quit theorizing and muddling and drifting and put the matter to the test of a conclusive experiment? It will only cost a few cents apiece.

How Should Privately Owned Capital be Transferred to Public Ownership in the Transition to Socialism? Probably the best way to convert disjunctive property in the means of production into conjunctive is by means of government bonds rendered by proper legal devices practically non-inheritable.

The privilege of living by ownership has been practised so long that it is regarded as a right, not alone by those who practice it, but by those at whose expense it is practised. Indeed, as shown in Chapter III, it is in fact a right, so long as the public refuses to attend to its own business. No one is entitled to criticize the present practice of such a privilege, because the public has provided no substitute for it. If the capitalist, by his absorption of interest, rent and dividends, is robbing the people to-day it is because the people insist upon being robbed. They insist, not in words to be sure, but in actions, and actions speak louder than words. Those who have encouraged the practice of living by owning therefore can afford to be tolerant if they make up their minds that the public interest will be served by its discontinuance. After their long insistence upon the private ownership of property used for public purposes it would hardly be reasonable to suddenly confiscate it at the expense of the present owners whom they have so persistently encouraged to acquire it. It should be paid

for in bonds bearing the rate of interest usual with such government securities, and if the bonds are taxed it should not be at confiscatory rates.

In suggesting this method of dealing with capitalism, I am following the sane, if disregarded, policy of the sanest of Americans. America did not listen to Lincoln's advice to end slavery by purchasing the slaves. She lived to regret it. The difficulty of abolishing capitalism suddenly is the same as the difficulty of abolishing slavery suddenly, and if Americans will stick to the American policy of learning by experience they will not repeat the mistake they made two generations ago. Lincoln's position with regard to slavery and the method of abolishing it in 1858 is the position which socialists should take with regard to capitalism to-day. If you will substitute the word capitalism for the word slavery in the following words of Lincoln they will express exactly the position of sound American socialism at the present time :

"I have said, and I repeat it here, that if there be a man amongst us who does not think that the institution of slavery is wrong, . . . he is misplaced, and ought not to be with us. And if there be a man amongst us who is so impatient of it as a wrong as to disregard its actual presence among us and the difficulty of getting rid of it suddenly in a satisfactory way, and to disregard the constitutional obligations thrown about it, that man is misplaced if he is on our platform. We disclaim sympathy with him in practical action. He is not placed properly with us."

But though it would not be reasonable to cut off completely by confiscation the privileges of the capitalists of to-day, neither would it be reasonable to pass on those privileges to their heirs and assigns forever. The mistake of developing and sanctioning capitalism is the mistake of the past and the present. Unless the people of the future insist on perpetuating that mistake they should not be asked to atone for it. By inheritance

taxes, wholly, or practically confiscatory, with such accessory legal devices as may be necessary, bonds exchanged for a given public industry should be made to revert to the government within a generation or less after their issue. If this policy of transition is combined with that suggested in the last section, America will avoid the miseries she suffered in the transitions of 1776 and 1861.

How Will the Transition to Socialism Affect the Capitalist? It is quite generally supposed that the substitution of socialism for capitalism will have dire results for the capitalist, but the supposition is not justified. It is safe to say that for all but a small fraction of the capitalist class the change will bring a substantial increase of happiness, assuming of course that reasonable methods are used in making the transition. A little discussion will make this fairly plain.

To begin with the capitalist will not be deprived of his income by arbitrary fiat. There will be no law passed forbidding persons to receive payment for ownership. Under socialism the owners of stocks, bonds, etc., will receive all the income their investments earn, but with the exception of the non-inheritable bonds mentioned in the last section (which will disappear in about a generation) securities will be very scarce, and hence will earn little income. This is because the function formerly performed by the capitalist for the public will be performed by the public for itself. That is, the capitalist will disappear, not because he is interdicted, but because with the disappearance of capitalism he has become superfluous, just as kings became superfluous with the disappearance of monarchy, and slave holders with the disappearance of slavery.

But capitalism is not likely to disappear all at once because the public is not likely to assume the perform-

ance of all public functions at once, and under socialism—as under capitalism—the capitalist will be left to perform for profit that part of the public business which the public does not perform itself for service. That is, profits will be less under socialism only because the public will attend to its own business more thoroughly than it does under capitalism. The less essential parts of its business will no doubt be left for a long time—perhaps indefinitely—to private operation. As noted in Chapter VI, the replacement of capitalism by socialism is for the same practical purpose as the replacement of the stage coach by the railroad, namely, improvement of public service. It is not a doctrine applied to please the doctrinaire, nor sought as an end in itself. Therefore, although as a general method for serving the public, socialism is as superior to capitalism as the railroad is to the stage coach, yet there may be situations in which it will be wise to retain capitalism just as there are situations in which the stage coach still operates to advantage. One of these I have mentioned on page 158, namely, in the development of new processes and apparatus either for productive or consumptive purposes. Thus the investment of capital would tend to concentrate in the field of potential, but not actual, public industry, and consequently this line of endeavor would be stimulated to great activity without prejudice either to the principle or the practice of democracy. For as fast as a new kind of enterprise proved itself publicly useful by developing into an actual public industry it would, if it were sufficiently important, be taken over by the public, and the money paid for it would become available for the further development of new ideas. There seems indeed everything to gain and nothing to lose in the retention of capitalism in this field of enterprise.

In the transition to socialism the capitalist will have the same opportunity as any one else to perform the

managerial functions which he quite commonly performs to-day. If he shows himself qualified he will get the job and be paid in proportion to what he does, instead of to what he owns; but "pull" will not avail him, as it does under capitalism. Nepotism, which flourishes so commonly in the business world, cannot flourish under an efficient civil service system. Control of a public function cannot be handed from father to son by economic any more than by political kings. Such control will go to the person best qualified, so far as impartial tests can be developed for discovering him. Is there any objection to this? Those capitalists who fail to qualify for managerial functions will take whatever job they can qualify for, just as any one else must do, and become useful, if inconspicuous, members of the coöperative commonwealth.

Of course in the transition to socialism excessive incomes will tend to disappear, although the survival of persons holding government bonds would permit of the survival of a much dwindled plutocracy for a few years. With this exception, incomes throughout the community will tend toward equality in the manner described on page 168, and this will mean the practical disappearance of the private servant class, except for invalids or other disabled persons whose insurance will protect their helplessness.

Some people will complain that society cannot get along without domestic servants, just as the slave holders of ante-bellum days complained that it could not get along without household slaves. It is the old demand for somebody to do the dirty work. Such persons see only their own point of view. They ignore the point of view of the servant and the slave. Under socialism if a person can afford a private servant, he doubtless can have one, but it is going to take quite a lot of money to make such a position sufficiently attractive to compete

with the government. Under socialism the domestic service performed to-day by a household pariah will be performed largely by public agencies; machinery and co-operative methods will increase, and the drudgery which such service demands to-day will practically disappear. Indeed drudgery of all kinds will diminish as machines take the place of men in industry, for among the other novelties to be introduced by socialism will be the use of labor-saving machinery to save labor.

Any estimate of the range of compensation under socialism must be in the nature of a rather wild guess, but in order to have something definite to go on, we will venture one. Assuming socialism to attain a stage of moderate maturity within a generation or so, let us guess that the range of wages would be between \$2,000 and \$6,000 a year, with a few extra exacting jobs yielding more than the larger sum, and a few extra easy ones yielding less than the smaller one.

Now how would such a change in the condition of things affect the life of the capitalist class as it is to-day? Differently according to their present scale of living, of course. The bulk of the capitalists are not rich. The merchants, farmers, jobbers and other struggling and saving persons of the so-called upper middle class doubtless average less in yearly income than they would receive under socialism, yet they constitute the majority of the capitalist class. The moderately rich would be compelled to curtail their expenditures moderately, and the excessively rich, excessively. This might cause some hardship temporarily; but consider the benefits that the whole capitalist class would receive in return. They would, in common with the rest of the community, live in security, without fear of possible destitution, they would be free from the worry of guarding their money, or conducting their business in the midst of a world characterized by the necessity of constant struggle, con-

stant watchfulness and constant self-assertion. The corrosive influence of bargaining would be absent. No longer would it be necessary to try for the better, in order not to get the worst, of a trade. Conflict of interest between men would disappear—not only between former business rivals, but between the managing and the operating forces of industry.

There would, in fact, be only four varieties of capitalist who would not be happier under a reasonably managed coöperative commonwealth than they are to-day; namely, those whose income permits and whose happiness requires either: (1) excessive idleness, (2) excessive luxury, (3) ostentation, or (4) excessive power over the lives of others. These are the only kinds of persons in the community whose interests would not be benefited by the introduction of socialism, and even they would be benefited if they changed their tastes—as they could and would do when necessity required it. At any rate, they constitute an insignificant fraction of the population, and it is hard to see how the present interests of such a fraction could be served without sacrificing the interests of society at large, including the bulk of the capitalist class itself. It is better for the few to adjust their lives to the reasonable demands of the many, than for the many to adjust their lives to the unreasonable demands of the few. If happiness is to be successfully secured in society the lesser interest must always give way to the greater.

How Will the Transition to Socialism Affect the Non-Capitalist? The distinction between the capitalist class and the working class usually expressed by the orthodox socialist is one which leaves out the majority of the people in America to-day. It is a distinction which fits a doctrine better than the facts. I have already pointed out (page 41) that the more useful distinction, in

this country at least, is that between capitalist and non-capitalist, the very rich non-working capitalist being the extreme case of the one class, and the very poor wage worker without a savings bank account being the extreme case of the other. Roughly speaking, of course, the capitalist class includes the richer members of society, the non-capitalist the poorer, though there are many exceptions. We have seen that of the capitalists only four kinds would not be benefited by the change to socialism. Now it is these four kinds of persons, and only these four, among the non-capitalists who would not be benefited by the change. But while the proportion of the capitalist class belonging in these categories might possibly reach ten per cent, the proportion among the non-capitalist class would not reach one per cent. All the rest of the non-capitalist class would be benefited, for the most part in a very high degree, not only by the same things which would benefit the majority of the capitalist class, namely increased leisure, peace, security, and harmony with their fellow men, but by more interesting work and higher pay.

The non-capitalist would be more benefited by the introduction of socialism than the capitalist because he is for the most part more harmed by capitalism, though as a matter of fact the higher paid wage earners are fully as well off, often better off, than the poorer capitalists and professional men. The greatest benefit, of course, would be conferred upon the poorer class of workers, the manual workers in particular, because they are the worst victims of capitalism among a population practically all of whom are victimized in some degree. The leveling up process characteristic of socialism would bring these people to a plane of living characteristic of the higher paid workers of to-day; would give them security, leisure, and an outlook of increasing prosperity, and would insure their children the same

opportunity for position in the community as the children of the capitalist. As socialism matured, of course, the distinction between capitalist and non-capitalist would disappear, because the former class would disappear, and all able-bodied and able-minded persons would eventually take their places as working parts of the great coöperative commonwealth whose object is the happiness of society as a whole, each part performing a useful function and having equal opportunity for advancement with every other part. The natural inequality between person and person, determined by heredity, will of course exist under socialism. There will also be the inequality of authority, political or economic, necessary to efficient coöperation. But aside from these there is no need of inequality among the members of a coöperative commonwealth, and so the curse of caste would tend to disappear with the curse of class. And this incidental benefit of socialism would not be the least among those which it would confer upon mankind.

Conscious Improvement of Institutions. Institutions are the habits of society. And it is as easy for a nation to drift into bad institutions as for an individual to drift into bad habits. Such institutions as monarchy, slavery and capitalism are as easy to drift into as habits like dawdling or drinking—and as hard to drift out of. Indeed nations cannot drift out of them any more than an individual can overcome evil habits by drifting. They can only be overcome by the action of the violent drug of war—which is by no means a sure or permanent cure—or by deliberately taking thought and setting our steps in the right direction through the use of reason.

Conscious experiment indeed is not a roundabout or slow road to national progress. It is the shortest road available. For our present muddle-methods are only a

sort of blundering, drifting experimentation, which at times takes us backward instead of forward. Why not experiment with our eyes open instead of shut? Why not first determine clearly where we are going, and then find out by rational research how to get there? I have already pointed out, and in closing I wish to point out again, how readily a great community by concerted action can solve problems and create improved institutions with practically no risk and but trivial cost per capita. It can do this because great and small scales are relative. A sufficiently large scale industrial or political experiment to be conclusive can be carried out by a community of a hundred million people at a trifling cost per capita, and yet as much knowledge secured as if it were conducted by a community hundreds of times smaller and hence hundreds of times less able to bear the expense of experiment. The United States is thus able to experiment with institutions on a scale large enough to be conclusive, and yet make all its mistakes on a small scale—a scale relatively so small as to bring no perceptible burden to the average man. It is for an analogous reason that our country could dig the Panama Canal with a scarcely perceptible effort, while a small community would have been swamped by the task.

The knowledge required for safe and rapid political, social and moral progress can be as readily obtained if we will only dig in the right place. It is as easy to dig into the subject of human coöperative conduct and direct the stream of self-interest and intelligence to the service of mankind, as to dig into the dirt of Panama and direct the Chagres river to the service of commerce. It is only a matter of turning our attention and effort in that direction. And the task will yield vastly greater dividends of usefulness. The improvement in commerce wrought by the Panama Canal is a great one. The digging of the canal was a very useful piece of work and a

splendid example of what coöperative enterprise on a national scale will accomplish against the obstacles imposed by Nature to human achievement. But it sinks to insignificance compared to what could be accomplished were the same effort scientifically directed to overcoming the obstacles imposed by human habit and tradition. The greatest obstacles encountered by men in this world are those which they place in their own path. Reason alone can remove them. The Panama Canal cost about four hundred million dollars. It is worth it. But imagine what the expenditure of such a sum would accomplish if it were expended in scientifically studying and improving by deliberate experiment the institutions which control all our lives.

Let us then consider directing our effort to political as well as to mechanical, electrical and other branches of engineering. Let us apply reason as consistently to the achievement of ultimate as of proximate ends. Let us not be satisfied with mere doing. Let us be sure our doing is right doing. Let us use and not abuse the stupendous forces which the experimental method in social affairs places at our disposal, directing them to human and not merely physical achievement. Let us see to it that the Aladdin's lamp of science is not perverted to the service of the Mammon of commercialism or the Moloch of war. Let us hold it steadily to the service of humanity, making reason the master not the slave of tradition, the ruler of the moral as well as of the material world. Let man expel medievalism from the control of moral, as he has already expelled it from that of physical, things, to the end that scientific means may be directed to none but useful ends, and that we may erect upon a material civilization, already by science advanced beyond the dreams of former generations, a moral civilization transcending those of any but our own.

