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**THE CONTROL
OF WAGES**



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The Control of Wages

By WALTON HAMILTON ~ ~ ~ ~
Professor of Economics, The Brookings School, and

STACY MAY ~ ~ ~ ~ ~ ~ ~ ~
Assistant Professor of Economics, Dartmouth College



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Amherst College,
April 14, 1923.

DEAR HENRY CLAY:

The psalmist has said that a book on wages is like grass which in the morning flourisheth and groweth up and in the evening is cut down and withereth. But he must have been looking through his glass darkly that day, for he did not really see how frail are the pages whereon it is written of what hire the laborer is worthy. For man can, by diligence and care, produce a grass which will the longer endure the rain, the wind, and the sun. Yet he seems unable, by taking thought thereto, to add a cubit to the brief life of a theory of wages.

Surely men enough have given themselves to fashioning "laws" of wages. If every tome meant increased understanding, we must long since have learned more than there is to know about the earnings of "labor"; for the annals of its exposition are full to overflowing. But explanations have come and gone to no good purpose; for more often than not the new has been no nearer than the old to a truth which is on speaking terms with reality.

Of the right of this passing volume to even so fleeting a life you can judge better than we. It is only what it pretends to be: a realistic attempt at a first analysis of the problem of making his hire worthy of the laborer. Its title, *The Control of Wages*, meets your dictum that a theory which is worth the getting can be found in an attack upon an important problem. We have not dubbed it with the sub-title, "Or, How to Improve the Conduct of the Demand Curve for Labor." In fact, in its pages you will look in

vain for "demand curves" (if there really are such things), "wages schedules," hypothecated feeling magnitudes, putative funds of labor and of capital, and the other paraphernalia of a "neo-classical" economics which were the playthings of our youth. It is useless to attempt to explain the omission. Those who have never tasted the joys and unrealities of a romantic economics will never miss these things. Those who have not yet put away childish things along with "firsts," "summa cum's," and the other impedimenta of juvenile erudition can never be reconciled to their absence. Whether our argument puts in their place anything that is new or wise or true or useful or good we cannot tell.

We only know that we can dedicate this book to you with the assurance that it has one value possessed by few of its kind. When its brief day is done, if it has one, and it goes to that limbo whence the obsolete returns only to plague students who are being subjected to the discipline of a dead economics, it will give place to its "better." May our argument provoke you to speed your coming book on wages to the end that this volume may be scrapped and we may know more of the truth about the contents of the pay envelope.

We would, if we dared, wish for your book on wages a longer life. But, despite its greater merit, it is likely to succumb as quickly as this to the fate which overtakes all theories of wages. The test of a teacher is in training up "cubs" who will make his finished work the crude beginnings of fuller studies. You, sir, are too good a teacher for even your best work long to withstand the creative efforts of your best pupils.

Will you accept this ephemeral offering as a tribute to your craftsmanship? Since you use good materials, fashion them into substantial articles, and leave upon your wares

DEDICATION

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the delicate and artistic touch of your workmanship, we would fain write ourselves as of your company. But since we handle our tools none too deftly, are no accredited scribblers upon economic theory, and are engaged in an adventure which runs to the very edges of reputable belief, it must not be so. Accordingly we can only say that we should like very much to be able to sign ourselves,

Yours in the craft,

WALTON HAMILTON.

STACY MAY.

Henry Clay, Esq.,
The Craft of the Economists,
"The Manchester School,"
Manchester, England.

NOTE

A large part of the argument for "The Control of Wages" which is set forth in this book was tried out in "the classes for workers" in Holyoke and Springfield, 1920-1921; 1921-1922.

The argument was worked out in a series of conferences between Mr. Hamilton and Mr. May. In the actual writing Mr. Hamilton pencilled Chapters I-XI and XV, and Mr. May Chapters XII-XIV. The index was prepared by Miss Edna Cers.

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THE CONTROL OF WAGES

I believe in materialism. I believe in all the proceeds of a healthy materialism,—good cooking, dry houses, dry feet, sewers, drain pipes, hot water, baths, electric lights, automobiles, good roads, bright streets, long vacations away from the village pump, new ideas, fast horses, swift conversation, theatres, operas, orchestras, bands,—I believe in them all for everybody. The man who dies without knowing these things may be as exquisite as a saint, and as rich as a poet; but it is in spite of, not because of, his deprivation.—Francis Hackett, IRELAND, p. 324.

THE CONTROL OF WAGES

CHAPTER I

THE IMPORTANCE OF WAGES

"Wan iv th' sthrangest things about life is that th' poor who need th' money th' most ar-re th' very wans that niver have it."

Mr. Dooley on "The Pursuit of Riches."

In our "great society" well-being and culture alike rest upon the foundation of "the pay envelope." The overwhelming majority of the American people receive their share of "the national income" in the form of payment for "work." In all the great industries, save agriculture, the bulk of earnings are disbursed into the weekly wages of those who labor. The wage is the bait with which society tempts the laborer to engage in one of the processes of production which together make up our complex and gigantic "industrial system." The purchasing power which the wage possesses fixes the limit of "the standard of living" which its earner can set up for his household. The surplus of that wage over conventional necessities measures the opportunities of his family for development. If our culture is to be democratic, if the common man is to have access to "the fulness of life," it must be by the grace of the plain, ordinary "pay envelope."

The "rate of wages" has not always been a key to the real things of life and of the world. In days gone by the slave gave to his owner what he was compelled to give and received in return a living large enough to keep him fit for work. It was not his to worry about the wherewithal to buy his children's shoes or to pay the monthly rent. The serf of the Middle Ages gave to his lord a fixed rental; the imaginary surplus of food and of the means of living was for his own use. Likewise in America as late as the middle of the nineteenth century, and in some sections much later, the plain man worked out his own salvation. From the boundless domain he claimed his acres; his tools and equipment were simple and inexpensive; and all that he produced was his own. Since his labor yielded directly the goods which his family used, he was not dependent upon "the great industry." He reaped where he himself had sown, quite oblivious to the vicissitudes of price and the caprice of the market. For lean years or for fat he had only himself or the seasons to blame. His formula of welfare ran in terms of the soil, the sun, and the rain; of sobriety, diligence, and frugality.

With the march of industry across the continent the simplicity is gone. No one of us now liveth to himself, but dieth to himself. The tasks which once engaged each household have been torn apart and about each a great industry has been organized. The system into which these have been articulated has been complicated by the rise of many new trades turning out products unknown to our fathers. A new technique has turned workshops into great factories and filled them with intricate and expensive machinery. A market has been established to separate producer and consumer, in which each good and service is dubbed with price. Wares are produced for sale instead of "to order" and industrial operations are carried on "for profit." The

growth of "business control" over industry has given the laborer's welfare a new basis. He no longer eats the bread which results from the sweat of his own brow. Instead, the products of his specialized labor go out to many others in alien industries and from far away places come in exchange goods and services in which he shares.

This "coming of industrialism" to America has made the laborer dependent for his living, his welfare, and his development, upon a vague, mysterious, and powerful "system of prices." His economic existence is pent up within two sets of prices: the price at which he can dispose of his labor and the prices at which he can purchase the goods and services which appear upon his household budget.

On the one hand the limit of his expenditure is fixed by his nominal wage. What its sources are he does not fully know. He is aware that a larger income is divided between wage-earners and several groups of "non-workers" who receive "dividends," "interest," "profits," and whatnot; but the reasons for the division are wrapped in mystery. He is none too clear as to why the pay envelope contains just what it does and not a little more or somewhat less. Arbitrary forces, far removed from him, largely beyond his control, seem to determine how many dollars he shall receive.

On the other hand the limit of his expenditure is fixed by the prices which he must pay for his services and his wares. To convert his nominal wage into a real one, the laborer must take its purchasing power to market and exchange it for the material means to the pleasures, activities, attainments, and vanities which he regards as worth while. If he has no income, clearly he gets no goods. Since existence depends upon the wherewithal to be fed and clothed, his existence becomes a matter of charity. If his nominal wage is small he can gain a limited range of goods and

services. As its size increases he is allowed more goods and greater discretion in choosing them.

Nor can he ever escape from thralldom to the market. As prices go their wanton ways, he is forced to change his purchases, his activities, and even his personal habits. These prices, by rising, nibble away his hard-earned income; by falling, they bless him with unexpected plenty. Since he knows not the "forces" residing within the great industrial system which make them play a game of chance with his pay envelope, he accepts them much as the untutored savage accepts "the forces of nature." Dint of hard blows has convinced him that calculation, shrewdness, and bargaining ability should be the cardinal virtues set forth in a new edition of Poor Richard's Almanac. In our industrial community he should greet his fellow worker in the morning with "Low Prices" instead of the customary salutation of "Good Morning" which he has inherited from his agrarian forebears.

To the worker, in short, the price which he receives for his labor and the prices of the goods he buys are the upper and the nether millstones of "the wage system." Within their narrow or their wide confines he must work out his household problems. They determine whether there is enough of food, of clothing, and of "the necessities of life" for health and physical efficiency. They grant or withhold "the comforts" which make up "life's fulness." They give or refuse a surplus of income, free from compulsory expenditure for necessities, with which the wage-earner may do as he likes. They permit or deny to him recreation and leisure.

Nor is their tyranny over his life and interests merely immediate and personal. If they are irregular, he cannot establish and maintain a regular "standard of living." If they withhold just when his children need the opportunities

for development, uncultivated capacities and aptitudes may imprison their possessors within "the vicious circle" of poverty even unto the fourth or fifth generation. The community, too, cannot escape the penalty of giving to its workers inadequate and irregular livings. It is true that happiness is not a mere affair of food and clothes and that culture is not a product of the pocketbook. But, as life is now organized, the leisure and the opportunity for culture and for development are closed to those who do not possess at least moderate incomes. If the system of prices withholds advantages from the families of workingmen, the community is not developing and using to the full its human resources. As a result its culture must remain upon a lower level.

The real things of life,—goods, services, leisure, and what not,—which these two prices grant to the laborer or withhold from him are his wage. If he is to be efficient, if he is to have leisure for his own use, if the native gifts of his children are to be developed, if his family is to share in the culture which is the common heritage of the community, his wage must hold the possibility of these things. To that end there are three simple conditions which it should meet.

First of all, there must be a wage. This is obvious; for in a great industrial society organized about a system of prices, a wage is the right to a share in the product of the great common industry.

Second, the wage should be regular. The real needs of the laborer's household are regular and recurrent; his wage should possess the same characteristics. If it fluctuates seriously or is intermittent, it is impossible for him to maintain his standard of living. Irregularity interferes with the development of habits which will make real the potential resources of his children.

Third, the wage should be adequate. If it were true that

the ordinary man was likely to be overwhelmed with plenty, a definition of "adequacy" might be very perplexing. But, when in the richest land in the world the living of the family of the unskilled laborer is perilously close to bare existence, there is at present no excuse for attempting to fix the upper limit of sufficiency. It may be true that the good things which give richness and variety to life can be had for a moderate income. But at present the average wage falls so far short of even a modest definition of adequacy that there is little prospect that in the immediate future it will load the laborer with superabundance. For the moment, therefore, "enough" need mean no more than that wages be raised as much as they can.

The possibility of making wages as nearly adequate as may be is the problem with which this argument is concerned. The welfare of the laborer depends upon his wage, which is a combination of two variables, the vacillating price of his labor and the capricious prices of the things he buys. The welfare of the great democracy of wage-earners depends upon "the wage structure," which is an aggregation of many wage-rates in many trades and industries, each of which rests upon the same two unstable factors. What are the sources of wages? Are wages determined by natural and unchangeable laws beyond man's control? Are some, a great many, or all of the conditions upon which wages depend subject to control? If so, what are they, and how can they be made to increase the contents of the pay envelope? Have laborers no control of the prices of the commodities they buy? Can the laborer's real income of meat and drink and recreation be made more regular? Can it eventually be made large enough to meet his human needs? Can real wages be raised, and raised again, and again? Can they keep on being raised? In short, must the wage-

earner have his life dominated by his wages, or can he bring his rebellious wage under control?

Such are the questions with which an inquiry into "the control of wages" is concerned. The industrial system is too vast and too intricate and its ways are still too far past finding out to allow all these questions to be fully answered. Fortunately, the beginnings of an answer are alike possible and useful. It is hoped that the pages which follow will rob the process of wage-making of some of the mystery which surrounds it and will give at least a first tentative answer to these questions. Wages are like other things in the cosmos of here and now. We cannot immediately hope to make them all that we would have them be. If they are to be completely domesticated it must be through persistent effort and a longtime program. This volume will accomplish its purpose if in the general campaign for the elevation of wages it indicates "the next step."

CHAPTER II

✓ THE CASE AGAINST CONTROL

"Th' truth is something that wurruks. If it don't wurruk it ain't th' truth. A truth that is lying off is not half as true as a good wurrukin' lie. Whin th' truth stops wurrukin' it's a lie an' whin a lie starts goin' it's th' truth."

Mr. Dooley on "Philosophers."

Are rates of wages subject to human control? To this question there are as many answers as there are theories of wages; and, in a democratic country where each man is his own economist, the number of these is legion. At the right are those who believe that wages rest upon "natural laws" so inexorable that no amount of fuss and tumult will shake them. At the left are those who know that low wages rest upon the tolerance of the workers, whose conscious wills can break them down and put higher wages in their stead. Between the extremes lie groups who believe that wages are subject to varying degrees of control through a "direction" of the factors upon which they depend. These intermediate theories are numerous and varied enough to occupy almost every possible position between the right and the left. It is best to begin by disposing of the case against "the control of wages." The nature of this can best be shown by an examination of typical arguments.

The most popular argument comes from the untutored and omniscient business man. If it lacks the subtlety and

erudition of the economist's reasoning, it has numbers, conviction, and pecuniary interest back of it. In its simplest terms it is, "The rate of wages is determined by the natural law of supply and demand." It is rare that this statement is reduced to detail or that a distinction is made between "the general rate of wages" and the specific rate paid in an occupation or an industry. In its most general application it seems to mean that there is for the industrial system a single "natural" and basic wage, at which the demand for labor is just large enough to keep the whole working population fully employed. In specific terms it seems to argue that in each trade and occupation there is a "natural wage" at which, for the trade or industry in question, the demand for labor is just equal to its supply. These harmonies between wages, the demand for labor, and the supply of it are maintained by a "natural law" which works automatically.

In this popular dress the theory need not long detain us. It is unfair to argue against it that its champions could not, to save their lives, give an explicit statement of "the law of supply and demand." It is more to the point to insist that if rates of wages are immutable, because they obey natural laws, there is no use to raise a hubbub because someone insists upon meddling. Nature has a way of enforcing its own decrees, as anyone who partakes generously of mercury or shows a contempt for gravitation will discover to his sorrow. If economic law and natural law are of a kind, the advocate of this theory must not insist that "the law of wages" cannot be changed, and, therefore, that it should not be changed. This faith and doubt is that of a member of the President's official family who preaches that it is the function of the legislature to discover "natural" economic law and to enact—or, is it reenact?—it. Yet, even this same statesman has never been discovered drafting an "Act of Congress" out of a text book on physics.

Most important of all, the phrase "supply and demand" is not a "law of wages." At best it is only a statement of the terms within which the factors which determine wages are to be sought. "Supply" and "demand" are not simple and ultimate "forces," whence flow "normal" and inevitable rates of wages. On the contrary both of them are broad and complex terms that break apart into many simple factors. The demand for labor is a compound of the volume of industrial equipment, the efficiency of technique, the quality of management, the demand of the public for the products of labor, and kindred elements. The supply of labor is a matter of the number of laborers, their training, their experiences, their abilities, their organization, and similar qualities. The popular argument against control thus becomes a question of whether or not these more elementary factors upon which wage rates rest are subject to human guidance.

The case against control has been more convincingly presented in theories which the economists have from time to time put forward. The "orthodox" professional opinion usually agrees in substance with the popular opinion of its day; it differs generally in subtlety and elaboration of statement. The economist usually refines and turns into a finished product the crude ideas of the mass of men about him. The accredited economists have converted this vague "law of wages" into several elaborate theories. These in general have accepted the formula of "supply and demand" and have tried to restate it in such a way as to reveal a single responsible factor or an "efficient cause" in terms of which wages can be explained. A brief account and criticism of three academic variants of this popular theory will reveal the strength and the weakness of the case against the control of wages.

For a time the reputable explanation of wage determina-

tion was "the subsistence theory." In days when its hopeless teachings caused economics to be dubbed "the dismal science," this explanation bore the fatal name of "the iron law." In its terms the demand for labor met the supply at a price which allowed the laborer a bare subsistence. This doom was inevitable. For, if perchance the rate of wages was higher, the instinct for reproduction would bring about an increase in population which in time would increase the number of laborers and beat it down. If it were lower, its inability to sustain life would remove the surplus population to a brighter world and allow the rate once more to attain its "normal" level.

The value of this theory is easy to appraise. The modicum of truth which it contains is apparent. Back of the ritualistic terms of "supply" and "demand" lie the size of the population and the limited resources of the community, which must be factors of importance in any wage theory. The errors which underlie the theory, mainly those of omission, are just as evident. In the world of "the subsistence theory" the community is absorbed in producing and consuming food to the end that the race may reproduce. In the world of reality there is no such bucolic simplicity, and it is a matter of "common knowledge" that "the instinct for reproduction" is directed to other ends than overpopulation. In the static terms of this dismal theory "the state of the industrial arts," the general level of intelligence, the ability of management, the form of economic organization, the abundance of industrial equipment, and a hundred other things which lie beyond the doomful words of "supply" and "demand" are fixed and immutable things. In the world of here and now they are quite human affairs subject in large part to conscious guidance. When these human and manageable elements are substituted for the imponderables of the subsistence formula, it loses its terror,

ceases to be a "law," and is robbed of its case against control. The edge of the jaws of the theory may be of iron, but their substance is of more brittle stuff.

Its place in reputable belief was eventually taken by "the wage fund theory." This is an excellent example of an economic doctrine which begins well and ends badly. It is true enough that the laborer is paid when his work is done even though a long time may elapse before his product is marketed. It is beyond dispute that his wages are "advanced" by his employer, and that these consist of goods and services which he can immediately use. From this it is easy to argue that since such goods are limited in amount, the total of all wages can not be unlimited. And, in a class society with its different standards of livings, the peculiar commodities and services which together make up "the wages bill" of the community may easily be regarded as fixed. Thus, in ingenious terms, it is easy for an argument to be developed that there is in society a definite fund devoted to the payment of wages. Since this fund is fixed, the aggregate of all wages must remain the same. Therefore, it is impossible for laborers by concerted action to raise "the general rate of wages." One group, to be sure, may translate its strategic position into more of the good things of life; but, if it does, it must be at the expense, not of those who receive incomes from property, but of other wage-earners.

Even this fantastic theory has its meed of truth. The "product of industry" consists of goods and services specialized to meet the wants of buyers. The real wages of labor, consisting of particular articles, cannot at once be substantially increased; for the goods are not available. But, since laborers consume products which others consume, some increase is possible immediately. And if time is allowed to divert the resources of production for the

fabrication of articles for the leisure class to the manufacture of ordinary necessities, a substantial increase is possible. In like manner, if the prevailing system is to be retained, there are limits to paring down incomes from property to increase wages. But such limits are flexible, and the longer the time allowed for adjustment the more elastic they are. So it seems that "the wages fund" is elastic rather than fixed, and the factors upon which it rests are responsive to human guidance. This, however, denies to the theory the character of a "law," leaves the basic factors of wages subject to direction, and invalidates its argument against the control of wages.

After several decades, which witnessed the rise and fall of many restatements of "the law of demand and supply," a "productivity" theory of wages came into general favor. This theory, as ordinarily understood, is so typical of the argument that wages are beyond peradventure what they are that it deserves more than passing mention. The popular notion, of which it is a very elaborate refinement, is that "the laborer gets what he is worth." Its distinctive mark is an insistence that capital and labor each specifically produces the income it receives.

Its argument, stripped of subtlety and dialectic, is simplicity itself. Employers are constantly competing with each other for laborers, and laborers are engaged in a similar competition for jobs. Through this double process it comes about that the rate of wages is fixed by the laborer's productivity. For, if the laborer were paid less than he produced, his employer would pocket an unearned surplus; a desire to appropriate this would cause other employers to bid for the services of the laborer; and this process would continue until the whole of this surplus had been added to the laborer's wage. Conversely, if the laborer were paid more than he produced, his employer would find it un-

profitable to keep him; as a result he would accept a wage corresponding to his productivity as an alternative to discharge.

The single means to an increase in wages presented by this theory is an increase in "the specific productivity of labor." Its simple source of wages seems to make the laborer responsible for his own welfare; its terms seem to suggest that wage rates are inevitable.

But what is meant by the glib phrase, "the specific productivity of labor"? The vision of a society so ideally organized that each group specifically produces its own income is a beatific one. If such simplicity were real, conscious attention to economic problems would be alike unnecessary and of no avail. Even in a simple agricultural society the laborer alone can produce nothing. Even if he receives all that he produces with his equipment upon his land, the technical production cannot be said to be specifically his. In our world of modern industry his technical effort cannot be disentangled from the contribution of buildings, machines, materials, technique, and management to a common product. But if by productivity is meant, not the laborer's contribution to production, but rather his contribution to the value of the product, the difficulty is equally baffling. In this sense the theory is a truism, for the only objective measure of the value of his contribution is his wage. Nor does it seem fair to call the value he gives to the product a "specific" one; for that value, like all which appear in the market, is a product of countless factors which make it what it is, among which the effort of the laborer is a single one.

Nor does "the theory of specific productivity" give a realistic explanation of why some wages are high and others low. The English miner is probably the equal of the American; yet he receives lower wages. If this is due to

differences in "specific productivity," it is pertinent to seek out real causes for such difference. To accept such a statement as final is to make an explanation by coining a phrase. The Japanese rice-grower may be as intelligent, as experienced, and as devoted to his task as the Kansas farmhand. Yet the latter has by far the larger wage. The laborer who chooses to work in a land blessed with natural resources, abundant machines and industrial equipment, and highly developed processes of production receives a bonus for it. The man with a knack for tinkering who refused to be born in the twelfth and came into the world in the latter part of the nineteenth century gets a premium because of it. The wages paid for the same ability, experience, and application vary from place to place and from time to time with changes in economic conditions which are quite outside of labor itself.

If we accept the formula and insist that these differences are due to changes in "the specific productivity of labor," then this euphonious phrase is a blanket term for an agglomeration of all the pecuniary, technical, and economic conditions affecting wages. It, therefore, becomes necessary to break it up into its elements, and to determine whether these are subject to control. Thus, as with other theories which deny control, if we go behind the final terms, we discover that the "law" is not a law, and that it holds no valid argument against the control of the factors upon which wage rates rest.

It is unnecessary to multiply the number of such theories. Their authors, one and all, were engaged in a quest for eternal verity about wages. They demanded truth that could be given simple and absolute statement. The earlier theories were formulated when men's minds were all agog over the wonderful discovery of order and law in nature. They were written down by men who sought to discover

"the natural laws" of "the economic order." They are filled with discussions of a "normal" or a "natural" rate of wages, determined by the action of the immutable laws of universal competition. The later theories bear a fainter taint of naturalism. But, even when it became clear that the economic order was made up of human arrangements, the later writers could not quite free themselves from the naturalistic conceptions which had become the tradition of wage theories. Quite recently economists who should know better have argued that "the minimum wage" proposes to substitute an "artificial" for a "natural" rate of wages.

Men who seek "natural laws" are likely to mistake current reality for cosmic truth. It is easy to understand how each of these arguments was to those who accepted it an explanation that current wages are natural wages. In economics, as in politics or religion, the wish is often the father of the argument. It was easy for men whose minds were filled with mechanistic concepts to develop an unconscious prejudice against trade unions; for it was evident that these "monopolies" of workingmen sought to raise wages above their natural level. It is small wonder that the final terms of their formulas, such as "subsistence," "the wages fund," and "the specific productivity of labor," are "imponderables." They are magical words beyond which the inquirer should not seek to go. So long as they remained ultimates and absolutes, wage rates remained inevitable. To break through these mysteries is to rob these explanations of their character of "laws." But, when the real factors which make wages high or low are dragged from behind these euphonious phrases, we discover, even at first sight, that they are subject to control.

CHAPTER III

THE APPROACH TO THE PROBLEM

"F'r a gr-reat many cinchries th' wurruld was flat.
We have th' best iv contimpry ividence on that point.
Suddenly, some time ago, it became round."

Mr. Dooley on "Philosophers."

The "case for control" requires no formal statement. Its outline appears in the analysis of "the case against control." If wages are not made by "natural laws," they are products of human arrangements. If they do not rest upon "a wages fund," "specific productivity," or some other imponderable, their sources are in technique, management, organization, and other specific elements which make up such abstractions. If they are not inevitable, they are subject to control. The detail of the case for control is to be found in the whole of the argument which follows.

If the universe were made up of simple relationships of "cause and effect," the problem of making wages serve our purposes would present little difficulty. If the thing called "a wage" had a single source, its solution would only require making that source behave. But, unluckily for those who love "the right answer" and luckily for those who like to argue, the factors which determine the size of a wage are many, varied, and scattered unto the utmost confines of the economic order. A wage is a double affair of the price of labor and the prices of goods. Each of these is constantly being remade in terms of the multitude of prices

impinging upon it. Back of these prices are such factors as the efficiency of labor, the volume of industrial equipment, the ability of management, the organization of industry, and the like, which are constantly changing in kind and in degree. A rate of wages, therefore, is a variable, constantly in process of being remade, and responding to constant changes in the pecuniary, industrial, and economic factors which are its sources. If we would control it, we must discover these sources, determine their nature, ascertain the limits within which they are subject to direction, and devise agencies for making them serve our purposes.

Such an inquiry, large and intricate as it is, will fall far short of presenting an exhaustive explanation of wages. Such questions as to what extent wages correspond to native ability, to strategic position, and to lucky opportunity; why the services of property command an income; whether the "wages system" is a beneficent or an exploitative one; or whether the prevailing organization of industry under business control will abide or is doomed, are interesting subjects of speculation. But, fascinating as they are, the narrow confines of our argument do not permit us to stray into such by-paths. Likewise, a consideration of such problems as methods of wage-payment, the wages of women, the minimum wage, and profit-sharing, are beyond the scope of this volume. They all touch, in one way or another, upon the problem of "the control of wages," but each calls for an analysis and a treatment far more detailed than is possible here.

Even within its restricted sphere this argument can give only a general and a tentative answer to the question with which it is concerned. It must be general; for a complete catalog and a detailed analysis of the sources upon which a single wage rate rests would fill a large volume; a state-

ment of the ways in which these sources can be controlled would fill another; and an adequate discussion of the variations between wage rates in sources and in methods of control would overflow a shelf of books. Such is the variety in the behavior and misbehavior of the factors upon which they depend that "the annals of wages" can never be short and simple. It must be tentative because it is only of late that students of wages have approached their subject from the standpoint of conscious control. At present most of the many volumes required to explain the sources of wages which lie scattered throughout a varied and complex industrial system can not be written.

The general character of the argument which follows is alike its weakness and its strength. It weakens the treatment because it allows no space for an application of the conclusions reached to the practical problem of raising a particular rate of wages. This is impossible because the sources of wages vary too much in kind and quantity from trade to trade and from industry to industry, to allow so specific an application. It strengthens the argument because its general terms are broad enough to make it a blanket explanation of any wage rate. It should help to disentangle from the fabric of the industrial system the peculiar sources of a given rate of wages. It should present a formula in terms of which a quantitative study can be made directed to the possibility of raising that specific rate of wages.

This discussion of "the control of wages" must begin with a statement of its object. We would control wages, not for the sake of control, nor for the sheer joy of manipulation, but to make them as nearly ample as may be to the demands made upon them. Some writers have faith that rises to a conception of "a general rate of wages" for the mass of the workers, with special rates for skilled la-

borers, composed of the "basic rate" and differentials graduated to the degree of skill. If they are right, our purpose is to elevate "the general rate of wages." Others are so skeptical that they can see only a great conglomeration of wage rates with little connection between them. If they are right, our purpose is to elevate the whole by raising the disconnected rates of which it is composed. In any event it is well to begin with the specific rate of wages and to disregard for the moment so abstract a concept as "a general rate of wages." Accordingly it is pertinent to inquire how a particular, or perhaps even better how any, rate of wages may be increased. The answer is obvious: by adding something to the current one. But the next step is not so easy; for it involves finding something to add and discovering a way to add it. This little game of "find the increment" is likely to prove a merry one, because there are so many places in which an increment can hide. If we play a random game of hide and seek, it is likely that it will be long before we ferret out all the possible additions to the rate of wages which lurk within the industrial system. For that reason it is best to start the quest with a systematic plan. It is best to give that plan to the reader, for he can probably engage more intelligently in the quest if he knows where it is likely to lead him. There is little fear that his zest will be dulled by learning too soon where it will end.

There are, in very crude terms, three general ways in which any rate of wages may be increased. The first is by an increase in the price of the laborer's services or in his nominal wage. There are three possible sources of such an increase. These are the pecuniary incomes adjacent to the rate of wages, technical improvements in the process of production, and changes in the organization of industry. Within each of these general groups lie many factors which may be made instruments of a higher wage. These are set

forth in some detail in the three sections which follow. Such a statement requires for its completion an additional section setting forth the relative power of laborers to command these increments in competition with others who receive incomes and who would appropriate them.

The second way in which any rate of wages may be increased is by a reduction in the prices of the goods and services which the laborer buys. The many possible sources of such a reduction require at least a summary statement.

The third and most royal road to a higher wage is an increase in the laborer's "free income." Since such important items as accident compensation, health service, the use of parks, and educational opportunities lie within the laborer's real income and without his formal wage, the conditions under which these free goods may be increased must be set down.

This initial discussion of the sources of a wage increase will carry us to the heart of our problem. The discovery of potential increments lurking here and there in the economic order will furnish all the material that is necessary for a formulation of a theory of wages which is grounded in reality and which is relevant to the problem of controlling wages. This, in turn, will find practical application in a list of general suggestions upon wages policy. And this, if it is to be useful in the world of here and now, requires as a supplement some account of how the theory and policy can, by trade unions, be set to the useful work of actually elevating rates of wages.

Thus, if the argument as a whole should fulfil in some small way its promise, it should aid in the joyful game of turning the tables upon the boisterous forces of an untamed economic order. It should suggest the first steps in a program whereby the mastery of wages over the laborer may be replaced by the mastery of the laborer over wages.

CHAPTER IV

WAGES AND "THE ACQUISITIVE ARTS"

"Well," says Mr. Hennessy, "what difference does it make? Th' foreigner pays th' tax, anyhow."

"He does," said Mr. Dooley, "if he ain't turned back at Ellis Island."

Mr. Dooley on "The Tariff."

The popular proposals for raising wages have one serious defect. They assume that in some mysterious way wages can be made to raise themselves by their bootstraps. They are greatly concerned with increasing the contents of the pay envelope; they give little attention to finding the something wherewith the addition is to be made. If our analysis is correct, the rate of wages cannot be directly elevated. It can be made larger or smaller only by conscious and intelligent attention to the sources whence comes its content. If the nominal wage is to be advanced, if the prices of the laborer's goods are to be lowered, or if his "free income" is to be enlarged, the additions must have a tangible existence.

A search for possible increments with which to increase the nominal wage requires an examination of the entire range of values and institutions which make up the economic order. For purposes of analysis these may roughly be separated into the pecuniary, the technical, and the economic factors. Since they are the most immediate, let us consider the pecuniary factors first. There are possibilities of changes in five incomes contiguous to wages, each of

which can be made to furnish an increment with which the contents of the pay envelope may be increased.

1. Wages may be raised and the cost of the increase may be added to the price of the goods produced by labor. This obvious formula is hoary with age, is buttressed with many precedents, and enjoys high popularity among those interested in higher wages. Although this device has been repeatedly employed, there are still possibilities of squeezing a little more out of the unorganized "ultimate consumers."

Moreover, this device lends itself to a very discriminating use. It can be made to levy tribute upon one group of consumers and to allow another to go untaxed. If, for example, a nation is blessed with a high protective tariff, its benefits may be dispensed in higher wages while, thanks to higher prices, its burdens may be imposed upon domestic consumers. Meanwhile, keen foreign competition may keep the price to aliens down and free them from having to pay a part of the increase in the wages bill of the industry. Or if a country has a practical monopoly of an article demanded by the people of other lands, it can by raising its price force them to contribute to the maintenance of high wages in the producing industry. If, again, a single article, such as breakfast food, soap, or canned goods, is sold to the public in many different brands at many different prices which differ one from another in trade-marks, wrappings, or some external thing that appeals to the eye of the readers of American magazines, rather than in quality or content, the increase in wages can be imposed upon the consumers of the more expensive brands. Or, if those who fix prices prefer, they can use the device of "class-price" to take the increase from the pockets of those who use the cheaper goods.

Like all good things this royal road to higher wages has its limits. There is, first of all, a check in the demand for

the product of the industry. A great many goods are of a kind which consumers can do without and a large part of the supplies of necessities are put to uses which can be given up if need be. The demand for the good, a very human thing, resting upon the ability to pay, the feelings, and the patience of the consumers, is likely to decline with rising prices and thus check collections whose destination is the pay envelope.

There is, next, a check in the former exploitation of the consumer. Many times consumers have been made to bear the burden of advanced prices, quite often when the levy did not become an increment for raising wages. If the ways of industry and of business were unchanging and if all producers looked after their interests quite cannily, just as they are supposed to do in the old-fashioned books on economics, higher prices would long ago have extracted from consumers all that the traffic will bear. But, in this world of change, there are still possibilities in this source, particularly in view of the bedlam among prices which has followed in the wake of the war.

There is, finally, a check in the self-interest of the laborers who seek increased wages. Since wage-earners are also consumers, a part of what it received in increased wages is taken away in increased prices. If a single group of laborers were to attempt to increase wages at the expense of the consuming public, they could doubtless wax very fat. If all laborers were to use this device they would lose in higher prices a large part of what they gained in increased wages. The net gain would be limited to the amount collected from consumers whose incomes were from property. It would be a mere fraction of the gross increase.

2. A second source of an increment in wages is the income from the investment in buildings, equipment, and materials in an industry. Next to the consumer the most

popular contributors to an increased wage have been recipients of incomes from property. It is still possible to find in profits the revenue with which to fatten pay envelopes.

It is evident that in any industry the amount by which wages may be increased at the expense of the incomes of the owners has its outside limit in the volume of dividends and profits. This amount varies greatly from industry to industry and from time to time in the same industry. In one industry little is invested in plant and equipment and the disbursements are largely for labor. In another expensive equipment and the highly mechanized processes of production cause a large part of the gross income to go to security holders and little of it to labor. Coal and steel are quite dissimilar in the proportion which "the wages bill" bears to the other expenses. The possibilities from this source vary greatly and in any industry a quantitative study is necessary to show them.

Within this realm of incomes from investments are items quite susceptible to appropriation for raising wages. Perhaps the most promising is the increase in net income which the organization of a monopoly makes possible. Whether it is because of reductions in costs or because of higher prices imposed upon the public, the advent of monopoly is usually followed by an increase in net profits. In time this income will create property claims in its likeness and the dividends paid upon the larger amount of securities will not be at a high rate. But for the moment the income is in a sense unclaimed and at that moment it is most susceptible to appropriation for raising wages.

A like fund, less open to attack, consists of earnings upon capitalization in excess of the investment in physical property. Since such earnings and their capitalized value so frequently have their sources in privileges or monopolistic advantages, laborers are not unwilling to take from

those who take interest where they have not invested. They would appropriate the return of a "good will" which the concern has wrung from a reluctant public. Obstacles, however, lie in the way of so wilful an appropriation. It is difficult, if not impossible, to disentangle such equities from those which represent real property and to deny pecuniary returns to them. In most cases, too, the securities which represent these claims have changed hands many times, their current equities are established, and their present owners have purchased them in all good faith.

Two other possible sources of increased wages are "the rate of interest" and "corporate savings." If the rate of interest were lower it would be possible to increase wages slightly. This could be effected by an increase in the volume of savings, a more plentiful supply of credit, or changes in the banking habits of the community, all of them matters over which the workingman has little control.

The fund of "corporate savings" is both larger and more susceptible to appropriation. It consists of a surplus saved by the corporation out of profits for reinvestment in the industry. Its very existence bears evidence of earnings in excess of the sum necessary to meet the reasonable expectations of the stockholders. Yet its appropriation for wage payment is of doubtful wisdom; for this surplus is destined to be converted into buildings, materials, and equipment, whereby in future the goods which make up the income of society will be increased. The relative scarcity of investment funds and the retarded growth of industry, which are the aftermath of the war and the resulting industrial disorganization, make such confiscation quite dangerous.

It is, of course, quite possible to go much further in inroads upon "profits." The outward limit is their complete

assimilation into the wages bill. Such a step is neither "unnatural" nor impossible, for such incomes have no natural or absolute existence. If in all industries profits were confiscated, wages might be appreciably raised; in some the increase would be quite large.

But, if it is foolish to insist that such expropriation is impossible, it is more unwise to venture upon it without taking account of all the consequences. It is of note that interest, profits, and like incomes are intimately associated with the performance of essential industrial functions in the economic order as it is now constituted. In an ideal society such incomes may or may not be necessary; but in the crude scheme under which the industrial system is now put together, for better or for worse, they have their active parts to play. Interest is the "bait" with which the community tempts people to "save" and secures investment funds which find expression in all the complicated apparatus of modern production. So long as industry is under the guidance of business, "profits" are the lure that impels managements to be successful. Their presence or absence gives economic life or denies the right to further business activity. Even if such a confiscation should immediately raise wages, the resulting decline in the volume of industrial equipment and the growing disorganization of industry would make it increasingly harder to maintain wages at a high level.

An intelligent attempt at their appropriation, therefore, is contingent upon devising substitute ways of getting the functions performed which "interest" and "profits" now serve. There is no reason to believe that the present system of securing factories, equipment, and materials through investment funds which are the voluntary savings of individuals and of corporations is the best that could be devised. Nor does overwhelming evidence point to "the desire for

profits" as a final discovery of motives which may be used to keep the wheels of industry revolving. But if substitutes are devised, their operation will not be costless. The surpluses which even in their perfected state they will permit to be added to wages will be far less than the total volume of profits. In fact, the measure of the efficiency of the substitutes over current devices for getting investment funds and for keeping industry going is an exact measure of how much can be saved out of the larger fund for an addition to wages.

3. A third source of the increment is the income from land, minerals, water-power, and other "natural resources" used in industry. Man has had little part in bringing them into the world; in some sort of condition they remain here without his aid; and he cannot by taking thought thereto appreciably add to their quantity. An abolition of incomes from the ownership of "natural resources," unlike that from investments in the apparatus of production, carries with it little threat to industry. It has, for this reason, long been an object of a persistent, even if largely loquacious, bombardment.

How large a return "natural resources" yield to their owners it is impossible to say with precision. Among corporate securities coal-seams, beds of iron ore, water-power, and the like, are not represented by special certificates of ownership. Each share of stock represents the ownership, not of tangible, physical objects, but of a definite fraction of the value of the assets of the corporation. If "natural resources" be disentangled from plant and equipment, materials, "intangible assets," "good will," and the like, its yield will in most industries be found to be below expectations. In many cases, particularly the ownership of farm land and urban real estate, it is depleted by the exactions of a tax system whose agrarian origin makes it bear more

heavily upon "real property" than upon "corporate assets." Even in mining the volume of royalties is small in comparison with "the wages bill." This source, however, is increasingly important; for a growing population and a developing industry increase the incomes which flow from the ownership of "natural resources."

Two peculiar obstacles lie in the way of an appropriation of such incomes. The first is the notion of the sanctity of property rights. Though this is only a habit of mind, it is so much a part of the "common sense" of the times that it is not likely to go with passing hobbies. The expropriation of "landed" incomes requires a willingness of the public to revoke, or to sanction the revocation of, property rights in natural elements. This change in attitude is not likely to be hastened by a knowledge that the original recipients of "unearned income" have sold their claims; that many of the present owners came into possession by purchase with real earnings; and that the great American investment market is a melting pot wherein property rights lose all marks of an unsavory origin and reappear as abstract claims to income.

The other and more difficult obstacle is the necessity for inventing and perfecting devices for getting at these "unearned" incomes. All bushels of wheat sell for about the same price whether they are produced among the thorns, by the wayside, or upon the good ground. But since fertile loam, sticky clay, and stony land entail very different costs of production, they yield to their owners very different returns. The more fertile the land, the larger the income from it. Each ton of coal worthy of the name, and some not so worthy, sells in the market according to its "grade" for about the same price. Its cost varies from very little in large and rich seams where machinery can be used, to very much in ribs so narrow that it must be dug out by men

lying on their bellies. The incomes from the ownership of seams varies inversely with the cost of getting the coal out.

There is no way of saying, "let these incomes from the ownership of natural objects be appropriated to paying wages," and it will be done. On the contrary some ingenuity is required to get at them. If the state is called upon to confiscate them by taxation, they come into the possession of the state, where, as likely as not, they will be devoted to the purchase of battle-ships, garden seed, and red tape. And to get them away from the state into a new-fangled "wages fund" is as hard as to get them away from their current owners. Nor will it do to allow the laborers in each mine, factory, or establishment to appropriate the differential income of that unit of industry; for such a scheme, instead of rewarding men according to their several deserts, would make their incomes vary with the poorness or richness of the soil, seam, or water-fall of the employing corporation. The only possible way of solving the problem is to formulate some plan for collecting these differentials and disbursing them among all the laborers in the industry. In short, an attempt to appropriate income from natural elements is contingent upon a changed attitude toward this peculiar property right and upon the ingenious device of a practical plan for expropriation.

4. The fourth source of an increment is the salary roll of the industry. It is possible for the contraction of the pay check to finance the expansion of the pay envelope. Such a change does not cause wages as a whole to increase. Rather it redistributes wages within the family of wage-earners in such a way that the laborer in overalls gains at the expense of the laborer in a white collar. The man who works with his hands may look with scorn upon so paltry

an offering as the salary roll. Yet there are here three possibilities which require mention.

In any industry wages might be increased by saving salaries paid for the performance of duties which are nominal. When an industry is being established there are few such jobs; as the industry grows, its organization expands, and its parts diverge, there is a chance for nominal positions to appear; when it is established, its organization becomes bureaucratic, the initiative of younger days becomes routine, and sinecures are likely to become legion. Even after active offices degenerate into routine ones, they are likely to be thought of in older terms. They are likely to carry an executive's pay for a clerk's work. Some of them may degenerate into ornamental pretenses of activity which are mere appendages to competent secretaries who do the real work. As an industry or establishment grows and its processes become standardized its salary roll will bear watching.

How much can be saved by paring salaries down to "the real worth" of their recipients no one knows. The facts about salaries are a bedlam of values. Some are traditional; some are fixed at an arbitrary figure; some represent attempts of managements to wax fat at the expense of stockholders. Some represent genuine attempts to appraise the value of offices or of individuals. Some have a doubtful basis in the competitive bidding of the market. In general, the principles which make them large or small are not so clear that one who understands them can make others understand.

Surely salaries are not paid for the mere sake of disbursing cash. They might reasonably conform to the two principles of giving to their recipients enough to enable them to perform their tasks efficiently and supplying them with incentives to do their best. That at present man;

salaries are in excess of the requirements for efficient work a comparison of business with professional incomes will attest. Nor is excessive size a necessary incentive; for in business in other countries and in the professions here a lower range of salaries secures from its recipients a measure of devotion to the task which is just as intense. An application of these principles should enable a considerable sum to be taken from the salary roll. Yet, under a system in which corporations compete for executives, it is impossible for a single concern to pare its salary roll without danger of weakening its personnel.

The elimination of salaries paid for the performance of "capitalistic functions" seems less promising. There are doubtless functions, such as those of the lawyer, the advertising manager, the commercial traveler, and the lobbyist, which industry might possibly do without. It is quite possible to devise a social order in which such functions would either disappear or lose their current importance. But so long as business is business and a fancied competition stalks the land, each concern must levy its tribute upon industry and invest it in competitive armament. To regard such functions as unnecessary and to refuse to waste income upon them is, under the prevailing order, the counsel of pacifism. So long as such expenditures are not excessive, they offer no surplus for wage-increases. If, however, industry is to be organized to eliminate them, the saving is not from price changes, which alone we are considering here. It comes rather from a reorganization of industry, which as a source of wage-increases will be discussed in its proper place.

5. The fifth, last, and least promising source of an increment in changing prices lies in the purchase of materials and supplies. If these can be secured at lower figures, wages can be raised, and the cost can be thrown back out

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of sight upon the alien industries from whom the purchases are made. Shrewd as it seems, this plan runs amuck upon a very compromising alternative. In the alien industries the burden of the wage increases will fall either upon the laborers or upon some other group of income receivers. If the concern of this argument were for a single group of laborers who wanted "more now" and cared not whence it came, there would be nothing amiss in placing the burdens of one group of workingmen upon the backs of another. But, since we are concerned with raising all wages, we are no better off by taking from one to give to another. If, however, the ultimate sufferer is some other group of income receivers, the surplus had better be used to raise wages in the industries in which it originates. Surely alien laborers have a less valid claim to it.

So it comes about that our argument about price-changes as sources of higher wages is valid so long as it sticks to an industry. When it crosses the line which separates industry from industry it gets out of hand.

CHAPTER V

WAGES AND "THE INDUSTRIAL ARTS"

"It's a poverty stricken country, full of goold and precious stones, where the people can pick dinner off th' threes an' ar-re starvin' because they have no step-ladders."

Mr. Dooley on "The Philippines."

A more promising source of advancing wages is to be found in the technical processes which make up industry. The attempt to increase wages at the expense of the surrounding incomes soon encounters definite limits. It must make good against the opposition of salaried officials and property owners who find their own lordly incomes too scanty for their prodigal demands. The outer limit of its success is fixed by definite functions with which such incomes are associated in industrial society as it is now organized.

The technique of industry presents limits which are far less rigid. With their larger knowledge and improved methods the Colonists could extract from the soil of a countryside more bread and meat than the Indians who preceded them. Today the scientific ritual of the trained farmer enables him to amass wealth where the Colonist would have starved. "The state of the industrial arts" does not abide; the magic touch of improvement comes to instrument, method, and process; and as they come our

human and material resources yield to their touch in greater abundance. The surplus which a developing technique brings is new, as yet unappropriated, and is not represented by established interests. It constitutes an ever-present, attractive, and available fund with which to raise wages. Above all, since few of the industrial arts have attained perfection and nearly all of them can be consciously improved, they can be made to yield an ever-increasing surplus. The possibilities of finding the source of a wage increase in an industry in better methods and in their wiser use can be briefly set forth under five general heads.

1. The surplus may find its source in the increasing efficiency of labor. As yet no essay upon so baffling a subject as the art of the employment of labor has been crowned with a prize. The conditions upon which the efficiency of labor depends, including as they do all the qualities of human personality and all the devices of industrial organization, are too many and too complex to be catalogued here. But within them are to be discovered some four or five larger problems which will both disclose its general nature and will indicate that, at least within limits, it will yield to a deliberate attack.

There is, first of all, the question of the relationship of physique and health to the efficiency of labor. In every industry one of the limits upon what laborers do is what they can do. The outside limits of accomplishment are set by the physical and mental capacities of the human race. Usually the actual limits are far inside the outward boundaries. In many countries arrested development and poor health make the laborer's active capacity a mere fragment of its theoretical maximum. In the United States general health surveys, the examinations of school children, and the physical tests given by the army all tell the same tale of

physique impaired by underdevelopment and by disease. Since physical inefficiency begets low wages, low wages begets inadequate nutrition, and inadequate nutrition completes the genealogical circle by begetting physical inefficiency, it is possible for the effects in starvation and inefficiency to outlast the third or fourth generation.

This problem cannot be met by a single concerted attack; it calls for the persistent application of a constructive program. Adequate nutrition must be furnished to children during the years of physical growth; assistance must be given them in building up that bundle of habits which is personality; a wage must be given to the adult worker large enough to yield the food, clothing, shelter, and recreation essential to fitness; a proper system for the supervision of health must be established; and a lot of mental acumen must go into the formulation of a program for preventing the premature using up of human resources.

Many obstacles stand in the way of a realization of such progressive gains in the efficiency of labor. Among them are the ignorance of the great masses of people who do not know the laws of physical development and are unacquainted with the subtle ways in which habits are formed and character established; the short-time contract for employment which prevents the employer from taking a long-time interest in the physical and mental welfare of his employees; and inherited notions of individualism which retard the development of an adequate program for the conservation of human resources. But even such stubborn facts must yield before a progressive attack, and the amount of their yielding is the measure of the increment which may be added to wages.

There is, next, the question of the relationship of the training and placing of laborers to the efficiency of labor. The lack of the proper adjustment between the abilities of

men and the requirements of jobs is one of the greatest sources of waste in the industrial system. Youths are denied the general education and the special training essential to efficient work; they are distributed between industries and occupations with scant regard to their capacities and aptitudes; and even within an industry their placement, special training, and promotion rest upon whim and accident rather than upon principle or reason. In late years some attempt has been made to reduce the chaos of labor placement to order, but the greater task remains undone. Were it effected there would be an increase in wealth from the greater skill of men set to appropriate tasks, the greater interest they would take in their work, and the greater permanency of appointment which better selection would insure.

Such gains, however, to repeat the tiresome story, have their limits. Where the machine technique is established and quantity production prevails, the great god "routine" lords it over personal efficiency. There the great mass of tasks use only a fraction of the laborer's intellectual resources, the training for the job requires a scant half a dozen lessons, and one man is as good as another. In addition the organization of business in the form of a hierarchy reduces to a minimum the number of tasks requiring discretion and intelligence.

There is, likewise, the question of the relationship of the utilization of labor to its efficiency. Once labor is placed, it must be used, and in the use of labor there is still a lack of wisdom. The problems of "hours of labor," "rest periods," supervision and inspection, task setting, efficiency systems, "scientific management," methods of wage payment, and the like, by their number and persistence, indicate what a crude affair "labor management" is today. The best solution of these problems as against the worst

will produce a vast excess in output. Yet, so little has rational procedure superseded rule of thumb that the best is only to be hoped for. Even in the little work that has been done the viewpoint has been so largely that of the engineer dealing with materials and treating laborers as if they were inanimate natural objects rather than human beings that it is of doubtful value.

Probably the problem of the use of labor will never be adequately solved by "efficiency men" who seek to get the most out of the human stuff they handle. It may be solved by the coöperation of laborers who are determined that the parts of themselves which they give to production shall be so used as to give them adequate returns.

Here belong, also, the kindred problem of absenteeism and efficiency. The waste through the abstinence of laborers from work is very large, though it varies considerably from trade to trade and from occupation to occupation. The check which this imposes upon rising wages is a double one. Since the laborer's needs run on, even if his job stops, it reduces his earnings. And, by virtue of irregular attendance, the employer is compelled to maintain a force in excess of the requirements of output. The roots of involuntary absenteeism are in ill health and accident. Its elimination lies along the pathway of physical development, the supervision of health, the reduction of accident, and the conservation of human resources. The causes of voluntary absenteeism lie buried in the characters of the workmen. It is to be overcome by whatever will bolster up the morale of labor.

This suggests as a final question the relationship of morale to the efficiency of labor. In this country the morale of labor is already high. The habitual way in which we expect to purchase goods manufactured by laborers just when we will; take it for granted that the shoes,

typewriters and automobiles we purchase are free from defects in workmanship; and entrust our precious and unworthy lives to the care of those who keep tracks in repair and run trains show how high it is. If workmen were to make a real use of sabotage, an industrial system as delicate and articulate as ours would drop to pieces and wages as wages would be no more.

However, this morale has too much of a negative quality; it is at best the morale of not "scabbing the job"; its active counterpart in intelligent and persistent attention to production is not so evident. Moreover, throughout a large part of the industrial system a more active morale is unnecessary. Where work has been reduced to routine, the machine sets the pace and the laborer must accommodate his efforts to "the iron man" he obeys. Where quantity production prevails and the various operations have been fitted into a mechanism that moves like clock-work, the laborer's will is as mute as any machine. An excess of zeal on his part is just as likely as "easing up" to upset "the whole procession." His morale can express itself only in punctuality at work and in the ritual of his standardized movements.

But where the older "indiscipline" prevails, as it still does generally, the laborer's will can still speed production and his grudge arrest it. Here high morale can be turned into a surplus which may become increased pay. Yet real obstacles hamper the development of morale. The separation of owner and worker leaves little chance for personal loyalty or personal appeal. The impersonality of industry, appearing to the laborer most realistically as a most personal boss, is likely to cause morale to languish. A system of prices breaks the connection between effort and wages or makes the relation between them an abstraction hard for laborers to grasp. This renders "the pecuniary incen-

tive" a very unstimulating one. The irregularity of employment tempts the laborer to harvest high wages when the opportunity comes and to give of himself sparingly. When he discovers, as occasionally he does, that during depressions employers are filling orders out of stock, the while their employees are idle, he does not lose control of himself in his enthusiasm for large output.

These difficulties can probably be overcome and the problem of morale be solved; but it seems that some guarantee of regular employment and some device for connecting effort and reward must first be found. Here is work for the technician of the economic order.

2. The surplus may find its source in the increased efficiency of management. In the world of dreams each workingman may build the ladder by which he rises, determine his own fate, and carve out his own destiny, in fulfilment of the word as recorded in copy-books and the proceedings of bankers' conventions. In the world of reality his wherewithal to be fed and clothed depends quite immediately upon the efficiency of the management of the concern employing him. High up in the list of badly needed books still unwritten should be placed one upon, "How to keep even with the world, or a treatise upon the gentle art of selecting one's boss."

How directly the laborer's wage is dependent upon his employer's ability is evidenced by noting the relative abilities to pay wages of two concerns alike in every respect save that one is manned by a first-class and the other by a third-class personnel. What possibilities of fatter pay envelopes lie in improving the quality of management is manifest to one who will for a moment contemplate a world of industry under really able and competent management. Since the management has all discretion in industrial and business matters, the question of its efficiency is even more

tangled with confusing issues than that of the efficiency of labor. However, a bare mention of three of the more important of the questions connected with it will bring the problem down to earth and will show what promises its solution holds.

Most important of all is the question of selecting the personnel of management. At present the process of choosing officials seems to all but be initiated shrouded in mystery. The higher officials of a corporation are selected by directors who are chosen by the stockholders. In many cases they are identical with the owners of the larger blocks of shares. In other cases they are acceptable to, and represent the interests of, the dominant group of owners. The under officials in their several ranks are usually selected by their immediate superiors; they are employed, promoted, demoted, and discharged by their "betters." In all of this the aim of competence is somewhat confused by personal interest, kinship, acquaintanceship, and other alien considerations. It is muddled even more by the ignorance of self-appointed selectors of the personal qualities which various positions demand, their own inability to detect these qualities in others, their lack of ingenuity in devising tests of competence, and their unwillingness to give the necessary time to it.

The movement for the betterment of the personnel of management must take the double form of setting up standards of competence for various positions and of devising methods of finding individuals possessed of the necessary qualifications. This procedure must avoid both the waste and the recklessness of the method of "trial and error" now generally employed in business and the routine and irrelevance of the formal examination used in civil service. Nor can the test be confined to initial selection. Positions which differ in rank differ also in the quality of

the demands upon their holders. Since attested competence for the lower place is not competence for the higher, special evidence of fitness for the new position is demanded. We are just getting over the frontier notion that any man is good for anything. The art of selecting officials peculiarly fitted for special positions is in its infancy. But its very youth is a testimony to the great possibilities of gain which its solution holds.

Next in importance is the question of ridding industry of "marginal managements." There are groups of administrators who are just upon the ragged edge of competence and whose establishments barely manage to remain "going concerns." It is notorious that under such managements firms are able to pay only very low wages. Such low wages are contagious and the range of contagion is the whole industry; for, so long as the labor supply overflows the better establishments and fills the poorly managed plants, "the ability to pay" of the latter acts as a check upon the wages which competent managements must pay to attract men.

If the struggle for economic existence always ran according to the rules which the books have laid down for its guidance, all marginal managements would long since have gone to the wall. In some industries, for good or for bad, by act of God or through the guile of man, this has happened. But for all the laws made by economists, the establishment with an incompetent management is still in the land; it survives in the country's most basic industries.

It may be that a demand upon such managements for wages in excess of what they can pay is the way to their elimination. It may be that ingenuity will suggest some simple plan whereby they may be manned with personnels more efficient. In any event the problem must be solved many times over. For the elimination of grossly incompe-

tent managements leaves slightly less incompetent ones in a marginal position. So the process must be repeated until the managements of all the establishments in an industry measure up to a reasonable standard of competence or until the available supply of first-rate human material for official positions runs out.

Finally, and still in the realm of importance, is the question of enlisting the services of management in the real work of the industry. To the community the essential work of the industry and of the establishments which make it up is the production of services and of wares. Under our prevailing form of the business control of industry, the management is too prone to subordinate the output of commodities to the exigencies of profit-making. The most flagrant abuse of managerial position is its use for the advancement of the financial ventures of managers or of owners who employ them. More important, but less culpable, is the deliberate restriction of production to secure higher prices and larger profits, a practice so common as to be called "capitalistic sabotage." Most important of all and most respectable is such negligence of the essential function of industry as indifference to technique, neglect of organization, short-time policy, and a conduct of business with an eye only to the semi-annual dividend.

So long as industry is organized under the control of business it will probably respond primarily to profit-making and indifferently to the demands of production. But, short of a revolution in business control, something can be done to cause managements to see their plants a little more as instruments of production and a little less as ventures in finance. This can be achieved partly by devising a scheme of incentives which will keep the industry in sight, and money-making contingent upon this end, and partly by the establishment of a professional code in busi-

ness. The subject is new and little known. Perhaps the best first step is for some labor organization to offer a prize for an essay upon, "How to improve the morale of management."

3. A surplus may find its source in a development of the technique of industry. What the Iowa farmer gets from his land and what the Sioux Indian got from soil as good is all a matter of scientific method and machinery against the primitive art of scratching with a stick in the mould. Wages in the United States overtop those in Italy and Italian wages look extravagant to the Japanese peasant largely because of differences in knowledge, methods, and machinery. It is the extended use of machines and mechanical power and the larger natural resources which they have unlocked which has raised the meager wage of a century and a half ago to one which supports the current standard of living. If that wage is still too low, it is because laborers through ignorance, lack of strength, mistaken strategy, or Christian charity, have permitted the great gains from "the progress of science and invention" to be drained off into other incomes.

Important as this source of rising wages is, it is strange that it has almost always been overlooked by those who have tried to secure for workingmen higher wages. The explanation can only be that the leaders of trade unions have sought to tap funds from which they could get "more now." They have been little concerned with a source which despite its great promise could only be reached through a long-time program. What advancing technique may be made to yield to an increasing wage a cursory statement will show.

Long before America was "commercial America" or England had become "industrial England," a "common sense" theory of how discoveries, inventions, and improvements in

technique came about and of who should possess the resulting gains came into being. This theory has found expression both in writings on economics and in legislative enactments. It assumes that each invention or discovery is the work of a highly gifted individual; that the community must offer to the man of genius a pecuniary reward as a bait to get from him his pioneer work; and that, at least for a time, he is by virtue of creation the owner of the surplus wealth which he produces. His rights find expression in a patent which confers upon him sole ownership of his device for an extended term of years. At the end of this period the discovery or invention is to become public property. Then any producer who wishes can use it. Since many will do so and will compete in attempting to entice the public to buy their wares, no one can make anything out of the invention. So, in theory at least, the returns belong to the inventor for a span of years and then become the property of the public in low prices.

The coming of industrialism has invalidated this theory of invention. The startling discovery and the isolated invention alike belong to the forgotten past. The progress of technique is now a matter of the advancement of the double frontier of scientific discovery and of practical application. The more fundamental work of scientific discovery is carried on by research "staffs," connected with universities or foundations and manned with a personnel who are paid fixed salaries and whose primary "incentives" are curiosity and scientific reputation. The more immediate work of practical invention is entrusted to research organizations, maintained by corporations or industries, whose members are in touch with the "profession" and who receive "fixed" salaries. An innovation in technique is nearly always the last step in a long and concerted attempt to win for man a bit more mastery over the domain of

nature. The contribution of the inventor is a very small part of the joint work of many men who have made the advance possible. In many cases it is so definite and tangible that inventors can tell quite accurately how long it will take them to solve given problems.

Many industries now try to capture whatever is relevant in scientific discovery and to incorporate it in technical processes. The system seems capable of extension to all industries. Under it the cost of innovation in method or contrivance can be reduced to almost calculable terms. Wherever it is used only a fraction of the real expense of innovation is borne by the corporation or industry and that fraction is small in amount compared with the gains which the improved technique makes possible. After all the costs are met there remains a surplus, wholly or partially "unearned," as you please, for some one to claim.

We seem to have no definite policy for the appropriation of this surplus. Since the corporation usually takes out patents upon devices perfected by its research organization, the immediate returns pass into its coffers. Thence they may be disbursed to the consumers in lower prices, to the laborers in higher wages, to the officials in higher salaries to the maintenance of salesmanship, advertising, and the rest of the competitive armament of business, or to the stockholders in larger dividends. It is certain only that somehow or other it gets appropriated. It is probably idle to inquire too zealously where the surplus made possible by recent technical development has gone. All of it is by this time probably represented by established equities of one kind and another. But for the future the technical advances are not yet made, the surplus has not yet been distributed, and in it there are at present no vested interests. If wage-earners are determined that the industries in which they are employed shall maintain research organi-

zations, if they have ingenuity to work out a scheme for appropriating the resulting surplus, and if they have patience to wait for results, they have here a certain and increasing source of larger returns.

Incidentally, the advance of knowledge and the development of technique open new stores of natural resources. "The gifts of nature" may be physically fixed in quantity; but, if so, it is only as matter and energy. It requires the spark of man's knowledge to convert them into natural "resources." Thus it required "dry farming" to convert the waste of the Dakota desert into fertile ground and a whole body of knowledge to turn seams of coal and iron into the energy and machinery of industry. What stores of wealth still lie hidden in the matter and energy of "the world of nature" we cannot know. But when knowledge gives value to such resources, the hosts of labor, if they are wise and able, can make them an expanding "wage fund" for better living.

4. A surplus may find its source in improved tools, machines, and other equipment of industry. Improvement in pattern and design mean a larger output at a lower cost. If some skilled technician could painlessly extract all obsolete equipment and replace it with the best models, there would immediately appear a large fund, upon which others as well as laborers would cast covetous eyes. Unfortunately the process of substitution is a costly one and the costs set its limits. Two problems involved in the process of obsolescence and replacement will make this clear.

The first limiting factor is the rate at which the new equipment may be installed. The rate is a double affair of the superior efficiency of the new machine and the cost of scrapping the old one. Since new designs of standard pattern in spite of all their merits usually cost little more than the cruder ones they replace, the effective check

upon their introduction is the cost of scrapping the older models. If the substitution occurs when the old machine is worn out, the surplus is all net gain. The greater the amount of wear in the old machine, the greater the cost of obsolescence. Were it not for this expense which eats away the surplus created by better equipment, machines might at will be replaced by better ones. In the navy, model follows model with kaleidoscopic rapidity, while in even an up-to-date plant the turn-over of equipment is a tedious process. But the corporation must bear the cost of premature obsolescence while the navy can heap it upon the backs of generous taxpayers. As a permanent policy laborers stand to gain most from a slow rate of replacement, for in that case the surplus from increased mechanical efficiency is all net.

The other limiting factor is of quite a different character. It is the unwillingness or the inability of marginal managements to scrap ramshackle equipment and to bring plant and machinery up to standards set by the better establishments in the industry. Like poor management poor equipment diminishes the ability to pay and is a constant threat to wages throughout the whole industry. If some combination of men should help nature enforce the alleged "law of survival" and deny the right of economic existence to such concerns, an effective check on wages might be removed. Better equipment and larger yield would force up wages in the poorer establishments. Since others would be bidding against more efficient competition, they would have to pay more and wages would go up throughout the industry.

5. Finally, a surplus may find its source in improved organization within the establishments making up the industry. Factory organization is still in its swaddling clothes. It has neither the strength nor the knowledge to

drive the rule of thumb, trial and error, and the forgetfulness called "experience" out of industry. The possibilities of reclaiming a surplus from disorder and waste are as comprehensive as the whole domain which will eventually be brought under "the law and order" of business administration. It is impossible to do more than suggest one or two of these prospective sources of gain.

The "established order" of nearly every plant can be improved. The closer articulation of parts of the business, the avoidance of duplication of function, the systematic planning of the day's work, the provision against future contingencies, the proper correlation of processes with other industries, the installation of a system of accounting that gives accurately and quickly the information upon which business judgments are to be made, and a hundred things of the kind present possibilities of a reduction of costs. The gain from each may be small; but the aggregate is large enough materially to raise wages.

Quite as promising are the results anticipated from the establishment of "standards of efficiency." As yet little progress has been made in developing standards in terms of which it is possible to test the efficiency of each of the agencies which make up a concern. In rather broad terms, too vague to be discriminating, one can speak of one official as "good" and of another as "bad," of one department as a "success" and of another one as a "failure." But it is not easy to disentangle the contribution of the head of a department or of a workman from the general result and to appraise it. Hence business practice has stumbled into a difficulty from which there is no easy escape. It has persisted in making pecuniary reward the incentive to good work. But it has created a system wherein the work of the individual is lost in a product in motley to which many men doing various sorts of work have contributed. It is

not true that good work and high salaries or high wages go together. It is not true that if laborers or managers are inefficient they get no pay.

In view of this general condition it seems necessary to supplement pecuniary rewards with other incentives. There might be set up "administrative standards" for determining the efficiency of the persons who comprise the management; "department standards" for showing how well the persons in charge of the divisions of the undertaking are performing their tasks; and "production standards" for measuring the efficiency of the work of laborers. Such standards would help to preserve the vanishing nexus which in thought at least connects effort and reward. If properly applied they would have the added advantage of revealing the current status of efficiency and of pointing toward possible improvements.

How much of the promised land lies beyond the frontier of the current status of the industrial arts we do not know. We can only say that there is no reason to believe that we shall soon reach the effective limits of their development. They offer to laborers who are alert and wise an ever-expanding surplus from which to take higher wages.

CHAPTER VI

WAGES AND "THE ECONOMIC ARTS"

"'Ring out th' old,' says a guy at th' Brothers' School. 'Ring out th' old, ring in th' new,' he says. 'Ring out th' false, ring in th' true,' says he. It's a pretty sintimint, Hinnissy; but how th' divvle can I do it?"

Mr. Dooley on "New Year's Resolutions."

A quest after the wherewithal of higher wages runs finally into the institutions which make up the economic order. Our industrial system is not that of our grandfathers no matter how heroically we try to apply their ways of thinking to it. The habits, customs, institutions, and arrangements which make up the "order" wherein we toil, divide our gains, lay up our treasures on earth, and use our wealth are peculiar ones, unknown to other ages. Moreover, whether we would have it so or not, they are constantly changing, producing an altered industrial system at whose coming structure we can only guess.

So we must regard our "industrial system" as an active cause of our "structure of wages" and argue that because the structure of business and industry is as it is wages are as they are. If the system were different, the various rates which make up this structure would probably all of them be different. Can we, then, change these arrangements which make up the prevailing order to make them yield the golden surplus which is the object of our quest? Or, since

that scheme of things will not abide in its present form, can we direct a growth which in any event is inevitable to our chosen ends? Can it eventually come about that "the system" will yield to a more efficient and a less wasteful one?

Such questions are both old and new. They are old, because in every age the riddle of riches and poverty has led reformers to point an accusing finger at "the system." The production of hand-me-down substitutes for capitalism, which today is carried on by quantity methods, and the fabrication of utopias in every age attests its lack of youth. It is new, or at least new to us, for we are just emerging from a period wherein men thought of economic institutions as fixed and absolute and of the economic order as a part of the world of nature.

So long as men regarded the economic order as "an automatic self-regulating machine," they could not be expected to give conscious attention to an improvement of the man-made arrangements which make it up. They could not compare ways of doing things and the functions of institutions with those of other ages and places, nor could they critically examine them to the end that they might the better serve their purposes. Such an attitude denied the existence of "the economic arts" and retarded their development. But with the recovery of the knowledge that institutions are of human contrivance and that they make up our system of work and reward, we are beginning again critically to assess our arrangements in terms of goodness and of efficiency.

The larger inquiry of a judgment upon the economic order is beyond our immediate purpose. Here it is enough to inquire into the possible sources of new wealth to be found in the development of the backward "economic arts." In this short discussion it is impossible to survey all the institutions which make up the order. But the nature of the

examination and the sources of new wealth from a change in economic institutions can be indicated by a cursory survey of some six typical problems. Whatever answers be eventually given to them, they will abundantly attest the close relationship of the size of the pay envelope to the habits, beliefs, and customs which make up the economic order.

1. A solution of the problem of "the business cycle" promises a surplus. If the violence of "the rhythm of business activity" were toned down, the gain would be large; if it were eliminated altogether, the saving would be enormous. A depression leads to a period of increased business activity which becomes one of "flush times" which runs into a depression. This cycle ever runs its merry round. At one time men, plants, and equipment are worked beyond their capacities; at another, a large part of the human and material resources of society stand idle. The causes of this rhythmic movement of business and of industry are many and complex; they ramify to the ends of the earth and even unto the outmost limits of the economic order.

An adequate solution of the problem involves a consideration of almost every economic agency. Perhaps it is impossible so long as industry is subject to business guidance. At least it is too intricate to be discussed in a single paragraph of a book on wages. Here it is enough to indicate how intimately this ebb and flow of economic activity is tied up with the rate of wages.

Its most obvious effect is to reduce wages by creating unemployment. It may well be that nominal rates of wages, stated as so much per day or so much per week, remain the same. But a rate of wages which one does not receive buys few tickets to the moving pictures and fewer automobiles. The real rate of wages consists of earnings for a full year or some other period long enough to have some

significance in the life of the worker; and this rate is materially reduced by unemployment. Indirectly the unemployed reduce the wages of their more fortunate brothers who retain their employment. For without wages they cannot buy; their failure reduces the demand for products; and the reduction in the demand for products limits the ability of the producers to employ labor.

A smaller burden upon wages is the tendency of the business cycle to increase the costs of production. In years of depression when orders are few and plants are run below capacity, "overhead costs" have to be spread thick over a small output. Since they are payments for plant, equipment, and the like, which must be used whether or no, such costs do not vary with the demand for the product. But, in years of prosperity, there is no relief. Increased demand drives up the price of materials; the cry for more labor when all laborers are employed makes labor more costly; and it is expensive to work a plant beyond its capacity. If these extremes could be cut off, the volume of production from year to year might be made regular. That would reduce costs and provide a surplus which might be diverted into higher wages.

The problem of making production regular, with its promise of regular employment and lower costs, is the problem of the business cycle. Here a single suggestion, prompted by our immediate concern with wages, may be made. It is that a tax as high as the traffic will bear be assessed against irregularities in the volume of employment. Since the conduct of employers proceeds from pecuniary interests, this makes it to their advantage to keep the volume of production and of employment regular from year to year. If the receipts were disbursed in unemployment benefits, this would give purchasing power to the unem-

ployed, arrest the slump in buying, check the fall in prices, and reduce the violence of the rhythm.

This probably would not eliminate the business cycle; for its causes are too widespread to be gotten at by so simple a device. But it would hardly fail to make the rhythm less severe; it would effect a substantial saving; and it might suggest the next step in a program for bringing the business cycle under control and removing a very baffling problem in economic organization.

2. A surplus might be found by reducing payments for the services of property. A great many people believe that we are paying very extravagant prices for the uses of property for productive purposes. Natural resources all yield returns to their owners, despite the fact that they had nothing to do with their creation. "Corporate excess," "intangible assets," "good will," and the like yield their fruits of dollars and stock dividends, even if they have no basis in tangible physical property. Investments in buildings, plants, equipment, and the like still return their toll to the owners even if generations have been gathered to their fathers since the original savings made the investments possible. It seems reasonable for the community to set up the principle of paying for the services of property the minimum necessary to secure such services.

In the abstract, though nothing ever exists in the abstract, the ownership of natural elements in the creation of which man has had no part, should be vested in the community; private individuals should not be allowed to take tribute from "intangible assets" created by the community's demand; and genuine investments should be paid with just enough to insure their continuous flow. The difficulty is that ownership is so intimately connected with the operation of the industrial system that any simple and direct attempt to abridge its vested rights is likely to end in economic dis-

aster. The acquisitive arts seem to be far more highly developed than the economic arts; the barricades with which ownership has been hedged about are far more formidable and ingenious than the weapons which have been contrived for the attack. Those who would limit the harvest of property owners to their own sowing are in the predicament of the Gilbertian company who were all agreed that it should be done, but no one could think of a plan.

If the laborers, or the public of which they are so large a part, were to give to their own rights a modicum of the care and wisdom which is lavished upon the maintenance of privilege, the burden of ownership might be materially reduced. To begin with the clearest claim to an income from property, we pay too much for genuine savings which through investment find expression in plant and equipment. The investor receives shares of stock which for an indefinite period entitle him to a yearly income or bonds which bear interest for a period of years and are repaid at maturity. Since the repayment can again be reinvested in securities bearing interest, in either case the owner receives for saving and investment a reward which runs on indefinitely.

The wages of one who works stops with his labor; the salary of the organizer ceases when his task is done; and even the income of the inventor from the property which he has created ceases after a term of years. If laborers, managers, and technicians receive limited and terminable incomes, it seems only reasonable that the investor should receive a definite series of payments for his services. If scientific knowledge, discovery, and invention become "public property" after a term of years, there seems no reason why investments in the apparatus of production should not become the property of the community when those whose savings make them possible are fairly paid.

This can be accomplished by the very simple device of buying the investments with annuities running for a period of years rather than with indeterminate securities. For the moment this will not reduce the "property charge," since interest must be paid on the annuities. On the contrary it will increase it slightly; for annuities, to have an equal market value with indeterminate securities, will have to be issued at a fraction of one per cent higher interest. If such a higher rate is used, the annuities will at the time of issue have an equal market value with the securities they replace and there can be no denial of a right to property. However, at the end of forty or fifty years, which is a very short time in the life of a community, they will automatically expire and the burden of the ownership charge which they represent will disappear.

This device has the added advantage of offering a plan for the eventual "liquidation of ownership" in natural elements, intangible assets, and other corporate property. An attempt to confiscate such property is unfair, since a great deal of it has changed hands many times and has been purchased by its current owners in all good faith. It is dangerous, since it is certain to upset market values, with results in arrested production and industrial disorganization of serious moment to the whole community. It is, also, likely to prove futile; for any attack upon established incomes is likely to encounter the most stubborn resistance.

However, if the community is willing to wait a generation, the saving can be effected without any violent change in the economic structure and in fairness to all. This can be accomplished by the very simple device of recalling outstanding securities and replacing them with terminable annuities. To make the new certificates of ownership equal in market value to those they replace, either they will have to be issued at a slightly higher rate of interest or a small

cash bonus representing the excess of value of the older securities will have to be paid. In this way, and at a trifling cost, the whole burden of the ownership charge might be lifted from industry in less than half a century.

In this plan, startling as it is, there is no necromancy. In simplest terms it is only buying out all the returns due to ownership fifty or more years from now. It costs so little because the series of incomes which begins fifty-one years from now and stretches away toward eternity has so little current market value. The individual's hold on life is too frail for him to look so far ahead; but half a century is so short a span in the life of the nation that the cost is small and the gain enormous. The wage-earning class is the larger part of the community and in higher wages or in cheaper goods it can claim a large share of the savings.

A similar source of higher wages is "the corporate surplus." It is getting to be a common habit for a corporation to save part of its income and to reinvest it in "improvements" and "extensions." This practice can become universal. In fact, at present at least one-fourth of all new investments consist of "corporate savings." Such surpluses represent earnings in excess of the payments which have to be made upon outstanding securities. New securities of a value equal to the savings are usually issued and are allocated to the old stockholders. The public, of course, in purchasing goods pays a property charge upon these improvements and extensions just as it does upon the original investment. Now, if new securities were not issued, the returns from these new investments from within the business might be diverted to paying higher wages. As the establishment or industry gradually expanded, a larger and larger portion of the conventional property charge might be diverted to the payment of wages.

This could be accomplished without any conscious finan-

cial change through the simple device of the collective bargain between wage-earners and the employing corporations. It would, however, amount to giving to the laborers a property right in the extensions and improvements made possible by "corporate savings."

3. A small surplus might be found by reorganizing the marketing of the products of an industry. At present the system which an industry uses for the disposition of its wares is made up of a complex hierarchy of jobbers, wholesalers, retailers, high and low factotums, and whatnots. Some of these functionaries might be eliminated and the toll which they levy upon the productive process diverted to the incomes of wage-earners. There are, however, two conditions which impose obstacles to effective market reorganization. One is that there are functions, such as transfer, storage, and delivery of goods, the display of wares, and the extension of personal credit, which are essential under any type of organization, and which fix a minimum beneath which an effective organization cannot be reduced. The other is that in course of time "vested interests" in an organization which performs unnecessary functions have grown up and that these have no thirst for extinction.

4. A possible source of increased wages might be found in a unification of one or more of the processes carried on by an industry. There was a time when those concerned to find the more with which to fill pay envelopes confined their attention to dividends, profits, and like pecuniary things. But of late the search has been carried far and wide and many adventurers have reported that unclaimed wealth is to be found in a unification of one or another of the many processes which make up an industry. These proposals need to be examined separately and in some detail.

There is, first of all, the growing demand for "collective

marketing." A number of the items which make up the cost of marketing are for such necessary services as the transportation of goods, their storage, and service to the consumer. Many more of them, such as expensive wrapping, advertising, and salesmanship, have their sources in an attempt to persuade consumers to buy particular brands. It is because of an increase in these competitive and unnecessary items that selling costs have of late rapidly mounted and have become a heavy drain upon industry. In particular, the demand for staple commodities like flour, underwear, and coal is remarkably steady, and the bombardment of competitive salesmanship can only persuade the consumer to prefer one of a number of indistinguishable brands.

In this country law has recently permitted competing firms to establish a single agency for the exploitation of the foreign market. Of late there has been a hue and cry (particularly among growers of wheat and of cotton) for similar agencies for covering the home market. There is little doubt that a unified marketing organization, particularly in a staple industry, could effect substantial economies.

There are, however, three obstacles which such a proposal must overcome. The first is the vested interests of the profession of salesmanship and of a national press that thrives upon competitive advertising. The second is the necessity of an agreement between the concerns maintaining the agency for an apportionment of sales and of production. The third is the necessity of formulating a definite program for protecting the public against extortionate prices by concerns who are no longer competing. A surplus lies in "collective marketing"; but there are barriers that must be broken down to get at it.

There is, second, the demand for collective research in technique. A single firm, particularly if it is small, lacks

vision and resources to engage in the experimental work necessary to perfect technique. If, by an odd chance, it should make some discovery, the secret would soon be the common property of its rivals and its competitive advantage would be lost. Nor could it count upon our clumsy patent laws for a certain protection of its rights. Where all the concerns in an industry are about of a size, little research goes forward. In fact, it is only the large corporation, with some monopoly advantage, which can afford to invest current profits in a struggle for future gains.

But the competing firms in an industry, no matter how small, might well unite in maintaining a joint organization for the collection of information, the development of technique, and the establishment of technical standards. The cost to each would be small; the results would belong to all the firms making up the industry. The advancing technique would materially increase the ability of the industry to pay wages. The only obstacles in the way of so promising a scheme lie in the contrary mental attitudes of nearly every one concerned. A coöperative solicitation about developing technique is not the principal ingredient of business management. The public would scent in the whole affair an ingenious and iniquitous attempt at monopoly. And the government, under a score or more of counts, could make out a case of an attempt to break the anti-trust laws.

There is, third, the proposal of a "wages pool." From time untold the payment of wages has been to the employee from his own employer. In the past each has had to "go it alone"; the employee contenting himself with what he could extract from his "boss," the employer paying what he must as best he could. Despite the mark of age such a scheme is customary rather than inevitable. It is now proposed that the whole machinery of wage payment be taken from

the individual concern and concentrated in the industry as a whole. There is to be a "wages pool" for the whole industry. This is to be composed of contributions made by employers in accordance with some principle, as for example, so much for each unit of output or for each laborer employed one day. Out of this all wages are to be disbursed at prescribed rates.

The object of the scheme is to free wages from "the ability to pay" of the single establishment and to make them dependent upon "the ability to pay" of the industry. This would eliminate the depressing influence of the marginal management or marginal concern. It would give to the whole wages structure of an industry a stability and a regularity which it does not now possess.

The scheme seems to be only a cumbersome way of making wages a little larger. A trade union powerful enough to force an increase in the price of the product of the industry might make it a very ingenious device for fleecing consumers and distributing the loot among laborers. But, if the interests of consumers are to be respected, and if the state does not contribute to the pool, it is hard to see how it could raise wages materially. At best it might levy a wage assessment against each concern in an industry in accordance with its ability to pay rather than that of the "marginal establishment." This would only average out the abilities to pay of the several firms and eliminate inequalities in the wages paid to laborers working for different corporations. It might perhaps be made to replace marginal managements by others more competent to extract earnings from their businesses. But it seems that its success would be contingent upon an elaborate and troublesome organization. And it is quite likely that a simple device of a minimum wage might accomplish the same object.

5. A source of higher wages may be found in the complete unification of the industry. Among the bedlam of conditions which make a wage large or small one is the organization existing among the establishments making up an industry. At present an industry is, or in economics and at law it is supposed to be, an aggregation of competing corporations. In fact, this watchful aloofness is modified, to what extent only those who are in the secret know, by some semblance of unity for price-making or other altruistic purposes. Under the present form of organization wages are what they are; under a different system they will be what they will be. They may be higher or lower than they are now, but quite certainly they will not be the same. This demand for a unification of industry comes from optimists who have discovered this last desperate source of an increased wage. United as they are in the demand for merging all managements into one, they break into three groups, each with its distinct proposal for accomplishing this object.

The simplest of these proposals is for a control of all the establishments in the industry by a single large corporation. This would preserve "private control" and "business management" in a form crudely known as "monopoly." It would permit "collective marketing"; it would make possible "collective research"; it would insure "financial unification"; it would make wages dependent upon "the ability to pay" of the industry and thus establish quite informally the principle of the wages pool. It would permit the systematic distribution of establishments within the industry, the formulation of a single plan for production, and the development of a constructive policy looking into the future. Against this many economists would set down losses from the deadening touch which bureaucracy and security give. While the case for monopoly is still unproved, economic

opinion is looking less favorably upon the blessings of competition and is finding in monopoly, particularly in the basic industries where quantity production is possible, possibilities of great efficiency.

The objections to the scheme take the form of a dilemma. We may permit rival concerns to unite or we may compel them to do so. If we permit it, monopoly will become the dominant form of organization in many industries, for the corporations which make them up are quite willing. Yet, in this event, unless the laborers in the several plants are united into a powerful and compact body, as comprehensive as the industry, there is little likelihood that the economies effected will be used to raise wages. In fact, we have not yet reached the point in cosmic evolution at which those who organize monopolies find their chief incentive in a desire to raise wages. But, if we compel corporations to come together into a monopoly, we cannot be sure that they will direct their actions toward the benevolent end we have in mind. In short, we have not yet reached the point in universal progress where the economic arts can furnish a practical plan for controlling so unruly a creature as a monopoly. So long as "the people" distrust their ability to regulate a trust, it must come, if come it must, surreptitiously.

A more ambitious proposal is the nationalization of an industry. In its terms the separate corporations are to pass out of existence, the control is to be consolidated in a single bureaucratic organization, and this is to become a branch of the government. Individuals may still own bonds that are paper evidences of investments in the industry; but these give to their owners fixed incomes and entitle them to no voice in management. Its advocates modestly claim for nationalization all the advantages and freedom from all the disadvantages of monopoly. All of the economies of

unification will be realized, and, thanks to the government, there will be no baffling problem of control.

For many decades we have had a nationalized post-office. Our educational industry is carried on under the control of the state. The great enterprise of maintenance of public highways is under public auspices. In many lands and at many times industries have flourished and withered under government control. Yet, in spite of all this, we know as little about the workings of nationalized industry as we did before the process began. We know so little after all these years that the question is still largely an academic one. Industries are not all alike; an organization ideally adapted to the post-office may be quite unsuited to coal. Moreover, the real goodness or badness of administration is to be found in the component parts which make it up. It is only when the question of "private control" versus nationalization is broken asunder into such inquiries as which can secure investment funds at the cheaper rate, which can attract the more competent personnel, which can secure a higher morale among laborers, and a hundred similar inquiries, and these are answered, that an answer to the larger question is possible.

Of late some very interesting and important work has been done in analyzing these problems and in gathering and interpreting materials which illumine them. But as yet research and experience have not reduced the evidence to terms definite enough for judgment upon the effects upon an industry from so sweeping a change in the form of its organization. It may well be that ere long its champions will be able to present a convincing case for nationalization; but, in that event, their proposal is likely to bear little resemblance to the crude plans we are offered today. But, lest they hope too fondly, they must remember that, whatever its future promise, the adoption of any scheme which

cuts athwart the usages and habits of the business system is certain to be followed by an immediate loss.

An even more daring proposal is for unification under some form of "workers' control." It has been suggested that the management of a unified industry be entrusted to the joint control of representatives and workers, of workers and consumers, or of workers alone. Under such a scheme the corporate form of organization might be retained. In this event various groups might have blocks of stock assigned to them in proportion to their several shares in control. Almost certainly all certificates of ownership would take the form of bonds bearing a fixed rate of interest. Except for "outside regulation" the state would have no control over the industry.

For this scheme its advocates claim all the advantages and freedom from all the disadvantages of monopoly and of nationalization. As against monopoly it will save the morale of labor which under "capitalism" is a "wasting asset"; it will conserve and utilize in the management of the industry the experience and the intellectual resources of labor which now go to waste; and it will safeguard the interests of the public against private exploitation. As against nationalization it will avoid the deadly sin of bureaucracy and it will involve no radical break with the existing forms and usages of business.

Such proposals are as fascinating as they are promising. If ingenuity were persuasion, we would all accept their promises whether or no. Nor can we insist that the results will belie the promises; for there is more conviction than fact in the case against them. We can only insist that these proposals are too new and too little understood to be accepted in exchange for the present system. It is only when analysis, the accumulation of fact, and careful and detailed restatement has reduced this general proposal to a specific,

constructive program that a judgment upon it will be possible. It is, however, more than possible that in the fullness of time, which no one is willing to wait for, an intelligent attack will convert this pious wish for workers' control into a practical plan.

6. Such proposals as these prompts a suggestion of "economic research" as a promising source of the much-sought surplus. This suggestion of a frontal attack upon the problem of economic organization is alike more scientific and more radical than any which has been made. It is that there be established one or more institutions for research in economic institutions and for the development of the economic arts. Thanks to human nature, or to the behavior induced by the system under which we live, the acquisitive arts flourish without any artificial encouragement. The industrial arts are of tedious growth; but the case for scientific procedure in their development no longer requires argument. Yet so prone are we to regard the temporary and human arrangements which make up the economic order as eternal and natural, or as the fittest survivals of a long process of conscious trial and error, that we take them all for granted. Some of us naïvely regard a conscious attempt at their betterment as an impious act, and it occurs to few of us to subject them to critical scrutiny. Yet there is nothing in their character which makes the economic unlike the industrial arts. The institutions which make up the economic order were never deliberately created; its frame-work was a matter of no conscious ordination; its being is the result of no miraculous inspiration. It emerged as the result of the attention given by many men to the small matters of their own concern. The constant changes which are occurring in it are the by-products of attention to particular interests or special problems. Its development

is even now more a result of acquisitive pressures and of technical change than of conscious design.

Of late there has been an increasing demand for research organizations to accumulate "the facts" about the economic system. In response to this bureaus of economic research have been established. But necessary as such "fact-finding" bodies are, they fall short of meeting this demand. To supplement them there are needed research organizations with competent personnels, who are able and willing to examine objectively proposals for economic change. By analysis, criticism, the accumulation of fact, and interpretation they should be able to convert vague proposals for novelty in economic organization into detailed, articulate, and constructive proposals for change. This they should do, working as the "scientist" works, without passion or cosmic concern, making no commitment for or against the proposals. By this means the thought, effort, and goodwill which individuals put into suggestions for change might be conserved. The worthless could be discarded, the promising could be made practical, and the practical could be incorporated into the structure of the economic order. Above all, such constructive work in economic research would enable us to pass valid judgments upon proposals for change. It would be a significant step in the substitution of "reform by method" for "reform by agitation." The advance in the state of the industrial arts is coming to rest upon objective and imaginative research. The "backwardness of the economic arts" might be overcome by a like attack.

Such are the numerous and nebulous gains which a conscious revision of economic institutions offers. They are alike more vague and more promising than those offered by a development of the industrial arts. Our lack of attention to the structure of industry and of business robs us of the

knowledge whereby we may know which of the sources we have discovered are the more promising and how much conscious attention to each of them can be made to yield. The overwhelming evidence of the backwardness of economic organization argues convincingly that the gains will be large.

In this discussion there stands out a close nexus between wages and the institutions which make up the economic order. If the organization of industry under the guidance of business holds a large element of chaos, wages are lower because of it. If the elements of blind vision, cross-purpose, and confusion which still lurk within it could be expelled, wages would go upward. Wages are what they are because the arrangements which make up the economic order are what they are. An attempt at their elevation by conscious attention to the arts which find expression in economic structure has its limiting factor in our ability and our willingness to make an objective attack upon the problem of perfecting the economic organization.

CHAPTER VII

THE RIGHT AND MIGHT OF LABOR

“ ‘Tis betther to give thin to rayceive,’ says th’ good book. Mind ye, it says better, not more nachral. It ain’t nachral to do ayether. It’s aisier to keep thin to give, an’ more sportin’ to take away thin to rayceive.”

Mr. Dooley on “The Christmas Spirit.”

If the world were simple and good, if different kinds of incomes had their separate sources, if the new wealth accruing from a development of technique and economic organization would fit only into a pay envelope, the tale of the sources of wages would be told. But, to confuse us and add to the gaity of life, the sources of wages are the sources of all incomes. As free wealth emerges from the development of the industrial and the economic arts, stockholders would add it to profits, directors would convert it into a “corporate surplus,” the advertising staff would invest it in salesmanship, and the officers with all Christian charity would add it to salaries. These surpluses, instead of automatically becoming wages, as they should in any proper fairy story, become objects of contention among all who get incomes from the industry. How much goes to laborers depends upon their power to command this free income in rivalry with these other groups. That competitive strength is largely a matter of right, of knowledge, and of power, each of which deserves a word in passing.

In modern industrialism a moral claim to income, while not indispensable, is at least no obstacle to its possession. Laborers, like other groups, are not indifferent to their rights to the surplus wealth made possible by technical and economic development. Unfortunately they are in the dark as to what they have or have not the right to claim. Our society has set up no standards by which the fairness of wages, salaries, or profits may be judged. So far as it is committed to a moral principle it is that the price which the market sets upon a good or a service is a fair one. This is not quite allowing morality to sanction whatever price the market may wantonly fix; for the theory holds that the price is the result of a double competitive process, buyer bidding against buyer, and seller against seller. This is, of course, at best a very immediate moral judgment, for there lurks in the background the question of why a price made in an open market through competitive bidding is necessarily a fair one. The judgment also takes little account of the current fact that in the determination of very few wage rates does competitive action approach this ideal state.

In the absence of ethical standards, one can do no more than examine quite superficially claims to this income in terms of a few crude "common sense" ethical notions. For the purpose we had better consider incomes from pecuniary sources apart from those which proceed from the development of the industrial and the economic arts. The peculiarity about the first is that giving to labor involves taking from some other income. Whether these other incomes possess or lack ultimate moral justification, they are now in somebody's possession. Since ownership is now constantly being bought and sold, many of them have been acquired by their possessors in ways which the great majority of us would call fair. Every readjustment of a

wage contract to some extent redistributes income between laborers and property holders. But the right of possession imposes a limit upon how far labor should go in possessing itself of such incomes. More important is the limit imposed by the functions of saving and investment which under the prevailing order are intimately associated with property incomes. If the right of the nation to an abundance of industrial equipment is a moral right, either property incomes must not be pared down so far as to interfere with the process of investment or some other means must be found for making "provision for the future."

The community has even less of a theory of how the new wealth created by advances in the industrial and the economic arts is to be distributed. The shreds of principles exhibited in such institutions as the patent-system, private property, pecuniary competition, and the like, assume a static and orderly universe, quite unlike the developing society that exists. Since those who created the theory out of their own moral judgments had no conception of a free income, the result of economic "progress," they fell short of offering a plan consciously designed to dispose of this surplus. Since the community has no expressed intent in the matter, it may be argued that the laborer's claim is just as good as any other's; and, if he makes it good in the market, it will have all the economic, legal, and moral validity with which the system can endow it.

It is more important that in terms of ethical standards of more or less repute his claim is the most valid of all. The patent-system would allow the consumer to reap lasting benefits of change; the theory of democracy puts in a claim for numbers; and the principles of Christian ethics puts emphasis upon needs. Thus they unite to present overwhelming evidence in behalf of the laborer's title. And if, as the common sense of the age is wont to insist, "the

creators" of new wealth have the right to the lion's share of it, laborers can make their claim conclusive by initiating and pushing forward a constructive program for converting the potential sources of wealth into actual income.

But, since moral principles are not the sole elements of the power of possession, we must look further. Thrice armed is he who can add power and knowledge to a quarrel just. Right and might cannot attain their end without knowledge. And from the sum of all knowledge a knowing of the devious ways of wages is most necessary. If the representatives of labor have inside their heads a theory of wages which holds that rates of wages are inevitable, that they are fixed by "natural law," and that they rest upon such general terms as "demand" and "supply," they begin their fight with the battle lost. If they think that wages can be increased only at the expense of other incomes, they will wage it along a narrow and very unpromising front. If they think of the technical efficiency of labor, the ability of management, the state of industrial technique, and the efficiency of the organization of economic processes as fixed, they are neglecting very promising sources of attack. If they understand the changeable character of the many and varied pecuniary, industrial, and economic factors upon which every rate of wages rests, they can wage the battle constantly all along the line, ever varying the strategy to attack at the point which promises most.

The success of such an attack depends upon careful preparation. Those who make it must know approximately how much each of the sources of wage increases can be made to yield, how much it will cost to secure it, how long it will take, and at what moment to strike. This requires a knowledge of the finances and prospects of the industry, of the technical organization of production, and of the articulation of plants into the economic organization of

the industry. Since industries are very unlike each other, and an industry today is in a very different position from that occupied yesterday, this information can be given in no book and imparted by no revelation. It can be gathered only by those who know the industry, who know how to garner and interpret information, and who will take the time and trouble to get the real facts. A great deal of it must appear in the quantitative form of accounts and statistics. Already much of this information is available to those who know how to find it. In some cases a demand for full information about an industry may have to be the first step of the laborers in a program for advancing wages. Like other skilled ventures, this is no work for well-meaning amateurs. It can be really successful only when entrusted to a semi-permanent research staff representing the laborers of the industry.

But careful preparation will not guarantee results without concerted action. The rhythm of the business cycle unites with the voice of prophecy to declare that there is a time for pressing pecuniary demands, a time for technical change, and a time for economic reorganization. When prices are low, business is stagnant, and labor a drug in the market, the program must be different from that used when prices are mounting, business is booming, and the cry for more labor is unheard.

But, whatever the time, in action as in preparation, the program must have the support of all the laborers. To that end they must be organized and act as a unit in bargaining. The rate of wages which appears in separate contracts between a corporation and each of its employees is likely to be lower than that made between it and all of its employees acting together. The institution of collective bargaining is a necessary one to laborers in seeking to appropriate unclaimed income.

It is also of note that if the program is other than acquisitive, if it is to aim at the development of technique and economic organization, it must be the demand of all the laborers who stand to gain from such a development. For that very reason its success is contingent upon a larger measure of coöperation between the various groups of laborers in an industry than exists at present. In fact, it requires, at least for this purpose, an amalgamation of the various crafts into an organization as broad as the industry.

In last analysis, however, the source of strength is in numbers. In any industry a scarcity of men who can do its technical work will raise the wages of its laborers and give them command of the sources of wealth. Here a dearth of men with requisite skill, a protracted period of apprenticeship, a high admission fee for membership in a craft or any similar device will enhance bargaining power. On the contrary in an industry which is overrun with men who are competent to do the work, laborers must endure low wages and exclusion from control of the sources of wealth.

Since industries to some extent compete for workers, such situations do not exist alone. Back of them is the ratio of the working population to the productive resources of the country. This is so important as to be a basic factor in even the most cosmic or the most ephemeral theories of wages. If this ratio favors labor, its power is great; if it runs against it, its most heroic efforts will accomplish little. In this land of potential plenty a weaker and more poorly organized trade unionism has been able to establish wage rates greatly in advance of those won by the stronger and more articulate trade unionism of Great Britain.

For the future this ratio is likely to be even more favorable to labor than in the past. The resources of the nation

in natural wealth, equipment, technique, and organizing ability seem ample. A domesticated birth-rate, checked by comfortable prudence, promises a slow growth of the native population. A dam built against the great flood of immigration allows only a small stream of aliens to pass into the country. Without these checks the sheer mass of coming millions and the resulting disorganization would make impossible a concerted program for higher wages. Because of success in making the birth-rate behave and in excluding aliens America is becoming a very exclusive club, wherein the privileged membership can take charge of its own affairs and put its house in order.

This optimistic promise, however, must not go without a word of caution. Laborers must be alert lest growing strength beget indolence and injustice. The arrested immigration, the more homogeneous character of the labor supply, and the greater scarcity of laborers is going to make it easier to organize and to maintain trade unions. There is danger that these will give their attention too exclusively to an acquisitive program, to the neglect of the development of technique and organization from which new wealth must come. In this event "more now" is likely to be at the expense of "more afterwhile."

There is even graver danger of gross injustice between different groups of laborers. With a more stable population there will be less of the bustling rush of workmen from plant to plant and industries will possess more permanent groups of laborers. In industries whose products are in great demand there will be a much better chance for laborers to appropriate new gains than in those in which the demand is weak and intermittent. As industries of strategic importance expand there occurs now and then an occasion which the employee may improve to turn the strategic importance of the industry to account. Such occasions come

rarely, if ever, to the workers in industries of little strategic importance.

The same question of justice among different groups of laborers is raised by the possibility of the elimination of the ownership charge from industry. If the saving goes to the laborers as consumers it may be fairly evenly distributed. If it goes to them as wage-earners in the industries in which it originates it may work injustice. In industries in which there is a large investment in plant and equipment and few workmen are employed, each of these will receive a large addition to his wages. In industries with small investments and a large number of workingmen, each will get a small bonus. In this event, whether the laborer gets much or little depends upon the accidental facts of the amount of the ownership charge in the industry and the number of its employees. This will amount to no more and no less than a transfer of the rights to claim income from ownership from those who now possess them to the laborers in the industry. Whether such a situation will hold more or less of injustice than the present arrangements is a question about which we will differ and is not to be argued here. It seems clear that it will not work ideal justice between various groups of laborers.

If it should come about that all industries were organized, if the laborers in all of them were gathered into unions, and if the workers in the more strategic industries could keep their ranks intact against the invasion of laborers from less important industries, all the returns due to the strategic position of the industries could be converted into differential wages in those industries. In this event it would come about that laborers in general would be paid, not in accordance with native ability, skill, experience, training, or application, but in keeping with the strategic positions of the industries they served. The wage-differentials in the

better-paying industries would amount really to converting the importance of the industries to the community into a property right for the benefit of its laborers. Whatever else this may be it is at once a recognition of a new form of property and of privilege among groups of wage-earners.

If there is to be a comprehensive organization of laborers by industries, and if organized labor is to grow in power, the only effective check upon injustice among groups of laborers must come from labor unions giving constant attention to their interests as consumers. That alone can equitably distribute these differential surpluses among the whole body of wage-earners. Whether our growing control over our numbers in this country is to convert our inchoate mass of workers into a labor hierarchy, with a new tyranny over its members, or into a democracy depends upon whether the laborers in the less strategic industries can be organized as consumers. In its future program organized labor must keep in mind its ideal of justice between groups of workingmen.

Thus the discussion of the power of labor over the sources of wealth ends, as it began, with a moral question.

CHAPTER VIII

THE CONTROL OF PRICES

"What diff'rence does it make to ye how far ye move forward, if ivrything moves forward ahead iv ye. Now, as thin, ye are chasin' th' willow-th'-wisp iv good groceries. As ye begin to rethreat they come back, but there's niver a day ye can reach out an' seize thim. Ye are, as Hogan would say, th' same rilitive distance fr'm a tenderline steak that ye were thin."

Mr. Dooley on "Hard Times."

The rate of wages, as we have learned and have probably forgotten, is a double affair of the price of labor and the prices of goods. In any occupation winning a nominal wage is only one-half of the problem of gaining a living. To complete the process the laborer must take it to market and exchange it for the necessities, amenities, and follies of life. His real wage is as intimately dependent upon the terms of that exchange as it is upon the number of dollars which make up his earnings. Or, quite briefly, the prices of wares and services are one-half of the problem of wage rates. The worker is, therefore, as much concerned with keeping the prices of goods down as he is with keeping the price of labor up.

This array of prices belongs to the same world of man-made arrangements as the price of labor. It has the same variety of sources, is subject to the same sort of control, and requires the same conscious guidance. If wages are

to be kept up, trade unionism must take as much thought to keeping prices down as to keeping nominal wages up. A program directed to this end requires an enumeration of all the factors which make prices high or low and a discovery of the varying degrees in which they are responsive to control. But, since this catalog would be like that of the sources of the price of labor, which has just been given, it seems unnecessary to present it at length. The reader can, with time and patience, following the outline above, formulate it for himself. Here a mere cursory statement of the more peculiar of these sources is all that can be attempted.

The most obvious way in which the system of prices can give the laborer greater abundance is through a decrease in the price of goods which are means to his well-being. All the improvements in the industrial arts and in economic organization, discussed in detail above, are sources of lower prices of commodities. Their many savings, instead of being used to raise wages in the industry or to reward owners with overgenerous profits, may be given to the consumer in lower prices. Of particular importance are the necessities which constitute so large a part of the laborer's budget. Where many brands of the same article are produced in many small factories, under methods which make only a partial use of the machine process and the principles of large-scale organization, there is lack of efficiency and high prices. Where specialties are eliminated, the work of production is reduced to a standardized routine and the processes of quantity production prevail, costs and prices are materially lower. Of late there has been a tendency to think of problems of production in terms of engineering. Technicians ought to be able to formulate a program for having our basic commodities produced under a system which will yield maxi-

imum results with a minimum of expenditure in human and material resources. This should yield an enormous surplus. If justice is to be done between laborers in different industries, a large part of this surplus should go to consumers. In addition to programs for wage increases in particular industries, an organization representing all the wage-earners of the community should formulate a program for giving to the consumers the gains from the application of developing industrial and economic arts to basic industries.

A step in the same direction is the diversion of productive resources from the fabrication of luxuries to the making of necessities. The articles which we discover in the market are so unlike as to appear to be made of very different materials. Yet, if we break them up into their elements, resolve these into their constituents, and continue the process far enough, we shall discover that in large part they are made of common and adaptable materials. In their basic terms we discover such unspecialized resources as soil, coal, investment funds, and unspecialized labor. If we catch these elements early enough in the productive process, we can make of them what we will. The extent to which we can direct these rawest of "raw materials" to new uses depends upon how far back in the productive process we are willing to go to exert our control and upon how long we are willing to wait for results. Since a yacht cannot at an act of will be converted into housing, and battle-ships are too stubborn to be turned into harvesting machines, there is little possibility in immediate diversion. But if, instead, we aim at cutting off or reducing the market for luxuries, the interests of the producers will eventually teach them to give their attention to the production of other articles. We can, if we will, strike from national budgets the expendi-

tures for big guns, coast defences, submarines, and all the materials of competitive national armament. We can, by a judicious use of luxury taxes and graduated income and inheritance taxes, greatly reduce the demand for non-essentials and persuade their producers to give us necessities instead. This, in fact, we are doing. We might do it less clumsily, if we were more conscious of our intent. Nor must we forget that a similar end will be served by all legislation and all social measures which tend toward a more equitable division of income.

Prices can also be lowered by giving stability to the purchasing power of the nominal wage. Prices which are so irregular as to obey no orders but their own are always high prices. Though mathematics will never explain it, a regular scheme of prices gives far more to the laborer than an irregular one which averages out at the same figure. This is because low prices tempt him to purchases for which his need is not great and high prices make it necessary for him to go without those of greater value. If he had omniscience to apportion his income to the changing prices of the market, he would not lose; but, since he does not, the gifts of low prices cannot restore to his budget what high prices take away.

Moreover, since prices are forever changing, the worker seldom knows the real value of his nominal wage. He only knows that low prices give and that high prices take away and he curses the name of the price-system. If he had within him some sort of a defensive armament, such as the "instinct psychologists" might invent for him, by means of which his needs and aspirations might soar when prices fell and his demands upon the world shrink as the cost of living went skyward, he would be fit to survive within the system. It may perchance be that through variation and selection a type of worker adapted

to the vicissitudes of life in a pecuniary environment may yet be evolved. But for the present this hope is vain; the worker's demands are for goods essential to life in an orderly community; they possess regularity and demand of income the same characteristic.

The chief offender in making it difficult for the laborer to adapt himself to his pecuniary environment is "the unstandardized dollar." Though it has been unjustly called upon to bear many iniquities which are not its own, it is a most unruly member of economic society. In intent the dollar is a measure of value; in practice it falls far short because it is almost as capricious in value as the values it attempts to measure. If a business suffered half as much from some irregularity as the community does from the unregulated dollar, it would set competent men to work to search out a remedy. When our country was agricultural, when business was slow, and when the volume of trade was small, a definite quantity of gold served none too well as a unit in which to quote prices. But, with the rise of an intricate industrial system, in which the economic organization is contingent upon precision in measuring value, it is socially dangerous to cling to so crude a device.

Perhaps the thought that the gold dollar is divinely inspired is too strong for us to expect a scientific dollar, which is a fitting companion to modern technique, modern business, and modern economic organization. Perhaps a knowledge that a "stabilized dollar" can be established only when the fat years of prosperity and the dull ones of depression are reduced to a period of prosaic activity will prevent its establishment. Perhaps a realization that so exact a measure of values can be bought only at a sacrifice of many of the features of the business control of industry will inhibit its introduction. But, however

this may be, the perfection of a device that can look the good old honest yardstick in the face should be one of the first duties of a real institute of economic research. The establishment of a real "stabilized dollar" will mean a substantial increase in the laborer's wages.

Quite as important as lower prices is the elimination of unnecessary expenditure from the laborer's budget. If his nominal wage remains the same and prices in general maintain their level, the saving from unnecessary purchases can be converted into useful goods and services. This can be accomplished in two ways. One is by having some agency furnish him with services for which otherwise he would have to pay. Thus for some time by a development of the public school system the state has saved him the expense of his children's schooling. Today he is being saved the costs of accident insurance by the development of systems of "workmen's compensation." The other way is by the sheer elimination of expenditures for unnecessary items. When one learns to substitute physical exercise for the magic of patent medicine, the saving can usually be spent. Whatever be the truth about "light wines and beer," a multitude of instances attests the increase in material comfort which follows the elimination of the expenditure for heavy drinking. Nor is the matter wholly one of personal prudence. The current movements for the healthy development of children, the extension of sanitation, the growth of preventive medicine, and the reduction of accident promise to free the laborer's meager budget from unnecessary expenditures. If these arts develop, it may eventually come about that from the wage is lifted entirely the heavy burden of expenditure for the avoidance of ill-being.

CHAPTER IX

THE LABORER'S FREE INCOME

"In ivry city in this unfair land we will erect school-houses an' packin' houses an' houses iv correction. Whin ye've become edycated an' have all th' blessin's iv civilization that we don't want, that'll count ye one. We'll threat ye th' way a father shud threat his childher if we have to break ivry bone in ye'er bodies."

Mr. Dooley on "Expansion."

There remains for consideration the laborer's "free income." He has access to a stream of services which lie outside the purchasing power of his dollars. Some of these, like education for his children, he can have when he has need for them; others of them, like the use of the company's gymnasium, go along with his employment. None of them has been produced by business for sale and ticketed with prices; all of them are his upon conditions quite independent of markets, pecuniary competition, and the system of prices. Some of these, like the use of public parks, have always been beyond the immediate control of the business system. Others of them, like the supervision of health, are being lifted out from under the domain of purchase and sale and are being organized as "services." The future promises an increase in the nature and variety of these services and that increase will respond to other than pecuniary considerations. A consideration of the pos-

sibilities of increasing this income requires a brief examination of each of its two important sources.

The first is the corporation employing the laborer. In recent years many concerns have established for their workers devices for easing the strain of the day's work, facilities for recreation, health services, and opportunities for industrial training and general culture. The motives which have impelled these programs of welfare work have been as varied as the programs themselves. One concern has invested a sum the bulk of which would otherwise have gone into "excess profits taxes"; another has sought by this means to bolster up the waning morale of its laborers; a third has cast its bread upon the waters hoping for a return with interest after many days; a fourth has yielded to a feudal sense of responsibility for its men; and a fifth has seen in such "betterment" a step toward a genuine democracy.

With the passing of years the services which rest upon the sandy foundations of whim, sentiment, and tax-dodging are disappearing. The remaining ones are coming to be looked upon less as charities and more as the rights of workingmen. Even the sentimental term "welfare work" is passing into disrepute. The steady, if irregular, extension of "industrial services" rests upon a valid basis. Its spirit and method is that which finds expression in the development of technique and in the revision of economic organization; it is an attempt to make the position of the laborer one which he has a human right to claim.

It has been argued that the employer pays for such services by subtracting them from wages; and, hence, that they represent only a diversion of the laborer's income from his own purchases to services which the employer buys for him. If this argument is true, they represent no net addition to his wage. However, no proof of this has

been offered. In fact, since such services have so generally been begun by monopolistic and semi-monopolistic concerns, the evidence seems to be all against it. It is, however, undoubtedly true that laborers look upon such services, and in many cases quite justly, with suspicion. In no event must they be used to blind the eyes of workmen to inadequate pay or unjust working conditions, or to purchase the silence and inaction of those who might lend their efforts to the realization of a constructive program tending to an elevation of the position of the wage-earner. In fact, their development and utilization requires the participation of wage-earners in the formulation and administration of "services" furnished by the industry. If laborers see to it that the sources of such free income are profits, corporate surplus, or increased production, it will constitute a new addition to wages. For the rest they have only to take care that such types of service are developed as will administer to the needs of the laborers as human beings as well as employees of the corporation.

The second source of the free income is "the political order" within which the laborer lives. Many of the services performed for him by the federal, the state, and the local governments are so regular and so obvious that he takes them as a matter of course. The maintenance of law, the prevention of "force and fraud," and the preservation of means of communication are all necessary to the existence of the economic order. Whatever be its overemphasis upon the rights of property, the law adds something to the laborer's income by giving it a measure of protection against those who would, by fist or tongue, by force or guile, take it from its possessors. The laws providing against payment in scrip, guaranteeing bank deposits, and denying the use of the mails to fraudulent stock promoters are but three examples of a very imper-

fect protection which barricades the laborer's earnings against "sharpers."

With the coming of industrialism and the passing of the theory of laissez-faire there is a great increase in the number of the services which the state is offering the laborer. To cite a very few, the state is providing or forcing the employer to provide compensation for industrial accident; it is attempting to protect the laborer's family from disease by an elaborate health service; it is providing educational facilities for the laborer's children and is beginning to make provision for adult education; it is furnishing facilities for recreation to all the members of his family; and, in the very near future, it may provide him with some sort of a guarantee of regular employment. Many of these services the laborer could not buy for himself; several of them are essential to his welfare; some of them determine what sort of men and women the next generation is going to be. The number and quality of these "gifts of the community" vary greatly from state to state. It is estimated that in a typical industrial community their increase has within a generation added ten per cent to wages; but that is an understatement, for their services have a quality which cannot be reduced to market terms.

Free as they are to the laborer, all of these services impose a cost upon the community. That cost is the most effective check upon their extension. In general they are paid for with money collected through taxation. If their ultimate source is a tax upon amusement, an excise upon tobacco, or customs duties upon bananas, coffee, and sugar, the laborer pays a large part of the upkeep out of his own pocket. If, on the contrary, the taxes fall heavily upon luxuries, incomes, and inheritances, the laborer in large part escapes. If the income tax is sharply graduated and

is based upon the principle of "ability to pay," he avoids most of the burden. A fuller appreciation of the importance of these services, an increase in the political power of labor, and a better appreciation of the niceties of a system of taxation as a means of control argue for the gradual extension of the services performed by the state for labor.

The social importance of this free income is not adequately appreciated. In the past in every established community the relationship of the worker to the man over him has never been expressed exclusively in pecuniary terms. In other ages and under other systems labor was not bought at so many dollars per unit of man-power. On the contrary, the whole man was employed and the employer was under obligations to the whole man. If the employer of old—if the phrase is not an anachronism—knew little about the subtle and varied needs of body and mind, he at least felt responsible for the welfare of his men. The annals of the manorial system, of the "plantation system," and of English farming are full of accounts of services which custom and social responsibility led the "over-man" to render. It was the shock of the coming of industrialism which broke down personal relationships and rested the wage contract upon "the cash nexus."

An ideal of democracy, however imperfectly it has been realized, has helped industrialism to make a free man of the laborer. He can no longer accept gratuities from a benevolent employer or a paternalistic state. But in a society like ours he can not make his own provision for health, safety, leisure, development, and culture. These must be the fruits of co-operative effort. The industry in which he works is his industry; the state of which he is a citizen is his state. These he can use in securing for himself, outside his regular wage, services which decency

and culture require and which no wage can buy. Their costs are small and immediate. Their results last even unto the third and fourth generation. In the end, in increased wealth and in better men and women they pay for themselves, some five, some ten, and some a hundred-fold.

CHAPTER X

A THEORY OF WAGES

"Th' profssor thinks no wan wurruks enough. I wudden't whisper this to th' boss if I were you," said Mr. Dooley.

"I hope they'll fire him fr'm th' Union," said Mr. Hennessy.

"They can't," said Mr. Dooley. "Th' Mettyphysical Union that he's a mimber iv is divided into manny camps an' ivery mimber iv it is a walkin' dillygate."

Mr. Dooley on "Philosophers."

A discussion of the sources of an increment in wages leads inevitably to a "theory of wages." There are just as many theories of wages, reputable and disreputable, as there are books and articles upon the subject. Lest the number of wage rates be in excess of the number of explanations of wages, for several generations economists have been working overtime contriving new theories. The addition of another to this confusing babel of tongues is probably the penalty which the god of dialectic exacts of those who will speak or write about wages. But at this point in the argument it is too late to call a halt. A general statement is necessary to bring together the discursive comments above and all the ingredients necessary to its manufacture are at hand.

Like other good things of life a theory is both useful and dangerous. If we would use it aright we must know quite definitely what it is intended to do and what its limitations

are. The disrepute in which many men profess to hold theories is ill-deserved. Upon "theory" judgments have been heaped for sins of which it has been guiltless. A theory may be bad; but its badness is not in its being a theory, but in its being an untruthful one. A theory may be used to prove or to disprove something to which it has no application whatever. But the fault is the fault of the clumsy user and not of the unoffending theory.

For a theory is only an explanation in general terms. It is a mere statement of what is common to a number of like objects or situations which have been observed. Since they all have much in common, it tells the approximate truth about each of them; since they all have their peculiar features it tells the exact truth about none. With a good theory one may with diligence and intelligence tell much of a new situation which is like those with which the theory is concerned. But the theory will not explain the unknown automatically and its truth will not redeem the ignorance of those who misapply it. If each condition that we met were all its own, if one situation were wholly dissimilar from another, and if life presented an endless pageant of unlike things, experience, generalized statement, and theory would alike be of no avail. In fact, it is our ability to meet the partially new with the old in general terms that enables us to get along at all. This is the use and the justification of theory. But if to indulge in theory be wickedness, then are those who profess to despise it sinners beyond all men.

At the very beginning it is necessary to understand the nature and the limits of "the functional theory of wages" which is to be presented. It grows out of a single one of many problems of wages. Its origin is in the question of how real wages are to be raised. Its formulation is an attempt to reduce the discussion above to general statement, to tell in very broad terms the factors upon which the rates

of wages rest, and to indicate in a rough way the control which can be exercised over each.

It is a theory, not *the* theory of wages. It is a single one of a large number of theories of wages, each of which has its beginning in some one problem of wages. It is not a cosmic explanation of the many-sided and bewildering thing called wages. It requires from half-a-dozen to a score of theories, perhaps even more, to do that. This theory explains wages, so far as it explains them, from the standpoint of the single problem of how they may be raised through a conscious control of the factors upon which they rest. Its claim to a hearing is that this is by far the most important of all the problems with which those who receive wages or bother about wage theory are concerned.

The theory which is implicit in the above discussion, quite inchoate as it is, is given an outline statement below. Its primary concern is with the question of how a wage-rate in any industry or occupation is made. It requires for its completion answers to two other questions: What are the relationships of rates of wages to each other? What is the relationship of wages as a whole to all the other incomes from industry? In terms of the control of wages the supplementary questions are of far less importance than the leading one. It is, therefore, fortunate that our knowledge of the making of particular wage-rates is far more thorough and far more accurate than that relating to the more general questions which used to be the exclusive concern of wages theory. We may, therefore, start, as we should, by asking, what are the factors upon which *any* rate of wages depends.

1. The factors upon which any rate of wages depends are those from which, as we found above, an increment may come. If wages might perchance be higher if laborers had more technical efficiency, technique were more rapidly developed, industrial equipment were improved, or the

organization or establishments into an industry were more perfect, wages are what they are because the technical efficiency of labor, the rapidity with which technique develops, the state of industrial equipment, and the mal-organization of establishments into an industry are what they are.

The argument above has shown that a wage-rate may advance because of a change in any one or a number of variable sources. It could have been shown, quite as easily, that its fall could have been effected by a contrary change in any one or a number of these basic factors. An explanation of the conditions under which the rate of wages could be higher or lower than it is is an explanation of why it happens to be at its present figure. The higher rate, the current one, and the lower one rest upon the same factors, sources, antecedents, or if you must have it so, "causes." They differ, as differ they must, because of differences in some one, in a number, or in all of these antecedents.

It is, therefore, possible from the tedious argument above to list the factors upon which *any* rate of wages depends. The formula must be general and incomplete, for to discover all the things of earth and of mind which influence wages and to resolve and to re-resolve each of them into its manifold detail is an impossible task. Moreover these conditions differ so much from occupation to occupation and from industry to industry that no mechanical statement can ever catch the full meaning of their reality. All that is possible is to set down the general antecedents which are fairly typical and to resolve them into enough detail to take away their abstract character and to reveal what human and manageable things they are. If more is required the reader may, from the argument above, and from his own analysis and knowledge, push this general formula as much further as he pleases.

In terms quite formal and far too solemn, the rate of wages paid in an industry or occupation is a combination of

- I. The laborer's real wage. The size of this depends upon
 1. The nominal rate of wages. This, in turn, rests upon
 - A. The position of the industry or occupation as regards
 - a. The prices of its products, the costs of its raw materials, and the sizes of the incomes which go to the owners, to the management, and to others who have claims upon it.
 - b. The current state of "the industrial arts," with respect to labor, management, technique, industrial equipment, and the organization of the plant.
 - c. The current state of "the economic arts" which consists of a large number of conventions and arrangements. Typical of these are the guidance of industry by business, the organization of an industry as a number of competing concerns, the placing of "the wages bill" against separate establishments rather than against the industry as a whole, and the absence of any competent research staff for the conscious development of a less wasteful organization for industry.
 - B. The ability of wage-earners to discover and to appropriate income in competition with other groups who would possess it.
 2. The purchasing power of the nominal wage over the goods and services which make up the laborer's budget.
- II. The "free income" of services which fall to the lot of the laborer as an employee in industry or as a member of "the political order."

Even so brief a statement of the formula makes it evident that the factors upon which a wage-rate rests are, one and all, customs, habits, practices, conventions, and arrangements, all of human contrivance and all subject to human guidance. Nowhere among them are to be discovered "the inevitable causes," "the natural forces," or the other imponderables that by some mysterious but inevitable "natural law" holds wages in their vise-like grip.

But, realistic as the terms of this formula are, they are still too general to disclose the passive and human character of the sources of wages. It is only when this statement is resolved into the current and specific detail of a particular occupation or industry that its realistic character is fully disclosed. But when, to take the single example of the coal industry, these abstractions become laborers too provoked with the inefficiency of "private enterprise" to give their best, managers too poorly paid to be efficient if they would, inspectors far too few in number for the task, engines and machinery so obsolete as to be dubbed "the originals," and a sprawling conglomeration of establishments into an industry, uncontrolled from without and powerless to control itself, it becomes evident that the final terms of the formula are anything but inevitable abstractions. Or, to put the matter more briefly, and more academically, they are "institutions."

If such be their character, these wage-making "institutions" are all variables. Because of what they give or withhold the rate of wages is subject to a constant process of addition or subtraction. An increment is added to it because of an increase in one, in a number, or in all of these factors, or because of an improvement in the bargaining position of wage-earners. A decrement is subtracted because of a decrease in one, in a number, or in all of these

factors, or because of a decline in the bargaining power of labor. The making of a rate of wages is not a single mechanical act. Even when nominal wage-rates remain the same, the real wage is given no respite from the buffets of the industrial system. Of the making of a wage there is no end; it is a continuous process; it is forever being remade in terms of the vacillating factors which lie at its basis.

Since these factors are "institutional" and variable, they are, each in its degree, subject to control. The real basis for a belief that wages can eventually be brought up to their proper level is the conviction that their basic factors are subject to guidance. This characteristic is, therefore, far too important to be passed over without some detailed comment.

First of all, there are limits to the conscious control to which these sources of wages will respond. There are no magi who will fill the pay envelope to overflowing at a mere touch of an Aladdin's lamp. On the contrary the factors which give or withhold earnings to the laborer are stubborn things and only intelligence and patience can gradually extract from them what they hold. As they are unlike in kind so they differ in the barriers which they interpose to control. The unwillingness of the consumer to bear the burden is a check upon wage advances through rising prices; the cost of the replacement of equipment retards the rate at which technique develops and the sublime faith of the public in the beneficence of an unreal competition arrests economies through a unification of an industry. It could not be otherwise; for in our developing society the advancement of each of the factors is more or less checked by the others which impinge upon it. But "the limits" themselves are not impassive barriers; they are human beliefs and customs which will yield before a concerted intellectual attack. How far the frontier of control can be pushed against the

barricade of limits only time and persistence will show. All the evidence, however, indicates that for a long time to come a proper control can extract more and more from these sources.

Next, these factors differ greatly in the groups to whose conscious control they may be made to respond. A single corporation can increase the efficiency of its management; the development of technique can be controlled by an organized industry, but not by the average establishment within it; a change in the form of an organization of an industry involves an appeal to "the public." A single craft union can raise the nominal rate of wages in a trade; only an amalgamation of all the unions in an industry can control developing technique to wage ends; it requires an organization representing all wage-earners to prevent nominal advances in wages from being swallowed up in higher prices. Many of our agencies of control were never designed to get at these basic sources. Unionism, for example, as limited by its current structure, is almost powerless to secure increased technical efficiency or to perfect our current economic organization. At present more than one of these sources lies beyond the reach of any instruments of control which industrial workers now have at their disposal.

These factors differ, again, in the time which must elapse before laborers can receive the returns which their control makes possible. If a price is raised, the increased wage may appear at once or even in advance of the new market price. If the increase has its source in greater efficiency of labor or of management, it may be months before it becomes real. If ownership is to be "liquidated" by substituting terminable annuities for outstanding securities and without any confiscation of market values, it will be more than a generation before the returns are realized. The further we go from the superficial fact of wage payment

toward the basic factors upon which wages rest, the longer we must wait for returns. Such returns, however, are worth delay, for they are likely to be both large and cumulative.

Finally, the number of factors and the degree to which each is subject to control depends in no small measure upon the attitudes of those who can get at them. Ignorance of the economic order makes one impotent to change the scarcity or the bounty which it bestows. A conception of it as part of the natural universe makes an attempt at intelligent guidance of the processes which lead into wages alike impossible and impious. A belief that it is a crude mechanical affair which can be broken up to be replaced by a perfect economic order prevents any attempt at control short of revolution. Only those can control the sources of wages who understand the human stuff of which the arrangements which make up the industrial system are made and who know these institutions both in their detail and in their relations one to another.

At present the attitudes of nearly all the groups which make up our society seriously impede attempts at control. It is only as the facts about the organization of the industrial system accumulate, as this knowledge becomes diffused, and as the superstitious reverence for whatever is, as if it were whatever had been ordained, gives way to genuine wisdom, that wage-earners will discover how many of these factors are subject to their guidance and what far-reaching power they have over them.

From these three characteristics of the sources of wages, their "institutional" quality, their variability, and their susceptibility to control, comes the most startling fact of all. There is no such thing as a "normal wage" or a "natural rate of wages." In cases in which some person or commission has formally set wage rates, they are frequently referred to as "artificial" in contrast to "natural" rates determined

by bargaining in the market. The rates fixed by minimum wage boards, by the government for its employees, and by the state for its soldiers and sailors are determined by "authority." There is no such authority in the fixing of wage rates for carpenters, structural steel workers, or truck drivers by agreement between all the interested parties. But, whether authoritatively determined or not, the wages in one group are just as "artificial" as those in the other. If the content of any "natural" rate of wages be traced back and back to its source, even to the confines of the economic order, it will be found that it rests upon a very large number of ideas, values, and arrangements. If the process through which it finally emerges be analyzed in detail the rate will be found to rest upon the personal judgments of a very large number of persons, who differ one from another in wisdom and in knowledge of the structure of industry. Had these arrangements been otherwise, or had the quality of judgment been different, the rate of wages would be different from that which now exists. Wage rates may differ in the methods by which they are made, but they cannot be separated into "natural" ones and "artificial" ones. The "natural rate of wages," like the "normal" world to which it belongs, exists only in books and in the minds of men.

It has been decreed by custom that every theory of wages must be dubbed with a name. For want of a better one the statement which has just been presented may be called "a functional theory of wages." The adjective is longer, more dignified, and less descriptive than it should be. The authors are quite willing to scrap it and put in its place any title that is better. The word "functional" is taken directly from mathematics, a fact which is against it; for, whatever characteristics this theory of the rate of wages has, they are not mathematical. The term "functional" is

meant only to indicate that the rate of wages in an occupation or an industry is a "function" of the pecuniary, industrial, and economic factors which impinge upon it. And to call it a "function" of such factors means only that it varies with variations in one, in a number, or in all of them.

In this more general statement the rate of wages in an industry or occupation is a function of three general groups of impinging factors, the pecuniary, the industrial, and the economic, with all their bewildering array of detail. To separate these general factors into their parts, to resolve these parts into their elements, to divide and subdivide, to resolve and re-resolve, these until the formula is detailed and comprehensive enough to fit any case, is impossible. Time has too little of an eternal quality to permit so involved a statement to be used.

However, for practical use the theory can easily be reduced to a simple and workable statement of the sources of wages. No formula has terms either numerous or comprehensive enough to hold all the truth. In a sense almost everything in the industrial system is an antecedent of the rate of wages; vary any antecedent and the contents of the pay envelope may be affected. But for a particular industry, at a particular time and place, some of the factors are very susceptible to control, others yield less easily to direction, and a number will prove to be quite beyond its reach. For the problem of controlling wages in a given industry, the formula can thus be reduced to the few factors which are most amenable to guidance. Thus it has the selective character of all statements that attempt to get at the causes of things. Even such an abridgment will not satisfy those who seek eternal verity, who know that truth hath a simple mien and a "symmetrical aspect," and who crave formulas that can be printed in italics. A "functional theory of the rate of wages" lacks these cosmic qualities; its value must

depend upon its being specific and realistic enough to be useful.

But even in simplified form it has no self-determining power to raise wages. Its general terms must be converted into the specific facts relating to a particular wage rate. The various factors, each of which in the general formula counts for one and only for one, must be reduced to definite and quantitative terms and these must be arranged in the order of their importance. To this end all the available information about the factors upon which the wage rate rests, must be gathered, tabulated, interpreted, and made to reveal the sources of wages which are most promising and most subject to control.

Nothing short of an exhaustive quantitative application of the formula to the particular case will do. For the general factors which make wages high or low, and even more their constituent elements, vary from industry to industry, and from time to time in the same industry; factors of influence in shaping one wage rate are negligible in their effects upon another; and factors common to many wage-rates may differ widely in their influences upon these rates and in their responsiveness to control. It is only when analysis, the assembling of facts, and interpretation has breathed life into the abstractions of this theory that it becomes an explanation of a particular rate of wages.

2. The second question to which one who would construct a theory of wages must give his attention is the relationship of different rates of wages to each other. If we could make a fresh start and hand out to different groups of workmen ideal rates of wages as seats are assigned in a theater or tickets are handed out in a lottery, this question would be of far greater importance than that of how a particular wage rate is made. But, since we have to do with a "going" industrial system with its medley of

wage-rates, we cannot start with "wage principles," convert them into a plan for a "wages structure," and ordain actual rates in the likeness of this orderly pattern. On the contrary we can deal realistically with the larger question of "all wages" only by giving our attention to specific rates of wages. Yet, since our real concern is a general elevation of wages, we cannot be wholly indifferent to the relations of the items which make up "the wages bill" of business.

The relationship of wage rates in different occupations and industries has provoked explanations which are quite contradictory. Many insist that all rates of wages fit together into an orderly, unified, and articulate "wages structure." They find at the base of this a "general rate of wages" which is paid everywhere within the economic order for the services of unskilled labor. Above this they discover various rates of wages paid to various groups of skilled workers. Each of these is composed of the "general rate of wages" and a "differential" which represents quite accurately the excess in ability, knowledge, skill, training, diligence, or whatnot possessed by its recipient over the "common laborer." Others regard "the wages structure" as a mere agglomeration of independent and lawless wage rates, an affair so disorderly that explanation must stop short with the particular rate of wages.

"Facts" can be found in support of both of these positions. The facts about wages in different countries and under different economic systems seem to support the argument that there is "law and order" in "the wages structure." Wages generally are higher in the United States than in Spain, higher in Spain than in Turkey, and higher in Turkey than in Siam. All rates of wages are higher where population is small and the machine technique is employed than they are where population is large and man-power is industrial energy. A detailed study of wage statistics for a single

country makes one skeptical alike of a "general rate of wages" and of well-ordered differentials based upon it.

The truth is that there is a tendency toward uniformity throughout the wages structure and a tendency to diversity. If the world of modern industry fitted the pattern of it in minds that are filled with absolute notions, it would be impossible for contradictory things to continue to exist and to undo each other's work. But the fact is that old Mundus has been, is now, and probably always will be a battleground for warring "tendencies." A theory cannot, therefore, assume some of these and point out their consequences to the neglect of the antithetical factors. It can only, quite unpretentiously, list all of the "factors," "causes," or "tendencies," and leave a determination of the exact influence of each to the statistician whose quantitative logic alone can turn a theory into an explanation. Here the relationship of rates in the wages structure can be set down only in terms of contradictory tendencies.

There is at least some evidence for the notion that there is a tendency toward a "general rate of wages" and of order among "differentials" in "the wages structure." First, there is the common-sense notion that labor is a "standardized commodity" which is to be paid for at so much per unit. It has been easy for the employer and the public alike to think of labor as they think of cotton, coal, and credits, as an article to be purchased in units. Many of those who have constructed wage theories have quite glibly converted personal laborers into a fluid, homogeneous, impersonal fund of labor.

This conception, which has done so much to give an unreal uniformity to wages, has some basis in reality. Where the machine has reduced the great mass of tasks to routine only a small part of the laborer's personality can be crowded into a job and for the purpose one man is very nearly as

good as another. Immigration, too, has given us a great flood of human beings, whom we have insisted upon stripping of their personalities and cultural inheritance, and have converted into mere standardized units of man-power. How definitely this notion has written itself into industrial practice is evidenced in a fight of American unionism which found expression in a national law declaring that "labor is not a commodity."

In addition, the mobility of labor tends to give at least a pretense of order to wage-rates. Where laborers are "on the move" and "on the make," where travel is cheap, where tasks are so standardized as to require little training, where the laborer can go from shop to shop without losing his mite of technical knowledge, and where the entrance to the trade is barred neither by a long apprenticeship nor by craft rules, there will be competition between industries for workmen and between laborers for jobs. To the extent that workers seek the better-paying positions and avoid those that are less remunerative, there will be a tendency to uniformity in wage rates, however badly they may correspond with the real abilities of the several groups of workmen. The mobility of prices also serves the same end; for an increase or decrease in the price of goods may be a way of increasing or decreasing wages to make them correspond to wage-rates "generally paid."

Yet, in spite of this tendency toward uniformity, the rates which make up "the wages structure" tend to diverge. A long and convincing account of the factors which make one rate of wages unlike another can easily be extracted from this argument. It is accordingly necessary to do no more than present, as illustrations, some two or three of the general factors making for divergence.

First of all, the notion of labor as a fund of homogeneous units is an unreal one. The requirements of the various

jobs within an industry and of those from industry to industry vary greatly in the demands which they make upon the laborer's aptitudes, knowledge, training, application, and patience. In capacity, experience, and personality laborers are unlike each other. Neither the requirements of various positions nor the respective abilities of laborers to fill them can be measured in terms of any common unit.

Next, one cannot find unity in "the wages structure" by arguing that it comes about quite automatically under the action of competition, and that the various rates of wages are expressions of differences in the "economic worth" of laborers. For, in terms of this theory, the competition of laborer with laborer and of employer with employer is necessary to so orderly a scheme of wages and the "mobility of labor" is an essential of the competitive process. Yet we cannot have "mobility of labor" so long as opportunities for special training have a cost, youths who know not their capacities find themselves committed to trades, men are unwilling to break the personal and local ties which prevent them from moving, and the "labor market" is so disorganized as to deny the worker a knowledge of his best choice.

But even if laborers were perfectly free to take or leave whatever jobs they would and employers were as free to hire and to fire whomsoever pleased them, it would not follow that the ratings which make up "the wages structure" correspond with natural or acquired differences between the groups of laborers who receive them. Since we have no common denominator of human capacities; since the laborer knows little enough about himself and less about the industrial system; since the employer's judgment about the requirements of positions and the qualities of men is based upon something less than omniscience; and since the business system is a very imperfect device for getting "the working force" of the country most advantageously dis-

tributed between trades and occupations, it is difficult to believe that competition has adjusted wage rates to the economic worths of wage-earners. This pleasant conclusion that "the wages structure" is but a pecuniary reflection of a scheme of real values of different groups of laborers rests upon assumptions about human motives and actions which are too unreal for even simple economic faith.

Nor can one argue, as many glibly do, that differences in wages correspond to differences in economic worth, for otherwise such differences would not be paid. This argument defends the unity and orderliness of the market structure of wages by an appeal to the market prices of labor, when the question is whether those market prices give unity and orderliness to it by being the reflections of different economic worths. It moves in a circle which is far too short to satisfy good taste. So long as no unit or standard apart from market-prices or wages can be found for the measurement of the value of labor, there is no reason to believe that the unity and symmetry which many see in "the wages structure" is not fictitious. On the contrary, laborers are much too personal and their differences hold too much of quality to allow them to be converted into "a labor fund," composed of a hierarchy of unskilled laborers and various ranks of skilled laborers.

In like manner trade unionism tends to make labor immobile and to sharpen the differences between wage rates. The wise organization of wage-earners, by keeping its personnel fairly intact, by imposing restrictions upon entrance to a trade, by using "collective bargaining" in the making of wage contracts, and by seizing the favorable moment for the presentation of its claims, can secure for its members higher wages than they could otherwise obtain. Such differences rest far more upon the strategic position of the industry, its "ability to pay," the strength of the trade union,

the quality of its leadership, and the skill of its representatives in discovering and tapping sources of wage increases than upon any definite calculation of the superiority in ability, intelligence, experience, or application of the group of laborers in question over that of unskilled labor. So long as wage-rates are fixed by bargains between employers and workingmen, so long as industries differ in strategic importance, and so long as the strength of organized labor varies from trade to trade and from industry to industry, those will take who have the power and powerless genius will accept what it can get. So long, too, will a wage structure, whose varying rates are to many eyes manifestations of economic worth, be confused by the greater or lesser power of groups of workmen and by the lesser or greater resistance of employers to their demands.

3. The third and last question, that of the relationship of wages to the other larger shares of the "national dividend," need not detain us. Of the three inquiries with which a theory of wages is concerned it is of least importance. Its relegation to the outer fringe of discussion is a curious instance of the last being first and the first last. The time was when economists talked easily and confidently about "wages," meaning all wages, and about "rent," "interest," and "profits," which together constituted the four funds into which the total product of industry was disbursed. They argued at length about the statement and even the wording of the laws which manifested themselves in this scheme of distribution.

If there were a prospect of abolishing once and for all one or another of the "property incomes," or if a question of a mechanical substitution of some other system for "the prevailing order" could become a very real one, it would be important to us to find the right answer to this major problem of the division of income. But with the coming of

a conception of the economic order as being in process of development, composed of man-made institutions, and to be directed to appointed ends by a control of its growth, the importance of this larger question dwindles. If one of our ends is to raise wages, particular rates must be advanced, and this requires attention to the impingement of specific wages upon other incomes and to the sources of these detailed rates. It grants the first place in a theory of wages to an explanation of the particular rate and requires little more than a statement of the all-inclusive inquiry of the division of income between laborers and the owners of property.

The relationship of "wages" to the other shares in distribution can be stated either in specific or in general terms. In specific terms the question is that of the relationship of a particular rate of wages to other incomes paid in the same industry. In that form it has already been discussed to weariness in the solid and dull pages above. In general terms the problem is that of a division of the whole of the income of society between laborers and others who have claims upon it. As thus stated we must learn a great deal more about how wages, salaries, and the incomes from property in particular industries are determined before we can with a fair prospect of success make an intelligent attack upon so formidable a problem. For the moment the question must be left to the easy assumptions and the skilled dialectic of the romantic economists. Our consolation must be that ignorance of the matter imposes not the slightest obstacle to the formulation of a program for bringing wages under human control and making them serve human needs. On the contrary there is no use to which we could put the right answer to this cosmic puzzle even if we had it.

CHAPTER XI

TOWARDS A WAGES POLICY

"Well," said Mr. Dooley, "I dinnaw jus' what to think iv it. Me own idee is that war is not a matther iv prayers so much as a matther iv punchin'. 'Tis like what Father Kelly said. 'Hogan,' he says, 'I'll go into th' battle with a prayer book in wan hand an' a soord in th' other,' he says; 'an,' if th' wurruk calls f'r two hands, 'tis not th' soord I'll dthrop,' he says. 'Don't ye believe in prayer?' says Hogan. 'I do,' says the good man; 'but,' he says, 'a healthy person ought,' he says, 'to be ashamed,' he says, 'to ask f'r help in a fight,' he says."

Mr. Dooley on "Prayers for Victory."

At this point the argument might properly rest. It began with the question of how wages can be raised, threaded its hazardous way through the maze of customs, factors, and values which are the sources of wages, and came to rest in a theory of the rate of wages. If generalized statement is the end of intellectual inquiry, there is nothing more to be said. But, since the beginning of this adventure lies in the practical question of what we are going to do about wages, it cannot end until some application of the discoveries by the way is made to the original problem. For that reason a few cursory suggestions, all of them obvious in the account above, will be set down in summary fashion. It is hoped that they will point toward a

definite policy for raising wages. That policy must vary from industry to industry and from time to time in the same industry. For that reason these remarks can be little more than general suggestions. Moreover, it must be grounded upon more information and far more wisdom than this volume contains.

If the analysis above is correct, the prospects of raising wages are very promising. The rate of wages in an industry or occupation is always a man-made one; the factors upon which it rests are subject to control; the sources from which an increase can come are many and varied. Many of these sources will for the moment yield only small amounts in comparison with the wages bill for an industry. Many of them together can be made to yield substantial additions. More important still, under proper guidance, most of the sources can be made to yield a progressive series of increments, which little by little can be made to increase wages for a long time to come.

Such prospects, however, are not certain; they are only promising. The best-laid plans to raise wages can not be wrecked; for they will be based upon knowledge and wisdom that takes everything into account. But any plan devised by man is likely to be defeated by a failure to take thought about some factor prone to misbehave. A disorganization of industry, an arrested development of technique, or a population increasing too rapidly are but samples of dangers to rising wages which a proper policy must guard against. Here, as in other affairs of life, the prospects must be converted into realities by the intelligence and vigilance of men.

Yet, for all of its promises this inquiry gives little comfort to those who would by daring innovation effect an increase in all wages immediately. It offers no panacea to

wages. It was the Sons of Mary, not the Sons of Martha, to whom exemption was given from the curse of having to eat bread in the sweat of their brows. This adventure has chanced upon no coming economic millennium.

The number of questions relative to any wage issue is very large. The American lawyer who in presiding over a wages-tribunal ruled out of order questions relating to the organization and efficiency of the industry as irrelevant to wages was enslaved by an unreal conception of the process of wage determination. The English jurist who in presiding over a similar tribunal ruled in order matters relating to the technique, the equipment, and the business control of the industry as essential to an understanding of wage-rates was far nearer the truth despite the vague character of his idea of the process of wage-making.

When investigating committees, boards of arbitration, and other bodies give their attention to the immediate making of wage rates, they cannot properly limit their attention to the mere facts about the cost of living, wages paid in other establishments employing the same type of laborers, and the superficial showings of the balance-sheet. Still less can they accept as an absolute standard the purchasing power of wages at some preceding date, say "before the war," and by an increase or decrease of the nominal rate attempt to give to the laborer the real wage he was receiving then. On the contrary they must take account of the whole range of pecuniary, technical, and economic factors which has usually been regarded as beyond the pale of wage theory and with diligence and insight canvass the possibilities of these potential sources of an increase in wages.

In the campaign for raising wages the initiative must be taken by the wage-earners themselves. Since unorganized labor has no way to formulate opinion, to trans-

late it into a program, and to make its program effective, the lead must be taken by organized labor. To this end they must make skillful use of a large number of devices. There are possibilities and limits to their accomplishments both as a "militant" institution and as a deliberative body. For that reason, the advice which runs through the next few pages, gratuitous as it is, is addressed primarily to members of labor organizations. If they are to formulate and push to success a long-time wages policy, they must take full account of the large number and the great variety of the factors which affect wages.

To begin with, they must remember that the various factors upon which the wage rate in an industry or occupation rests are subject to very different "controls." The trade union as a militant organization for bargaining about wages, the trade union as an institution in which opinion is formed and social policy is made, the technicians, engineers, economists and other professional men who are "experts" in the industrial and economic arts, the great mass of consumers, and that mystical personality called "the general public," each has its respective share of influence. Each of these and other groups like them has a finite control over a limited number of factors; each is quite impotent to exercise control beyond its frontier; and each can be most effective by concentrating upon those things which are most subject to its guidance.

So prone have men been to take the conventions which underlie wage rates for granted, and so little have they tried by examination and experiment to discover the limits of their control over various institutions, that the factors subject to direction by various groups are far larger in number and far more amenable to influence than is usually supposed. This lack of consciousness of the problem is

scheme of control. At present there are no effective instruments of controlling some of the factors. In an unorganized industry, for example, it is impossible to guide the development of technique, and in one under the dominance of competition, it is hard to eliminate wasteful salesmanship. The form of many organizations, too, makes them ill adapted to the roles of direction which fall to them. To cite only the most obvious example, the form and structure of American trade unionism, with its emphasis upon craft autonomy, is not, without some provision for concerted action by an amalgamation of trades, well adapted to a control of the industrial factors upon which wages rest. More important still there is now no institution, other than a loose and chaotic public opinion, through which the separate "controls" exercised by various agencies can be directed to a common end. Such defects in the organization of industry are by no means fatal. The problem of the direction of a developing industrial system is far too new for the instruments of guidance to be numerous, well-adapted, or nicely articulated. It may well be that a first and fundamental step in a program for a mastery of the sources of wages must be the establishment and perfection of agencies of control.

In its demands for higher wages "organized labor" can not be indifferent to the sources from which the increment comes. Considerations of equity and of strategy unite in condemning the practice of laborers claiming from their employers higher wages and of blinding their eyes to the sources whence the increase comes. To take from another group too weak to resist because one has the economic power may have the sanction of an "economic law" which does not exist and of a legal system which does; but it is hard to find an ethical support for it. The moral is not that laborers should take no increased income whether

free or appropriated, but that they should look the gift horse in the mouth. They should know the source of the income; if it has belonged to another, the laborer's claim to it should rest upon some justification other than the power to take. It is particularly important that an increase in wages should not come out of the pockets of other laborers who are as deserving but who have smaller incomes.

To take because one has the economic power may also be bad strategy. The real source of an increased wage may be in a reduction in industrial equipment, a failure to develop technique, or a lowering in the quality of management, any of which may neutralize the increase in wages or eventually convert it into a decrease.

In addition, it has repeatedly happened that an increase in wages has been followed by an increase in prices; this has led to a decreased demand for the product of the industry; and this has led to unemployment in the industry. Again, the moral for strategy, as for justice, is not that wages should not be increased; but that those who demand such increase should know where they can find the funds and should be sure that they are genuine and not fictitious. Such a careful attention to sources by organized labor involves a knowledge of the industry in its many ramifications, a careful and consciously formulated program, and scrupulous attention to the end that funds come from the predetermined sources. This, in turn, involves an increase in the number of factors in industry over which organized labor exercises some measure of control. It involves, too, a larger responsibility for the conduct of business than "labor" has been willing to assume in the past. In the development of a program for raising wages no one can say how far this assumption of responsibility by labor will go or what form it will take.

A single example will suffice to show the necessity of "conscious attention" to sources. In attempting to raise wages "organized labor" should make a sparing use of the obvious method of putting the burden upon the consumer. In practice this device should be subject to some such restrictions as these:

It may quite properly be used to raise wages in an industry or occupation to a sum adequate to a decent living. This sanction rests upon a classification of "a living wage" as "a necessary cost of production" and an ethical principle that the consumer of the product should pay the costs essential to its production. Neither the "classification" nor the "principle" rests upon an abstract, eternal, or indisputable standard of right. But both belong to a set of conventional moral values which few who live in intimate contact with the realities of modern industrialism will deny.

It may properly be used, in a period of rapid price fluctuations, to return to an established rate of wages the purchasing power of which it has been robbed by an advance in the price of goods. So long as the volume of production remains much the same, this is nothing more than a single step in the mechanical process whereby prices move from a lower to a higher level. If the increase adds to the wage no more than enough to restore its former purchasing power, the laborers in the industry are collecting in real goods and services from the consumers just what they were before. It may be added that, of course, there is nothing final, absolute, or sacred about the former real wage to make of it a "standard" of what the wage should be.

Aside from these two uses the device of making the consumer pay for higher wages should be sparingly employed. There are rare occasions when its use is both rightful and

necessary. It may, for example, be necessary to raise wages at the expense of the consumer to attract into an occupation or an industry workmen possessed of the requisite skill; or in an industry of great importance it may be necessary to assess consumers to pay to skilled employees a wage rate high enough to give them the materials and advantages essential to the proper performance of their duties. Such unfamiliar instances best attest how rare such real claims upon the consumer are likely to be. Every case of this type should be regarded as an exception and should stand upon a positive justification.

Most important of all, the promiscuous, or even the general, use of such a device is likely to defeat its own object. A single union, or even an "international" representing a whole craft, can raise wages by passing along the burden to the consumer. If all trade unions use this device, the real gain will be far smaller than the apparent one; for the members of various unions use each others' products and higher wages are swallowed up in higher prices. The net gains are likely to come in very large measure from unskilled labor, the group in the community which is least able to pay. In fact, the fewer the trades that are organized, the smaller the losses through the high prices of purchases, and the larger the net gains from imposing the burden upon the ultimate consumer. The success of such a policy in the last analysis is contingent upon a strict limitation of the number of those who can use it; it is a weapon of an aristocracy of a few chosen crafts, who condemn the rank and file of labor to the outer darkness of unorganization; it can not be effectively used by a unionism which is as broad as the whole body of wage-earners themselves. For if all laborers, unskilled as well as skilled, were organized, and if each and every one of

game of "charging what the traffic will bear," rising prices will give rising wages a merry chase, and the excess left in the pay envelope will be limited to the small return paid in advance prices by consumers who are not laborers. In addition, since such a policy does not permit more to be charged than the consumer is willing to bear, its yield has a definite limit. At best, however good or bad we may think it, this policy is sound strategically only for a few highly organized trades in an unorganized industrial society; nor will it stand the few in stead for very long, for the limits of its rewards are soon reached. It can not command the support of an organization which represents the interests of all the wage-earners of the country.

The representatives of organized labor have a more certain and far more expansive source of wage increases in an improvement of the industrial arts. In even the best industries the technique, the equipment, and the organization of the great majority of establishments fall far short of being "up to date." In the more poorly organized industries nearly all the plants fall far short of technical efficiency. In all the efficiency of labor and of management is subject to improvement. If "the last word" in technique, engineering, and management be taken as a "standard," in terms of which existing performance is to be appraised, a survey of industry will exhibit an immense waste which is potential wealth. But the possible gains from attention to technique far exceeds even this waste; for the standards, set as they are by the current status of technology, will advance with the progress of the industrial arts.

It is obvious that other groups will seek to appropriate this surplus. The organization of laborers within an industry, a business, or a single plant, can set itself the task of directing into the pay envelope as much of the

unappropriated income as possible. It can, with even better prospect of success, take the lead in developing a program for bringing the plant or the industry to the highest technical standards, developing the arts upon which efficiency rests, and eliminating waste. Since such a reform should begin at home, a commendable step in such a program would be the establishments of standards for measuring the technical efficiency of labor. Such an effort costs little and promises much. The rewards which it offers are all net. They can not be dissipated through increases in the prices of products.

If organized labor is willing to wait and will formulate a program in long-time terms still more substantial gains are possible. The pressure for an immediate increase in wages nearly always arouses violent opposition, not infrequently creates hostility between employers and employees which prevent their coöperation in industry, and more often than not ends in futility. The real reason is that the demand for "more now" can be satisfied only at the expense of established incomes, whose possessors are not convinced that it is more blessed to give than to receive. But, although they have escaped general notice, there are many future incomes which have no present owners and no current market values. These are so far in the future and move so little in the everyday economy of the individual or the corporation that the market hardly recognizes their existence at all. Yet, in the longer life of the group of laborers or of the community, a generation or two is a short space of time. If organized labor has vision and resource it can afford to lay claim now to unappropriated increments of income which will mature twenty, forty, or even sixty years in the future. Two examples of this kind, both discussed at some length above.

made in the industrial arts and the surplus made available a generation hence by freeing an industry from the costs of ownership.

Such are the possibilities of a constructive program which makes use of a militant trade unionism as its principal weapon. They are numerous, varied, and promising. They can be made the objective of an attack by all the laborers in an industry or by those who comprise the working force of a single plant. But they fall far short of exhausting the sources from which increased wages may come and they leave some of the most important factors underlying the wage-rate untouched. It is as an institution for organizing opinion and converting it into will, and not as a militant organization, that trade unionism can be made to control these more distant and more fundamental factors. The leaders of organized labor, if they would tap all the sources of higher wages, need to throw the weight of the largest single group in industrial society in favor of those changes in habits, customs, and arrangements which will lead to an understanding of how to use incentives in industry, eliminate the largest items of waste from the liability side of the national budget, and give to "the industrial system" a more economic organization. These things labor cannot accomplish by "going it alone." To these ends it must merge its opinion with that of other groups in the community, unite with them for action, and make use of economic, political, and educational agencies of control which lie beyond the structure of trade unionism. It has an abiding power in numbers; for the great mass of men, who are the personnel of the economic order, who make up "the state," and who are the patrons of the press, the church, and the schools, are laborers. If labor possesses some semblance of unity and has competent leadership, it may, through sheer mass, make use of all these agencies in

organizing opinion and directing it toward bringing the arrangements which make up the economic order under control. Many suggestions toward a larger social policy directed at higher wages are implied in the discussion above. A brief mention of some few of them will be sufficient to show the nature of this part of the program.

The leaders of organized labor must not be indifferent to the goods and services which fall outside the nominal wage. The relief of unemployment, compensation for accident, the supervision of health, and educational opportunities are important items of income. They are almost in the nature of investments. The incomes they yield are not temporary ones giving a single fleeting satisfaction; on the contrary the benefits which they bestow are lasting. The laborer does not, individually or through his union, possess over them the immediate control which he has over his nominal wage. For their benefits he has to depend upon the coöperation of the concern employing him or upon the state.

A real policy for raising wages must aim at tapping sources which will yield progressive increments and which are not quickly exhausted. It will be well to remember that there are only two ways in which the material welfare of the laborer can be increased. One is at the expense of other groups in the community; the other is through an increase in the wealth out of which all income is paid. The first of these, as we have seen, has very definite limits, and a wage policy which aims at appropriation quickly runs out. If it is overdone or takes more than the current arrangements of industry allow, it defeats its own end. The second of these, an attempt to get more out of resources, has flexible limits. The discovery, conservation, and utilization of human resources: the improve-

technique with its increased power over "natural resources"; the expansion of industrial equipment; and the perfection of the internal organization of establishments are all problems of significance to wage-earners. Their solution calls for a comprehensive and constructive program which will never be fully realized because each gain from nature, each victory from a stubborn industry, is a challenge to new gains.

But such a program does not rob the trade union of its militant function; on the contrary it makes that function real. Through the constructive program surpluses of free income are to be won from the economic system, through a militant unionism so much of them as may be are to be diverted into the pay envelope. It is only through the advance of technique that militant unionism can keep up a militant offensive.

The problems of "the unstable dollar" and "the business cycle" are of extreme importance to wage-earners. The vacillation in prices which follows in the wake of an unstable dollar causes a large part of the energies of organized labor to be spent in securing nominal increases in wages which merely preserve their purchasing power. No group has so vital an interest in the success of the search for a better unit than the conventional dollar for the measurement of values. The recurrent periods of depression and unemployment which attend the business cycle cause trade unions to have to make periodical fights, under the most unfavorable conditions, for the retention of wage increases secured upon the upward swing toward prosperity. An elimination, or even a substantial reduction, of the violence of the rhythm of business activity, promises that gains brought in by the flow of the business tide are not to be carried out by its ebb. So long as these two problems remain unsolved, a large part of the thought and might of

trade unionism must go into the passive work of maintaining wages. With their solution a defensive can give way to an aggressive militancy, and organized labor can address itself to the constructive task of raising wages. A solution of the problem of "the unstable dollar" and "the business cycle" promises to sweep away barriers which lie between the pay envelope and the funds from which it may be filled.

Of great importance, because of great neglect, are the varied problems associated with the development of the economic arts. The stabilization of the dollar and the reduction of the rhythm of the business cycle, which have just been mentioned, are problems of this kind. Others concern the discovery and utilization of motives to industrial activity, the reduction of the payments for the services of property to a minimum, the more efficient correlation of the business units within an industry, the elimination of economic waste, the limitation of profit-making to services of value to the community, and the subordination of business to the production of wealth.

It is quite proper for the leaders of organized labor to frown upon proposals for exchanging "capitalism," if that is what the prevailing system actually is, for "socialism," "communism," or some other ready-made and hand-me-down substitute. It is quite fitting for them to be wary of sentimental and emotional appeals for "reform by agitation." But it is quite as improper for them to become committed to a belief that the economic order that is, whatever it may be, or that any of the many arrangements which make it up, is a finality. A conception of reform in terms of a choice between two definite systems belongs to a mechanistic universe filled with absolute values that is a part of an outgrown system of thought. For it there

in terms of directing the development of the institutions which make up the economic order to ends we would have them serve. Whether we will or not, these arrangements are constantly changing. It is only by defining ends, understanding the institutions which make up the system, and devising and using instruments of control that guidance can be given to change. To this end, in its own defence, organized labor must give its whole-hearted support to research in the principles of economic organization and to agencies for the development of the economic arts. Thus it can substitute "reform by method" for "reform by agitation."

Finally, there is no panacea for raising wages. There is no formula for a wage increase which will automatically convert itself into a program of action; there is no doctrine which those who would give wage-earners more can substitute for knowledge, wisdom, and power. "The wages structure" is to be elevated by advances in the specific rates which make it up. The increase in each of these rates must depend upon a procedure based upon an understanding of the facts upon which it rests. It requires a detailed analysis of these factors, a statement of them in quantitative terms, and a program directed at specific sources which can be made to yield returns. The procedure must vary from establishment to establishment and from industry to industry. It must constantly be changed since the factors upon which it rests refuse to abide in repose. No theory of wages is a substitute for an intelligent attack upon a specific problem. The value of the discussion presented here, if it has any, is in supplying an approach which will enable such attacks to be made more intelligently.

CHAPTER XII

THE DIVISION OF THE VALUE PRODUCT

"Now what I want to know is where th' jury gets off. What has that collection of pure-minded pathrites to larn fr'm this here polite discussion, where no wan is so crool as to ask what anny wan else means? Thank th' Lord, whin th' case is all over, the jury'll pitch th' tistimony out iv the window, an' consider three questions: 'Did Lootgert look as though he'd kill his wife? Did his wife look as though she ought to be kilt? Isn't it time we wint to supper?'"

Mr. Dooley on "Expert Testimony."

In the argument above, an attempt has been made to advise organized workers on the question of where, in general, they might look for wage increases. It is the task of this and the following two chapters to make suggestions as to how, in particular, they may set about that task. Many potential sources of increment to the rate of wages have been designated; no longer may we avoid the burden of attempting to outline a technique for testing such sources and appraising their fruitfulness in specific cases.

But here one must fall back upon qualification, which is half the equipment of the economist. There is no blanket technique which may be used with equal effectiveness by the butcher, the baker, and the electrical worker, in the laudable pursuit of "more now" and "still more in the

for being unavailable. Data that may be readily obtained for one firm or industry, or in one state, must be estimated for others, and even the serene faith of the statistician that errors tend to cancel each other out will hardly support the novice in his attempt to formulate an effective method for bridging the palpable gaps with convincing guesses.

Probably, in almost every case, organized workers, when they wish to formulate a wages policy based on tabulated information of the sort suggested, will be forced to call upon technicians who are especially trained in the statistical methods of industrial research. A few years since, the search for men with these qualifications might have been tedious enough to discourage the most ardent enthusiast. Now, certain of the larger organizations employ permanent staffs for work of this nature, and any labor group may obtain the services of one of the several research bureaus which are now in the field with personnels competent to undertake such investigations. The most then, that may be attempted here, is the definition of a general approach, with the understanding that this will often serve as no more than a point of departure for the flexible technique of those who face the living problem.

In a previous chapter the statement has been made that there are two general sources for potential wage increases. The first of these is to be tapped by encroaching upon the shares of others who receive incomes from a given enterprise; the second is to be realized from an increase in the product. A variation of the latter source may be differentiated in the elimination of wastes which may not then be turned into increased production, but, since they represent sums which formerly were paid out to other industrial units, serve to swell the fund which is available for distribution within the enterprise.

Those who have a practical interest in the project of raising wages can ill afford to neglect either source. But it must be recognized that two distinct problems are presented rather than one. The successful exploitation of the first source depends upon the gathering of the detailed information of how much is produced and how it is distributed. Then must come the formulation of a bargaining strategy which will effect a redistribution in which the wage-earner gains. But the attack upon the second source must find its material in the reports of the engineer rather than in those of the accountant. The problem is presented of locating something which is non-existent but which might be produced; there remains the necessity of formulating a dual strategy which will insure both the production and its absorption by the wage worker. There seems to be no logical reason for refusing to treat with the first of these two sources first.

But before this is essayed, it will be well to point out that campaigns for information will focus upon different units of industry. The strategy of the conflict, at hand or in view, will determine whether interest centers about industry as a whole, a group of related industries, a particular industry, a section, either territorial or functional, of a particular industry, or a particular corporation. In attempting to determine what is available for distribution within the enterprise, the same general approach is applicable to all.

But the sources of information vary widely. A wealth of relevant information concerning the larger units is to be found in the report of the Bureau of Economic Research upon income in the United States; there is a statistical Mecca in the official census of manufactures; there are the reports of the Department of Internal Revenue;

official departments of the several states, with names almost as widely diversified as those which are manufactured in Pullman, Illinois; the balance sheets and income accounts of individual corporations may generally be run down in Moody's Manual; there are special reports by the thousands, covering special fields by the hundreds.

One generalization holds. In almost every case some essential material is lacking, and statistical estimates must be made, generally by filling in the gaps with relatives gleaned from figures available for the larger or smaller industrial units. With this warning we may proceed, and for the sake of ridding ourselves of the unlovely term "enterprise" we will suppose an inquiry that concerns itself with an entire industry.

Our first analysis concerns the distribution of what is actually produced. Over any accounting period the gross revenue from sale of output may be estimated at a given sum. But this is not available as income to those who win, or receive, their incomes from the industry in question; for this industry has drawn upon outside agencies for goods and services, and these must be paid for out of the gross revenue. In common practice it is necessary to deduct all expenditures outside of the industry for materials and supplies, including heat, light and power expense, freight and insurance charges, bank interest, depreciation, and all taxes. These items represent the share of the value of the output contributed by other industries. What is left is available for distribution within the industry. It is known as the "value product" or, in manufacturing industries, as the "value added by manufacture."

This is the item with which the investigation outlined in this chapter is concerned. The value product is to be distributed, in part, to those who are employed in the in-

dustry in the form of wages, salaries and compensation for work done under contract; minor amounts may go to the same group as pensions, compensation for injuries, bonuses, and the like. Partly, it is paid to the entrepreneurs and other investors as interest to bondholders and dividends to stockholders, and to the owners of property as rentals and royalties. Whatever is not so distributed is held as undivided profits or corporate savings, and as such is a claim of the owners of the industry.

In formulating the approach to the problem of wages outlined in this book, it is important to determine not only the value product of an industry, but also the distribution of that value product in as great detail as possible. For here, in compact list, is set forth the limit within which labor's claims must be confined, and a barometer which shows how successful it has been in competing for a share with all the other claimants upon the industrial income.

When it is not practicable to estimate with a fair degree of accuracy the detailed distribution of the value product suggested above, it is important, and generally possible, to determine the amount of the value product distributed to wages and salaries, and the amount which is paid to ownership claims.

It is obvious that all such information is much more valuable if it is to be had for a period of years. With such data one may determine the growth and decline of the effectiveness of the several claims. By seeking an historical explanation for such fluctuations, a sound basis for strategy in wage policy may be formulated by the labor group.

But the gathering of even the most elaborately itemized material is only the first step toward the accomplishment

chart a rival claim is not to establish it as one's own, and none of the groups which compete for shares of the value product are of notably philanthropic bent. Armed with a sheaf of statistical evidence elaborate as a tariff schedule, organized labor will find that the campaign against rival claimants must be waged by the exertion of much the same pressures as were effective in the benighted days when wage advances were sought on the ground that the workers wanted them, and thought that nothing more than a show of force was necessary to win them.

But there should be this difference: Under the older technique the workers proceeded blindly and their vociferous, "you must pay us more!" weighed no heavier upon impartial ears than the employers' "industry will be driven from the state!" It is possible that the student of literature may here gain enlightenment upon the significance of the Elizabethan usage of the phrase "making sweet moan." For one who seeks after economic truth the yield from even the most scholarly conning of such complaints will be negligible.

The approach outlined does not content itself with the formulation of demands. It proceeds to point out just how those demands may be satisfied, and asserts the justice and practicability of diverting to wages a share of that which is claimed by other groups. It would be common practice, for example, to determine the ratio of the profits earned by an industry to its capitalization (making an intelligent appraisal of the validity of the latter item as reported) and to refuse to accept the plea that the industry could not support wage advances if that ratio seemed to be unduly large.

In point of fact, when confronted with an actual situation, labor will probably seize upon many expedients in the effort to establish the validity of its position. After

all, in most cases, if not in all, it will be impossible to convince the rival claimants of the justice of depriving them of income which they have been accustomed to receive. The world can produce almost as many rival moralities as there are rival claims. Labor is interested in locating sources for increment to its revenue, and through the system of industrial bargaining the effectiveness of the rival moralities will be tested. But there is always the desirability of winning the sympathy of those who are not directly concerned in the particular contest, and with the growth of machinery for settling industrial disputes without actually putting them to a fight, through the employment of Impartial Chairmen, State Boards of Arbitration, and similar mechanisms, the task of convincing this "neutral" opinion takes on new significance.

Workers are in a position to argue jealously that none of the other income claimants be allowed to cut into the share of the value product which the labor force has customarily received. A test of whether or not this is happening may be had by examining, over a period of years, the ratio of the yearly wages actually received by the average worker to the per capita value product of the industry. If this ratio decreases, it is a sign that the workers are failing to maintain their relative bargaining position. It will hardly be necessary for an academic treatise to point out that, in such a case, action is indicated. Unless new conditions have been introduced, such as a legitimate increase in the capital equipment of the industry, labor may justify its efforts to gain its relative share of all windfalls of prosperity.

In times of rising prices labor commonly argues that its wages should be raised in order that its accustomed

that their increased profits are justified. With some show of logic they maintain that they also have a standard of living which they desire to maintain, and by the device of reducing reported profits to their purchasing-power value in the period preceding the advance movement in prices, they are often in a position to show that they are relatively no better off than they were in the beginning.

This argument hardly has the cogency of the similar argument advanced by the wage workers. In the first place, however psychologically sound, it is not commonly accepted that those in the higher income classes suffer as much from a reduction in their standard of living as do the workers. In the second place, only a portion of the income of this group is expended in standard of living; the remainder is invested and in times of rapidly rising prices, and concurrent money scarcity, it is generally possible to make investments which yield a high rate of return. Such return persists after the turn of the cycle and the ensuing movement of prices on the downward trend.

And so workers are in a position to urge rising cost of living as justification for wage increases, and the material for measuring the ratio between actual wage payments and the cost of living in different localities is easily obtainable from official reports. But they are by no means so ready to accept what employers claim is the logical corollary, that wages should be reduced proportionately as the cost of living falls with the recession of prices. That there is some justification for this stubborn attitude is attested by evidence that is reviewed in the arguments set forth in the paragraphs which follow.

A claim for special consideration for the demands of the wage workers as compared with the other sharers of the value product is based upon the workers' demand for a minimum standard of living. This standard is de-

terminated by the requirements of a family of average size living according to the minimum standards of health and decency, as determined by the acceptances of the locality and period. It is argued that workers are always justified in demanding such a minimum, and that an industry or industrial unit which cannot afford that amount to its workers has forfeited all valid claim to existence. Workers may always logically combat a wage cut if such a reduction will bring them below the minimum standard. But, however sustaining this logic may be to their own consciences, the matter will probably always be complicated by disagreements as to where, in practice, the standard is to be located. Perhaps we may work toward a more general acceptance of a given standard at a period in the future when our psychologists have worked out better methods for appraising human desires, and our biologists and physiologists have taught us more about human plumbing. There is evidence even for believing that the first of these contingencies must await upon the second.

At the present time it is probably that a more effective argument against the unwelcome doctrine that wages which have risen with the rising cost of living must fall when it falls, is to be made upon the ground that, over a series of years, real wages—the workers' standard living—have not been maintained. A recently published article¹ contends that real wages have declined approximately 30 per cent in the last twenty years. But wage rates were used as a basis of measurement rather than actual wages received by the workers. A similar measurement of real wages has been attempted for the period from 1899–1914. This study is based upon wages actually re-

ceived, and if its conclusions are correct, real wages have fallen 10 per cent during the period measured.²

These results must be weighed in the light of evidence gleaned from recently constructed indices of production which shows that physical production per capita of population has increased 30 per cent from 1899 to 1920. In other words, according to this evidence, substantially more has been produced in the last 15 or 20 years, and in terms of their ability to buy commodities at retail, workers receive substantially less than they did in 1899.

It is probable that further tests must be applied before this evidence may be accepted as conclusive. But as it stands it serves labor as a powerful argument in its contention that wage advances based upon rising cost of living should be retained in depression periods.

But the approaches outlined here can be nothing more than suggestive. As was stated at the beginning of the chapter, the attack must be adapted to meet the requirements of the particular occasion, and in the last analysis will be limited by the material that is available. Every investigation will be severely handicapped by the gaps in the relevant material which is to be had. One is confronted by the objectionable situation of knowing exactly what one wishes to find, and being unable to find it. Three-quarters of the investigator's energy will be devoted not to the logical compilation and presentation of cogent data, but to the piecing out of insufficient evidence into the rough estimates which must be put forward in place of the exact facts that should be available.

This condition arises out of the codes of mystery and secrecy which surround modern business enterprise. An anomalous situation is presented in which great emphasis

²G. SOULE, "Relation Between Wages and National Production."

is laid upon the rights and wrongs of a situation, in the face of a general unwillingness to have the facts of the case presented. In the absence of such fact all talk of right and wrong is empty rhetoric; any adequate opinion about the moralities or immoralities of a situation is contingent upon a clear understanding of the conflicting positions and the facts which give rise to them.

Two points should stand out clearly from the argument of this chapter. The first is that the strategy of a wages fight should be based by organized labor upon a clear analysis of the distribution of the value product. If the advance is to be sought out of incomes already claimed by one or more of the income sharers, the exact source and amount and strategy should be determined in advance. When the material necessary to the acquisition of such knowledge is not available, it should be estimated as accurately as possible by technicians who are qualified for such work. This commitment is founded upon the belief that wage fights, like all other struggles, may be better fought if they are fought intelligently. It is good strategy to allow economic determinism to direct the campaign of your adversary.

The second implication is that organized labor should inaugurate a campaign for the general publicity of all material which reveals the factors upon which wage payments are contingent. It should be quick to note inconsistencies in the arguments which are often advanced to prove that workers who strike for wage increases are interfering with the "public interest." Such arguments may be sharply questioned when they come from an employing group or from a "public" which promotes or allows the suppression of the factual information upon which

Unless organized labor brings pressure to bear, such facts will not be made public. There are two possible wings of the attack upon this problem. One is through political agitation for legislation that will require the publication of the required data. The other seeks to achieve the same end by bringing pressure to bear upon the employing group through exercise of ordinary bargaining prestige, or through the force of public opinion. Certainly public opinion is often invoked, and certainly it has seldom given evidence of unwonted activity in economic affairs. But the reiterated insistence that facts are necessary, and that facts are being suppressed, might well have a cumulative effect, and if the demand is focused upon one of the desired ends at a time it may prove effective even beyond the expectations of academic optimism.

It may be the enthusiasm of the moment, but just now it does not seem too remotely fantastic to imagine a future strike of the United Mine Workers of America with the object of assuring "that publicity of fact without which it is impossible to determine whether or not the industry is functioning for the public good." At least it is interesting to speculate upon how such a situation would be handled by the public press.

Labor appears to be in something of a strategic position in regard to this whole matter. All available evidence points to the conclusion that it stands to gain from a complete and free airing of all the facts which surround the question of the wage bargain. One might remark, without intended flippancy, that labor should count itself fortunate, since, in this age of the stockbroker and the insurance solicitor, it finds itself in a position where honesty—even in unlimited quantities—seems to be the best

CHAPTER XIII

THE CONTROL OF TECHNICAL EFFICIENCY

"Oh, what things I've seen in me day. . . . Think iv that gran' procission iv . . . inventions,—th' steam-injine an' th' printin'-press an' th' cotton-gin an' th' gin sour an' th' bicycle an' th' flyin'-machine an' th' nickel-in-the-slot machine an' th' Croker machine an' th' sody fountain an'—crown-in' wur-rk iv our civilization—th' cash raygister. What gr-reat advances has science made in my time an' Victorya's!"

"What ar-re ye talkin' about?" cried Mr. Hennessy, in deep disgust. "Ye haven't been as far east as Mitchigan Avenoo in twinty years. What have ye had to do with all these things?"

"Well," said Mr. Dooley, "I had as much to do with thim as th' queen."

Mr. Dooley on "The Victorian Era."

Unless the seekers after the grail of wages are content to rest when they have exhausted the possibilities of expropriation of rival claims upon the value product, they must turn to a consideration of increased output. Here they find themselves face to face with the dragon of industrial efficiency. Workers may readily be convinced that increased output could be made a source of potential wage increases. But they know from experience that it is connected with the Taylor System.

organized labor has come to accept the cry for increased production as capitalistic propaganda; honest workers who are seduced thereby will speedily discover that they have worked themselves out of their jobs—so the argument runs.

It might be well to commence this chapter with the admission that such an attitude has not been built upon altogether flimsy foundations; and at the same time to warn that before the argument has drifted far it will shift to the contention that this same increase of production may be made one of the most promising sources for wage increases. It may be felt that these two positions are mutually exclusive; that any one who attempts to defend both at once performs a feat of ethical straddling that amounts almost to contortionism. To avoid the charge of too easy catholicity in standards of criticism it is necessary to outline briefly the bases of each position.

In the first place, the labor attitude toward production has been definitely influenced by the fact that the burden of the refrain which urges increased productivity is furnished by the employing group. This, with the accompanying bass of the public press, has been sufficiently loud to drown out the treble of the economists of the schools who join their voices to the harmonious insistence that increased production promotes the common weal. Labor needs no more evidence to convince it that here is a field with which it can afford to be unconcerned; other interests are devoted to its cultivation.

And so, when it is not indifferent, labor's attitude is, at the best, one of suspicion; at the worst it is translated into openly restrictive policies. It is easy to see that, when a firm is operating with a given, unexpandable quota of orders, any speeding up of the processes will merely

such a policy had not been adopted. And the depression turn of the business cycle, which periodically causes some millions of workers to be thrown out of employment, creates a situation which tempts the unwary into applying the analogy of what takes place within the given plant to industry as a whole. The average worker, or his average spokesman, yields to this temptation.

The attitude of the labor group is influenced by the form in which the argument for increased production is generally presented, as well as by its origin. Since the employer has been allowed to do the complaining about the production level, to him has fallen the valuable spoils of explaining why production runs low. It is not surprising that the explanation is phrased largely in terms of labor inefficiency, and that the "speeding up" of the worker is urged as the major solution of the difficulty.

Workers resent being speeded up. And they cannot see why they should be honored with the distinction of being singled out as the particular group which should make all of the sacrifices in the name of public welfare.

But here protrudes the opposite horn of the dilemma. This increase of product might well be appropriated by labor with less of a struggle than that which inevitably follows the attempt to pry away from one or more of the other income claimants part of the amount which they have been accustomed to receive. It is easier psychologically to rise in defense of one's hearth, than to struggle for a potential increase in the bulk of one's purse.

It is clear then, that labor has a valid interest in increased production. Its active participation in the campaign for effecting such an increase will depend upon two

his physique is unable to sustain, or reducing his task to one of undue monotony. Second, there must be a reasonable opportunity for labor to appropriate a fair share of the extra value which is made available for distribution.

At this point it becomes relevant to survey the current technique of industry in order to appraise its potentialities for an expansion of output. Within very recent years a new field of research, which has developed an approach peculiar to itself, has come to be recognized. It is the field of "industrial accountancy." Its "certified accountants" are engineers, and their balance sheets list items which are entirely foreign to the bookkeeping of the financial world—units of output, horsepower, ton-miles. Profit shows on their ledgers as "increased efficiency"; loss, as "waste." It is upon this group that we must depend for our survey.

In 1921 a group of engineers attempted such a survey of industry in the United States. Their report was prepared under the auspices of The Federated American Engineering Societies and was published in book form with the title "Waste in Industry." Of necessity, the report is limited in scope, but the investigators, who are of unquestioned competence, believe that their selections are typical of the industrial system as a whole. The findings of this group, examining industry with a technical eye, and appraising its effectiveness with professional impartiality, are of genuine importance.

The Committee defines "waste" as the margin between actual production and potential production estimated upon the basis of the adoption of the best standards of current industrial practice. It proceeds to fix the responsibility for waste in the industries investigated. Responsibility is defined as arising "from the undeniable fact that

ticular agency." Almost 75 per cent of such responsibility is charged to the ownership and management group; considerably less than 20 per cent to labor.

These figures lend a new emphasis to the discussion of production. It would seem that the workers can afford to use that word almost four times as often as their employers. Armed with these figures and clothed in an innocence that loses none of its virtue by the fact that it is only comparative, they are in a position to assume the aggressive in the good fight for an increase in the product.

Interesting data is also presented illustrating the wide range in the efficiency of the several firms within a given industry. One would expect to find a considerable margin between the appraised waste of the best plant in an industry and the worst, but it is shown that there is a startlingly wide margin between the best and the average plant. In the textile industry there is half again as much waste in the average plant as in the best plant; in the metal trades, four and half times as much. The ratios in the other industries examined fall between these two extremes.

The economist finds an academic interest in these figures since they suggest that the well known laws of competition are not so nicely articulated but that firms may continue to operate in industry when their level of efficiency is far below that of many of their competitors. But this had often been suspected and stated before, and academic discussions should properly be confined to academic treatises. The data should be of interest to workers for use in presenting a case for a wage advance from a particular firm or in arguing against a wage cut.

that firm bases upon a claimed inability to pay the rate demanded may be received with open skepticism.

Nothing more than a suggestive summary of the wastes which pervade modern industrial technique may be attempted here.

Waste is apparent in much of the handling and routing of material, and in the ill-considered speculation in materials which is of too common occurrence in many industries.

Waste is involved in failure to standardize in equipment, product, and method, and in unnecessary duplication of design; in the inefficient handling of the factors of production; in conditions which result from the inadequacy of cost-accounting systems; in the failure to provide for necessary research and investigation of processes; in excessive labor turnover, and generally inefficient labor control; in ineffective workmanship and faulty sales policies.

Large wastes are incurred because of the inability of the industrial unit to achieve continuous operation. Men, material, machinery, and plant are held in idleness while overhead placidly accumulates. The Bookkeeper shares with Woman the distinction of being engaged in work that is never done.

But consequences arise from this intermittency which are far more hurtful than is the mere expansion of overhead expense. There is no more serious problem in the economic field today than that of unemployment. In addition to the obvious burdens which conditions of unemployment impose upon the community at large, organized labor should recognize its peculiar bearing upon labor strategy. No other one factor interferes so seriously with labor's program as the insecurity of the worker's

strength of his bargaining position. It haunts his thinking, shapes his reactions, and drains his courage. No wage rate is of even meager importance, so long as the worker who claims it draws no wages because of unemployment.

Inefficiency of industrial equipment and industrial organization, of the sort suggested in the preceding paragraphs, is one of the major causes of unemployment. As such, the interest of labor in its elimination is augmented a hundred fold.

Part of this industrial inefficiency is to be charged to the restrictive policies of those who are engaged in industry. Business enterprise is organized for profit. If net profits may be increased by limiting output rather than augmenting it, those who make the business decisions which guide the mechanism of industry will order such restriction. It has become an economic truism that sabotage is not a labor monopoly. But it is equally true that labor is not unfamiliar with its use. Many of the rules laid down by organized labor which limit production and fix arbitrary working jurisdictions are conceived from the standpoint of a narrow and mistaken production policy.

An official report published in 1919 estimated that in the United States about three million persons were seriously ill at all times. With easy statistical optimism it concluded that 42 per cent of this illness is preventable. It does not seem an extravagant estimate to place the average time lost because of illness on the part of the 42,000,000 men, women and children who are listed in our Census as gainfully employed at something over eight days per year. In so far as this is preventable, it represents sheer waste. Equally unnecessary is much of the

such injuries at something over seven days per year. The actual accomplishment of intelligent accident prevention programs which have been instituted in certain representative plants has convinced experts that at least 75 per cent of such injuries might be avoided.

A vigorous attack upon these two problems gives promise of yielding a very profitable return. A saving could be made not only of time and wages now lost, but of the amounts which are now paid out for what should be unnecessary medical services. The general disruption of the orderly industrial procedure which is attendant upon irregularity on the part of the working force would be avoided and production should increase. There is the further consideration that these two fields are the ones in which labor may urge reforms with the creation of less friction than is likely to attend its efforts in any other direction. The fact that workers are the ones who suffer from the avoidable illness and accidents is sufficient to convince most juries of the validity of their interest. But the privilege of appropriating the savings which might accrue will not be yielded to labor without a struggle. Each of the sharers of the value product will compete for the prize. Here is a problem that is certain to give rise to jurisdictional disputes.

It is difficult to put into summary form these generalizations about waste in industry. But it seems conservative to estimate that the output of industry could be increased from 25 to 40 per cent by merely raising the technical standards of the average plants to an approximation of those of the best plants under our present scheme of industrial ownership and organization.

It follows from the approach outlined in this volume that organized labor should attempt to formulate a policy

It is obvious that such a policy must be tempered with caution. While there is no grave danger that labor will be guilty of too great recklessness in promoting increased production, consideration must always be given to the fact that any specific reform must be worked out in an industry that runs only upon the stimulus of anticipated sales. No industry will turn out more goods than it can dispose of profitably. But to define limitations within which a program must operate, is not to question the desirability of such a program. And the alternative, which is an attitude that seeks to hold production at its current level, or actually to decrease it, carries consequences that the working class can ill afford to face.

Such an attitude presupposes a static society in which population does not grow, and in which the general standard of living is fixed. Any change must come from a mere re-shuffling of factors which cling stubbornly to their accustomed positions. But it seems obvious that it is easier to appropriate new income than to expropriate funds already claimed. An aggressive wages policy indicates an approach which promotes increased productivity in every case where it seems that such an increase may be made to swell the return which accrues to the worker.

Here a theme must be struck that has become redundant in the preceding chapters. Any general policy for increasing production is largely to be effected by application to thousands of specific cases. Each case must be analyzed on its own merits, and such an analysis is often difficult to make. Organized labor, in formulating its programs and presenting its evidence, will be forced to call upon the services of investigators who are trained in the field of industrial accountancy. In the past it has made little

out sporadic cases where engineers are in the employ of organized labor, and are helping to shape its policy. If the labor group develops a liberal attitude toward the question of industrial efficiency, it may result that the wage-earner and the technician will discover a community of interest which binds them to a common economic program.

The labor group may adjust its attitude toward increased production to its wages policy in the manner which is implicit in the discussion of waste that has been set forth. It is unfair to ask the workers to increase production upon the vague economic thesis that society as a whole will be benefited; isolated nobility is extremely unlikely to be sustained over long periods. What is more important, that approach has already been proved ineffective.

But it behooves organized labor to strike for increased efficiency whenever a fair share of the return promises to accrue to wages, and where such efficiency may be accomplished without undue strain upon the "human machine." It might appropriately start by cleaning its own skirts where its policies are restrictive of output without yielding commensurate advantages along other strategic lines. It should be quick to note inefficiencies in management, and should bring evidence of such inefficiencies into every wage discussion. It should drive for the elimination of specific waste through the exertion of its economic pressure and through well-advised publicity.

The last field may be utilized with peculiar effectiveness. All of the popular arguments which have been used against the labor position may be turned to its advantage. Available evidence proves that labor can afford to lead in the popular drive for more production. The strategic importance of a program that happens to be tuned to estab-

lished cores of community sentiment is very real. And, certainly, the labor claim to the increase in value product would be in no wise weakened by the fact that its aggressive activity made such an increase forthcoming.

A program of this sort makes the available indices of production do yeoman service. It is necessary to keep careful record of production in the individual plants, in the industrial groups, and in industry as a whole. An intelligent examination of such figures, their fluctuations over a period of time, and their inter-relationships will provide an inexhaustible fund of material which bears pertinently upon the question of wages.

In the brief summary which this chapter has presented many relevant considerations have failed to find a place. But there is at least one more thing that requires saying. The program suggested will make it necessary for the representatives of organized labor to develop an intensive knowledge of the technical processes and problems of industry. Such knowledge is of cumulative value. In the course of time these representatives will have been forced into a consideration of most of the problems which confront the management of industry today. Many of these problems are fundamental and pertain to any system of industrial control.

In the light of a general tendency on the part of organized groups of workers to assume an increasing share of the responsibility for industry, this factor takes on a new significance. Prognostication is as dangerous as it is enticing. It may well be that, from their vantage point in the future, those who comfortably look back and appraise the affairs of our day will rate this by-product as of much greater importance than any of the gains which

CHAPTER XIV

THE CONTROL OF BROADER ECONOMIC FACTORS

"Th' Jap don't know what it's all about. In Japan he was a horse. There ar-re no rale horses in Japan. If there were th' people wud have more to eat. So th' citizens iv th' country harness thimselves up an' haul th' wagons. All ye have to say to a Jap is 'Get ap' an' he moves. So th' Mikado says, 'Get ap,' an' th' little fellow leaves his fireside and wives an' families and niver comes home no more. Th' best he gets when he is kilt is a remark in th' news from Tokyo that Gim'ral Odzoo's plans is wurrakin' fav'rably. That ought to make him feel good."

Mr. Dooley on "War."

The strength of the wages program which was outlined in the two preceding chapters, if it has strength, lies in the fact that it rests upon the handling of issues that are tangible and immediate. In carrying it out workers would attack problems which directly confront them in the plants and industries in which they are employed. Little need be taken on faith; the pay envelope and the dinner pail are the barometers which measure the success or failure of each attempt that is made to put the program into practice. Its generalizations are based upon the cumulative effect of a great number of small but well-considered steps. It is ordered enough to have coherence and sustained vitality, and flexible enough to be opportunistic.

In so far as the program becomes separated from immediate issues, and holds out rewards which are to be gleaned only in a more or less remote future, it becomes less useful and its appeal is diluted. Workers are apt to hesitate to make sacrifices for a posterity which has notoriously done nothing for them.

But organized labor exists in a community that is moderately committed to long-time policies as well as to affairs that are ephemeral, and it is forced to take a position upon such questions. Therefore, it must accept the responsibility of determining a program that will deal with remote aspects of the control of wages in a way that accords with its more immediate policies. It is the task of this chapter to sketch the conditions of the building of such a program.

When one attempts to isolate the general inefficiencies of the industrial organization, once more one is confronted with the difficulty presented by an inadequate fund of informative material. But this time the problem is so unruly that it lends itself to no solution which even approximates accuracy. There is no group of accountants who are qualified to speak with authority upon the subject of waste for industry as a whole. Even limiting the discussion to wastes that could be eliminated without fundamental change in the competitive order of society, any quantitative estimate must be essentially sketchy; here there is no best practice to be compared with the average.

Quantitative information is simply not available. We control the wheels of industry through a decentralized, competitive business mechanism, and we have only decen-

needs forced us into an intelligent consideration of our problem of production such as was never stimulated by the constructive needs of peace. We set up a few central agencies for investigation and control; we apportioned a few materials and products according to the dictates of urgent needs; we fixed a few prices; we collected a wealth of data; and when the war ended we discarded all that we had learned, and slipped easily back into the undirected routine of pre-war experience. Much more by way of centralized control was developed in England during the war period at the dictation of even more serious need than ours. But their post-war housecleaning was about as complete, and little remains of the system which was built up with so much zeal and care.

If we do not then present figures which measure the efficiency of modern industry, it is not our fault. The only figures available on the subject are those which have been prepared by individuals bold enough to make sweeping generalization upon the basis of the most meager data. You have only to choose your engineer to have industry appraised at a 10 per cent or at a 30 per cent level of efficiency; and that accomplished, you may then be at a loss to determine upon what criteria of efficiency the estimate was based.

The best approach to the problem of the general efficiency of industry would be through an appraisal of human needs; these determined, certain generalizations could be made as to how well these needs are being met. But needs may well be classified as imponderables. Certain items which our industrial system turns out would be generally accepted as useful; others are harmful and fill no impor-

be no unanimous agreement about the social utility of piccolo solos.

About the best that we can do is to locate general wastes by finding factors within the system which break down periodically or which fail to function according to reasonable standards set by the more efficient units of industry. The process will be one of sampling and in no sense exhaustive.

From the standpoint of production which contributes to the standard of living, war, of course, represents a waste. Our last war cost us something over thirty billions of dollars in direct costs which had cumulated to the end of 1920, and part of the expense still accrues. Our military and naval establishments cost us a billion and a half each year. With a total national income ranging from thirty-one billions in 1910 to sixty-six billions in 1920 (thirty-seven billions at the 1913 price level) these figures are significant.

But the most obvious source of waste is evidenced in the inability of the industrial organization to keep its working force, plant, and equipment active. It is not that we turn out more than we need. A careful comparison of studies which have been made of the minimum amount required by each family to maintain a standard of health and decency with the annual distribution of the national income shows conclusively that over 90 per cent of the families in the country constantly exist at a standard lower than that minimum. It is rather a sign of a malignant malfunctioning of the industrial units. A brief survey will show how serious this lack of adjustment is. There are, out of the 107,000,000 of population, 42,000,000 persons who fall into

and one and one-half others. That would seem to be a sufficient burden to warrant full activity. And yet, there are many millions of these potential workers who are idle upon any working day. And of this number only a small fraction are idle because they do not wish to work.

Unemployment—the inability of workers who want and are able to work to find jobs—accounts for the most important group in this idle body. During the years in which our industrial system was at its most feverish pitch of activity, it is probable that no less than 1,000,000 workers were unemployed; in January, 1920, this number was well over 9,000,000. No attempt may be made here to adequately analyze the causes of unemployment. Part of it, of course, is caused by the lack of coördination in the labor market; an important share is chargeable to the minor fluctuations in the activity of business and industrial organizations; part of it is due to rapid changes in industrial technique; but the chief contributing factor is the depression turn of the business cycle, the periodical faltering of the entire business system on a world-wide scale. Any program that deals with the problem of unemployment must treat with these three factors. Any effective program of this nature will exorcise one of the most hurtful wastes of modern industry.

Idleness due to sickness and industrial accident was discussed in the preceding chapter. A comparatively small number are idle because of industrial disputes. Such disputes account for a loss of time which is equal to about a twelfth of the loss caused by illness, but since most strikes occur in industries which are irregular in their operation it is probable that there is little actual curtailment in production. If a plant is closed down at one period

of the lack of demand for its product. If the unemployment waste could be eliminated, then this loss of time might take on more significance.

A summary of the idleness of the labor force shows that from 10 per cent to well over 20 per cent, depending upon the business conditions of the period, is at all times separated from industrial activity.

The inefficiency of the technical organization of most of our industries was referred to in Chapter XII. But this problem ties in closely with the problem of overequipment which must be considered in its relation to almost every important industry. It is understood that when workers are idle there will usually be a certain amount of equipment idle also, but equipment is quite generally furnished in such quantities that much of it is always idle. It is estimated that 40 per cent of the machinery of most industries is not used in times of average business activity.

The bituminous coal industry presents a flagrant example of overdevelopment, with a capacity of active mines of something like 800,000,000 tons, and annual sales which have never amounted to more than approximately 500,000,000 tons. This condition is faithfully reflected in the reports of unemployment in the industry. The soft coal miner has averaged about 215 working days per year over a long period of time. Even with the length of the working day that the health conditions of the industry demand, the situation can only be remedied by shutting down a large number of the marginal mines. This would throw the workers employed in such mines into other industries. But at the same time it would make possible a regularization of employment in the mines which continued operations.

in the industry would stand to gain from such an adjustment. They may interest themselves with profit in plans for an intelligent reorganization of the industry.

The entire problem of waste entailed in the intermittent or chronic idleness of plant and equipment is difficult to meet. Partly, the evil is merely symptomatic of disturbances inherent in our competitive organization of industry. It ties in closely with the problem of intermittency in the business mechanism. The business demand for the product of a particular industrial unit is seldom regular throughout the year; fashions, holidays, seasons, and weather conditions play their disturbing parts; new customers are gained and old ones lost in the competitive scramble. Plant and equipment are not comparably flexible. And over longer periods, and for industry as a whole, the turn of the business cycle imposes a fluctuating demand upon the machinery of industry which must be regularized before we may hope to have the industrial wheels turn smoothly.

All that may be urged here is that labor recognize the problem and attempt to frame its program to mitigate such irregularity whenever an opportunity presents to exercise pressure to that end without interfering with its more immediate strategy. The first step, of course, is clearly indicated. It entails the systematic collection of information about the causes and extent of irregularity in the use of industrial equipment.

There is another general tendency of modern business which presents a challenge to the ingenuity of workers in shaping an extended program. Reasonably convincing evidence points to the conclusion that relatively more energy, expense, and thought are being devoted to the marketing and selling of the products of industry than to their pro-

salaried group in industry than in the wage workers. Some of this increase has undoubtedly been absorbed in that part of the managerial group which directs industrial processes, but the margin of increase is wide enough to signify that much of it must have gone to swell the numbers of those who control the business or marketing functions.

There is reason to believe that the margin between factory prices and retail prices has been rapidly increasing; that wages measured in terms of wholesale prices have advanced, but that their purchasing power in terms of retail prices have decreased. The conclusion follows that those engaged in the distributive process have tended to receive an increasingly large share of the product of industry.

All of this evidence points to the conclusion that the workers who produce goods are meeting with increased resistance from those who claim rival shares of the industrial product. And one is also given pause over the question of whether this diversion of energy from productive to distributive channels is not serving competitive rather than social ends. Perhaps when we learn more of what has happened, we shall find here one of our major sources of general waste.

Add to these considerations the cumulative effect of general inefficiency, and a picture has been drawn that is sufficiently suggestive. With most of our population living upon a standard that is below the efficiency line of health and decency, the estimate of what is lost through the abuse of our human resources becomes as impressive as it is imponderable. That such a condition should exist concurrently with a consistent idleness of a considerable por-

But how do these considerations affect the labor program? The problems presented are discouragingly intricate, and none of them can be solved in a moment; but most of them are subject to gradual solution. It can only be suggested that organized labor take the lead in demanding that such problems be worked over intelligently. Any effective approach is contingent upon the availability of material and knowledge which are not now to be had. Governmental authority must be obtained before much of it may be procured. Organized labor should agitate for the setting up of machinery to provide for the adequate handling and publication of data that will throw light upon such problems.

The first step is the outlining of an intelligent approach to an analysis of long-time economic problems. Probably what is needed is a Bureau for the Investigation of Investigations. After an approach is settled upon, there should be permanent machinery for performing research along these lines. There must be full authority for the procuring of all relevant information. The work of such a body should be of cumulative importance. It should be the task of organized labor to see that it never runs out of problems.

All of this is tenuous; it is not therefore unimportant. One thing may be said for such a program. In driving for the intelligent search for economic truth, labor will find itself in one department of modern life in which competition is not burdensome. The plan may seem overly virtuous and ambitious. But here, at least, is one star that is unencumbered by attached wagons.

CHAPTER XV

WAGES AND WELFARE

"Ye'd injye bein' in Congress," says Mr. Hennessy. 'Ye like to talk, an' nawthin ye say iver comes to annything."

"Well," said Mr. Dooley, "I'd be as happy there as I am here, knowin' there ain't annything in the wurruld I can do an' then thryin' to do it."

Mr. Dooley on "Congress."

To the great mass of men who live under modern industrialism wages is the most fundamental of all problems. Each man who lives in "The Empire of Machines" under the fitful sway of "The Price System" finds his living, his activities, his opportunities, and the development of his personality hemmed in between his nominal wage and the prices he must pay for the goods and services which minister to his needs and fancies. As these two factors draw near together they rob him of comforts and even of necessities; as they diverge, they give him more of the product of industry, freedom in spending, and opportunity for leisure and for growth. Within the confines lying between these two limits of a wage the laborer must find his quota of food and clothing and housing, his share of the comforts and follies of life, and his right to the resources necessary to intellectual and spiritual development.

withheld. As life is at present organized, leisure, access to books, music, and art, and opportunity to secure competent instruction are all necessary to intellectual development, and they are, one and all of them, accessible only to the laborer who has the necessary means. So it is, too, with spiritual and æsthetic values; one who would develop in himself an appreciation of beauty, of truth, and of goodness must have enough to allow himself to be surrounded with objects possessed of these qualities and to give himself enough freedom from the strain of exacting duties to appreciate them. Taste and character, if they be rich and positive, however great the "natural aptitude" may be, have to be built up through a long process of development. Immaterial as they are and far removed from the realm of money-getting, access to them has been barred by modern industrialism and income alone will unlock the gates. It may well be that the intellectual, the artistic, and the spiritual are the important things of life. But, because wages are still too small to allow these riches to become the property of the many, to the great rank and file of mankind the most important of all problems is still that of adequate wages.

Necessary as wages are to life, enjoyment, development, and goodness, they do not automatically convert themselves into welfare. They are rather, to use a very inaccurate but suggestive term, the very raw material out of which welfare is to be made. The process by means of which the laborer converts the contents of his pay envelope into well-being for himself and his family is far more elaborate and delicate than any known to industry. So great are the possibilities of good or bad choice that the results in health, comfort, and development obtained by different

vary tremendously. The process is beset with pitfalls and its every step requires an act of human judgment.

It may chance that a part of the wage is spent for impure food, patent medicines, or narcotic drugs which will contribute to ill-being. It may come about that, thanks to the guile of salesmanship, it will be wasted upon shoddy clothing, hideous furniture, or patent thingamajigs. It may be laid out quite improperly between food, clothing, recreation, and opportunities for development. The materials which are brought home from market may, through improper cooking, sewing, serving, or whatnot, be wholly or partially wasted. In extreme cases conditions of health and of life are such that the wisest judgment could not extract well-being from an ample wage. In every case mistakes of judgment proceed from habits and values which the individual has acquired in the society in which he lives. These have their source in a lack of development and experience which may have its basis in wages too low to allow contact with the materials and conditions which the world offers.

From this it follows that high wages are in themselves no guarantee of welfare. The roots of well-being are many and diverse. No one thing, such as an adequate wage, is sufficient in itself to meet the needs of human nature moulded by a social environment and an intellectual background. No sum of money, however large, can alone banish ill-being and bring the joy and fulness of life. But, although it is a single factor in welfare, the adequate wage is an essential element in that illusive compound. Its presence may be no guarantee of well-being, yet its absence is almost certain to result in ill-being.

will be wasted wages and recitations of horrible examples of wanton extravagance among wage-earners are beside the point. The higher wage represents a larger measure of potential welfare. If laborers fail to make the "potential" actual, it is not because the higher wage is there, but because something else is lacking. The need is not to take away the one active factor of increased well-being which is present, but to add the others. There is need for a development of an active appreciation of leisure by the laborer and of his capacity to use it. There is necessity for his development in taste, in habits, and in judgment. The real lack, if higher wages do invite riotous living, is for a training of the laborer in the elusive art of using leisure and the "backward art of spending money."

Such instruction is no exclusive affair of the schools. It must come, if come it does, from the press, the church, the trade union, and the hundred other institutions which together make up the social fabric which helps us to standards of judgment and organized opinion. Most of these agencies lie beyond the frontier of "the control of wages" and cannot be discussed here. But, without going too far afield, one suggestion can be made. To a considerable extent "the use of leisure" and "spending" are backward arts to the laborer because his wages have been small. In all probability laborers would learn these arts if they were allowed to experiment with rising wages. If in the past a workman's wage has been large enough only to satisfy his most urgent needs, he can have known little of the possibilities of well-being which adequate wages hold. He has had little chance to convert the abstractions of more goods and better services into specific commodities and helps which he can actually put to use and each of which means something

means that when his wages are first raised he must pick and choose between the things the market offers with little knowledge of the offerings and of standards of values. With "free income," not mortgaged to habitual expenditure, laborers may, by the rule of "trial and error" determine, not what is good and bad, but what is good and bad for them. It may well be that the greatest single step which can be taken in the establishment of a human standard of living is to allow the masses of men larger incomes with which to work out for themselves better material approaches to what life offers.

Many hundreds of years ago the term "the good life" was coined to express the joyous adventure in well-being which existence here makes possible. The Greeks, who gave us the term, had scanty material resources, used only man and beast for "industrial energy," and never acquired much wisdom about social organization. Since there was not enough to go round they gave a chance at "the good life" to the few by imposing its costs upon the many. The Athenian citizens who had a chance at plenty, at culture, and at the fulness of life, sang, "We're here because, we're here because, we're here because," and the host of helots, five of whom supported each citizen, joined in a lusty chorus, "We're here." With us conditions are far otherwise. Our resources are ample; we get our industrial power from coal and oil, gas and water; we can, if we will, unlock the secrets of economic organization. In our industries we have at work for us a volume of mechanical energy which is the equivalent of thirty helots for every family in the land. If the costs of a real life for the few must be borne vicariously by the many, a democratic culture may be built

translate "the good life" of aristocratic Greece into "the good life for all" of a democratic America.

Enough. It may be that all of this is merely talk. But there is a chance that it is not. And life offers experience only to those who dare.

A NOTE ON "THE ANNALS OF WAGES"

"Th' printed wurrud! What can I do against it? I can buy a gun to protect me against me inimy. I can change me name to save me fr'm th' gran' jury. But there's no escape fir good man or bad fr'm th' printed wurrud."

Mr. Dooley on "The Power of the Press."

The literature of wages does not take away all chance of the success of a program for the control of wages. Although most of it comes to the conclusion that "there ain't no such thing as control," there are many things in print which are usually not classed as wages literature that point toward an eventual domestication of wage rates.

There is no one volume that cuts through the maze of problems involved in a program for bringing wages under human guidance. The best statement of "wage theory" is to be found in H. Clay, *Economics for the General Reader*. The manuals upon economics, one and all, contain more or less systematic statements of how wages are determined. In general the more systematic these statements are the less relevant they are to a program of control. The older ones exhibit unmistakable assumptions of the "naturalness" and "inevitability" of wage-rates established under competitive conditions. The later ones, far more sophisticated, are by no means free from this taint of "inevitability." In many cases their authors go outside of their

between them. They are to be recommended rather for suggestion and provocation than for articulate contribution to the theory of wage-control.

The literature of the "case against control" is large, articulate in argument, and well presented. The case is very baldly, and somewhat naïvely, stated by J. R. McCulloch, "An Essay on the Rate of Wages," which was published nearly one hundred years ago. The best exposition of "the productivity theory" is in the writings of J. B. Clark. The reader who wishes a summary statement will go to "The Essentials of Economic Theory," ch. VIII; the one who wants a detailed explanation, to "The Distribution of Wealth." The argument, despite the general conception of it, is not primarily directed against control. In fact, one who knows the theory can reconcile it with most of the conclusions in this volume and that without exhausting all his resources in dialectic. The most interesting, even if the least convincing, arguments against control are written by bankers, manufacturers, and politicians, who in their daily life are accustomed to manipulate human situations, and therefore know that the economic order is run by natural laws. This literature is too inescapable to require citation here.

There is coming to be a body of literature telling how wage rates are actually made. The statistics of wages published in the Monthly Labor Review and the Bulletins of the U. S. Department of Labor, partial and incommensurable as their figures are, are a fair sample of the value which lies in quantitative information. In "Wages in the Coal Industry," J. W. F. Rowe traces the course of wage-rates and earnings for many years. D. Friday in "Profits, Wages, and Prices" chronicles the course of wages in this country during the war and after. It is suspected

the Ministry of Labor during the war and from many sources since its close, a vast amount of information about wage-rates and earnings in many industries. This suspicion, however, is confidential and is not to be passed on.

A vast deal has been written about the relationship of various rates in a "wages structure." For the conventional argument that these various rates fit together into a unified and orderly whole, see any standard work on economics. For evidence that rates do not dwell together in such heavenly unity, see the "frequency curves," showing the range of wages in various industries, presented in a paper by F. R. Macaulay, "Income in the United States," II, pp. 370-374; 418-423. These are but a fragment of a large amount of evidence upon the subject which the authors have gone over. Scanty as evidence of the courses of wage rates is, it is already sufficient to show that the number of factors upon which a wage-rate depends is large, that these factors vary from wage-rate to wage-rate even within an industry, and that a particular rate can be explained only in historical terms.

The literature of wages policy is not voluminous. To some extent this is because there has been little policy to be recorded. It is due even more to the failure of unions, arbitration boards, and others charged with the actual making of rates to present their theories in articulate form. It is unfortunate that there is no single volume containing the more important of the decisions of the Australian Commonwealth Court of Conciliation and Arbitration. Except for reprints of stray decisions these can be obtained only in a set of official records. The single volume upon wages policy which is far and away

The great mass of literature relating to the control of wages is not to be found under the heading of "wages" at all. Most of it relates to the various "factors" whose "guidance" can be made to increase the earnings of labor. A list of such factors can be gathered from the text above, and such a list is the best guide to further study. The reader can hardly dip into the realistic literature of technology and economics and miss the stuff of which this argument is made. His attention, however, must be directed to the most comprehensive and most persistent attempt which has yet been made to discover all the possible sources of an increase in wages. This is "The Report and Minutes of Evidence of the Inquiry" conducted by the Coal Industry Commission. If the two million words of this report which was "humbly submitted" "to Your Majesty's most gracious consideration" are too much for the reader, whose fragment of available time falls short of eternity, and he wishes a road easier than that appointed for royalty, he will have to put up with the pamphlet containing the conclusions of the Commission.

The literature upon wages and other incomes is readily accessible. "Income in the United States: Its Amount and Distribution," in three volumes, by W. C. Mitchell, and his associates in the Bureau of Economic Research, is comprehensive and reliable. It covers adequately the subject of the general division of income. The general reader will content himself with the first volume which presents the facts very simply without any attempt at interpretation. An equally reliable statement is D. Friday, "Profits, Wages, and Prices," which was referred to above. The book is interpretative as well as expository. The materials essential to a knowledge of the division of income in va-

the reports of the U. S. Commissioner of Internal Revenue, the reports of corporations, and the balance-sheets presented in Moody's Manual valuable.

The literature of the technical sources of wage-increases is far too large in quantity and too scrappy to be recorded here. Recent technical books and periodicals are full of casual references to advances in "the industrial arts" which have resulted in wage increases. A book which, in spite of much information, is valuable chiefly because of the problem which it raises is "Waste in Industry," gotten out under the auspices of the Federated American Engineering Societies. An attempt to trace wages from the nineties to the present is P. H. Douglas and F. Lamberton, "Movement of Real Wages, 1890-1918," *American Economic Review*, XI, pp. 409-426. The results of a similar attempt, specifically directed to the question of the extent to which laborers have shared in the surplus of recent technical development is G. Soule, "Relation between Wages and National Production," *Annals of the American Academy of Political and Social Science*, C, pp. 85-90.

The literature of the economic sources of wage-increases is just as voluminous. Since this possibility is more remote and more uncertain the printed word is largely hypothetical. The outlines of a program for bringing the rhythm of business activity under control are presented in W. C. Mitchell, "Business Cycles." This book, which is the standard work upon the subject, is being revised by W. C. Mitchell and W. L. Thorp. The most suggestive proposal for establishing a stable unit for the measurement of value is I. Fisher, "Stabilizing the Dollar." Perhaps the only "source" mentioned under this head in the

worked out in detail by W. H. Hamilton and W. L. Thorp in an article which will soon be published under the title "The Liquidation of Ownership." It seems unnecessary to cite references to proposals of fundamental change in economic arrangements. Nationalization, workers' control, state socialism, guild socialism, and the like each has its voluminous literature. F. Hodges, "Nationalization of the Mines," S. and B. Webb, "A Constitution for the Socialist Commonwealth of Great Britain," and G. D. H. Cole, "Guild Socialism," are as good as any others.

But it is indicative of a better day that dependence does not have to be put in books and documents which were never designed to help the workers in a conscious program to bring their wages under control. There are appearing men who are far more competent than "th' printed wurrud" to advise and assist labor organizations. Two or three "services" are furnishing regularly information which is invaluable in labor problems. Competent young men, who know alike industry and the use of statistics and accountancy, are available to assist labor organizations. And there are two or three bureaus, with staffs whose personnel is very competent, who are able and willing to undertake special work for labor groups. The amateur can no more handle the research work which must precede the formulation of a definite program for making wages behave than he can practice statesmanship or surgery. But every laborer, and certainly every union official, should know something of the fundamentals of the wages problem, at least enough to know when to "call in the doctor."

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