

**THE NEW
INDUSTRIAL REVOLUTION
AND WAGES**

POLITICAL AND
INDUSTRIAL DEMOCRACY
1776-1926

By
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THE INDUSTRIAL CODE

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CONDITIONS OF LABOR
IN AMERICAN INDUSTRIES

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THE IMMIGRATION PROBLEM

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THE NEW INDUSTRIAL REVOLUTION AND WAGES

A SURVEY OF THE RADICAL CHANGES IN
AMERICAN THEORY AND PRACTISE WHICH
HAVE COME IN SINCE THE WORLD WAR AND
CREATED THE PRESENT ERA OF PROSPERITY

BY
W. JETT LAUCK



FUNK & WAGNALLS COMPANY

NEW YORK AND LONDON

1929

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[Printed in the United States of America]
First published—February, 1929

7991

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CHAPTER I

INTRODUCTION

This book is not a compilation of data relative to wage changes during the past quarter of a century. So far as it has been possible, the attempt has been carefully made to eliminate all statistical compilations or concrete data. Such material has been used only where absolutely necessary to demonstrate a point or indicate a tendency, and even then in the most restricted way. The primary object has not been to present detailed information relative to the compensation of industrial workers. The real purpose has been to analyze and bring to light the extraordinary changes which have occurred during recent years in thought and action relative to theories of wage determination and the principles regulating the participation of employees in the output of industry. This has rendered necessary also a review of the revolutionary changes in the fundamental attitude of industrial leaders, financiers, students, publicists, and members of adjustment agencies, toward wage principles and standards, and also the citation of the sanctions for new standards and theories of wages which have developed through judicial or official action.

THE NEW INDUSTRIAL REVOLUTION

Prior to the World War, gradual, evolutionary changes had been taking place in wage-theories. After our entrance into the conflict, however, by mutual agreement between capital and labor, the general procedure was adopted of maintaining the pre-war purchasing power of wages by periodic changes in rates of pay according to fluctuations

in the cost of living. In general terms, therefore, it may be said that the war period practically constituted an interregnum in the development of principles and standards of wage determination. The only exception to this situation was the special emphasis placed on the so-called "living-wage" principle by the National War Labor Board. It was required to do this by the Presidential Proclamation creating the Board, in which the recognition of the living-wage standard was made mandatory upon its deliberations.

After the Armistice the pre-war wage agitation was renewed with unprecedented vigor. The ardor for the recognition of advanced wage principles and theories was also further intensified by certain programs for industrial democracy which were an outgrowth of the wartime movement for a wider expansion of democracy. Altho advanced conceptions were advocated, and in many cases sanctioned, there were no radical changes in theory or practise actually developed until after the industrial and financial breakdown of 1920-1921, and the resultant period of depression.

It was the effort to revive the prostrated industry and trade of the country that finally led to the new economic régime through which the country has been passing since the year 1923. Up to the beginning of that year, a policy of wage deflation and general reduction in costs had been adopted in the attempt to revivify trade and industry and place the country again on a prosperous basis. This procedure was unsuccessful. It was then supplanted by a radical change in constructive attitude. A new industrial revolution was inaugurated in the United States which finally became the marvel of the civilized world. In its significance it has outrivalled the eighteenth century industrial revolution in Great Britain, when steam power was first applied to new mechanical inventions, the factory

system created, and the modern industrial era inaugurated. Special students and official commissions from the leading industrial and commercial nations of the world have come to America to study our amazing changes and achievements.¹ European nations have been urged to adopt the American constructive policies and methods. Russia, in its desperate struggle to rehabilitate its industries, has openly accepted and based its hope for the future upon the new American plan of industrial performance.

This new industrial era, or the general underlying constructive program, was inaugurated by a group of industrialists and public officials, of which one of the chief spokesmen was the Secretary of Commerce, Herbert Hoover. In the early part of 1923, Secretary Hoover took issue with those who since 1920 had adopted the fallacious slogan of "a return to normalcy" in the sense of a deflation of wages and prices to a pre-war level. He contended that "the road to plenty" did not lie in that direction. "We must get our minds away," he said, "from the notion that pre-war standards of living and volume of business would be normal now. Normalcy is a vastly higher and more comfortable standard than 1913." He then went on to say that industry during the past decade had shown an unparalleled growth in productive efficiency. Volume had been increased; labor had been more productive; higher rates of pay had been made possible, and this, in turn, had enabled industrial workers to purchase more of the neces-

¹ A German Trade Union Delegation visited the United States in 1925. Its report was issued in 1926 under the title "Amerikareise deutscher Gewerkschaftsführer." Official British and Australian Industrial Commissions came in 1926 and 1927. Their reports are printed in the *Labor Review*, U. S. Bureau of Labor Statistics, June 1927, pp. 45-47, and May 1928, pp. 50-51. See also report of International Economic Conference, Geneva, May 4, 1927 (C. E. I. 13, International Labor Office, Geneva); also "America the Golden," by Ramsay Muir (Williams & Northgate, Ltd., London, 1927); "America's Secret: The Causes of Her Economic Success" (John Murray, London, 1927); J. A. Spender, Editor *Westminster Gazette*, article in *Washington Star*, June 3, 1928, entitled "Every Man Has a Chance in America's System;" "The Secret of High Wages," by Bertram Austin and W. Francis Lloyd (Dodd, Mead & Company, 1926).

sities and comforts of life. Prosperity, as a consequence, was contingent upon further improving these living standards, as labor would consume more if it could produce more and receive higher compensation. The Secretary of Commerce and those of kindred views, therefore, advocated the elimination of waste from industry, the standardization of output, the increased use of machines to extend mass production methods and to reduce labor and other costs of production. Under these conditions wage rates might be indeterminately increased, labor and other costs, as well as prices to consumers, reduced, and at the same time generous margins of profit maintained.

As a result of the influence of these revolutionary suggestions, the present era of unprecedented prosperity was begun and developed. Industrial leaders and financiers, as well as heads of labor organizations, accepted the new enlightened and far-seeing attitude as to industrial policy. The new proposals were enthusiastically applied. It was also clearly evident, because of the impoverished condition of European countries at the time, that the United States could not hope to sell its surplus products abroad in sufficient quantities to absorb the actual or potential output of its mills and factories. It was, therefore, realized that reliance must be placed on the domestic market, and that to expand domestic demand, wages or purchasing power must be increased.

Old wages, theories, and standards were, therefore, scrapped along with obsolete machinery and methods. The productivity principle of wage determination became dominant. Money rates of pay and real wages within a few years advanced to the highest point in the country's history. In the pressure, however, of the extraordinary industrial development which occurred, no general, practical method was worked out for guaranteeing to labor a definite share

in the increased productive efficiency of industry. This remains to be done. A basis has, however, already been laid down for such a constructive program by recent agreements between organized labor and industrial management. Industry itself has been firmly committed to the new wage theories. They are now passing from a status of theoretical acceptance to one of practical application. Both theoretically and practically they are supported by enlightened public opinion.

Aside from wages, the new industrial revolution has also developed fundamental problems of its own. The unprecedented machine which has been created must be coordinated in its workings. Not only must production and consumption be properly adjusted in individual industries, but industry as a whole must be coordinated, either through its own action or by public agencies, so that it may be stabilized, and recurrent periods of retardation and unemployment prevented. This is a vital problem and must be dealt with in a constructive way as soon as possible.

SANCTIONS, SOURCES AND PROBLEMS

This, in brief outline, is the background from which the present work has proceeded. In carrying it forward, reliance had to be placed mainly upon periodical literature and other purveyors of current history. The extraordinary industrial revolution through which we have been passing has been so recent that statistical data, precedents, and enlightening comment have been mostly restricted to these sources. Only four general studies have recently been published in book form, all of which are very valuable contributions to the subject.¹ Current governmental pub-

¹ "Industry Comes of Age," by Prof. R. G. Tugwell (Harcourt, Brace & Co., New York, 1927); "American Prosperity," by Paul M. Mazur (The Viking Press, New York, 1928); "The American Way to Prosperity," by Gifford K. Simonds and John G. Thompson (A. W. Shaw & Co., Chicago and New York, 1928); and "The American Omen," by Garet Garrett (E. P. Dutton & Co., New York, 1928).

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lications also contain important statistical information. The discussion of tendencies and the offering of constructive suggestions have thus far been confined to the business and financial press, and to addresses by industrial leaders and public officials.

Finally, in the course of the present work, the method which has been adopted in discussing the changes which have occurred in wage theories and principles, has not, as a rule, been to enter into a critical examination of theories put forward, but rather to state merely the reasons advanced in their support and to point out the extent to which changes have been sanctioned and applied.

CHAPTER II

PRE-WAR PRINCIPLES AND METHODS

Prior to the World War, thought and practise relative to the determination of wages in the United States were entirely different from the situation at the present time. Small progress had been made beyond the century-old "Iron Law of Wages" as originally worked out by the English classical economists. With the exception of the general theory of "Supply and Demand," there were in practise no definite principles or accepted standards for the determination of wage rates. Labor, in relation to its compensation, in other words, was generally—alho perhaps unconsciously—viewed as a commodity whose value was determined by the interplay of the forces of supply and demand. Alho such a conception as to fixing the price of labor would not always be acknowledged or openly avowed, nevertheless, as a matter of practise, it was a rule subconsciously present and usually followed. Labor's value was generally looked upon and determined in the same way as that of purely physical commodities, such as wheat, coal, iron, textiles and steel products. Very little attention, in a practical way, had been given prior to 1914 to the human and ethical elements in the wage problem.

THE SO-CALLED "LAW" OF SUPPLY AND DEMAND

From this view-point, the rate of pay to industrial workers at any time was to be determined by placing the supply of labor over against the demand for labor. The going price for labor was the result. In the event of any dislocation to or collapse in industry, the wage-earners were the residual sufferers. The evils arising from unre-

strained competition, such as prevailed in the coal-mining industry before 1900; price-wars in iron and steel manufacturing, and other basic industries, or the creation of a constant over-supply of unskilled and semi-skilled workers by an unrestricted immigration policy, as well as recurrent industrial depressions or collapses from whatsoever causes, up to the time of the World War, were imposed upon the wage-earner by invoking the so-called immutable and inexorable "laws of economics."

It is no cause for wonderment that industrial workers, under the influence of these conditions and pronouncements, came to look upon theoretical and practical economics, especially in relation to wage-fixing, as "the dismal science of despair." According to its principles, as practised prior to the war, they were without hope, or without any rational basis of procedure. Theoretically, their only opportunities for advancing their well-being lay (1) in reducing competition so as to permit the accumulation of a greater volume of profits and capital for future industrial expansion, (2) in producing goods faster than the labor supply increased, (3) in reducing the birth-rate, or (4) in the fortuitous advent of some pestilence, earthquake, or other natural catastrophe, or even war itself, any of which chance happenings would decimate the labor supply and thus give to wage-earners afterward a greater advantage in fixing the price for their labor.

FREE PLAY OF SUPPLY AND DEMAND OFFSET BY ORGANIZATION

Altho these theoretical contingencies as well as vigorous adherence to prevailing theories of wages might have been of great benefit ultimately to the wage-earning classes, they were too remote to be of any practical significance in the work-a-day world. Quite naturally, therefore, they

did not have a constraining effect prior to the war. What seemed of relatively more importance to industrial workers was organization and the use of their combined economic influence or strength to offset the devastating effects of the interplay of supply and demand.

The only effective program from a labor standpoint manifestly seemed to those in the movement to be in organization and in the use of concerted economic power so far as this could be developed. As a consequence, the more skilled wage-earners turned their energies toward organization and the exercise of economic strength as the most effective means of securing higher wages. Craft unionism rapidly developed among the building workers, in the metal trades, in clothing manufacturing, among engine and train crews and shop employees on the steam railroads, and among conductors and motormen on electric traction lines. Industrial unionism also gained strength in the coal-mining industry and to a certain extent in the manufacture of clothing.

Unskilled or common laborers, as a rule, were the defenseless victims of the unhampered forces of supply and demand. Their deplorable condition arose from the difficulty of organization and the consequent impossibility of concerted resistance.

As the organization of other classes of wage-earners developed, it was followed by a similar procedure on the part of employers. Collective action was met with collective action. Wage determinations virtually became the result of a test of actual or potential economic strength.

MEDIATION AND ARBITRATION UNAFFECTED BY FUNDAMENTAL PRINCIPLES

When collective bargaining and the strike or lockout failed, altho recourse was frequently had to mediation and

arbitration, no fundamental principles were evolved or generally accepted prior to the World War. In arbitration proceedings, stress was placed by labor upon the arduousness of their work, or, in other words, upon the actual physical sacrifices they were forced to make, and the physical conditions under which their occupations required them to toil. The groups above the unskilled and semi-skilled workers generally demanded differentials over basic rates of pay according to the skill, hazard, and responsibilities of their duties. These factors were, as a rule, recognized and given consideration. The potent influence in transmitting them into concrete terms of compensation, however, was usually dependent upon the relative degree of organization present and of the economic results which could be expected from either party to the case, if there was a failure to grant satisfactory rates of pay. Guiding principles were given scant, if any, consideration. Arbitration awards were almost without exception an irrational compromise of the conflicting claims of the parties to a controversy, popularly described as "splitting the differences."

COST OF LIVING AS A FACTOR IN WAGE-FIXING

After the year 1900, when prices began generally to rise, "cost of living" developed as an active factor in wage-fixation. Compilations of changes in prices of articles entering into the consumption of the wage-earning classes were made, and emphasis was placed by labor representatives upon the steady decline in the purchasing power of money wages. This tendency became increasingly apparent in negotiations and controversies over wages in all branches of mining and manufacturing. It was also brought prominently to the fore-front during the period of 1910-1915 in formal wage arbitrations between the rail-

ways and their engine and train crews under the provisions of the Newlands Law.¹

This factor, however, as a basis for the determination of wages, as can be seen at once, had no fundamental or constructive significance. It was a defensive factor and not a constructive or underlying principle of action. It assumed that pre-existing wage-standards were satisfactory, and its acceptance and application merely implied that the real wages which had previously been received should be continued. It carried with it no analysis as to the adequateness or acceptability of previous standards of compensation. Under its workings there could be no actual advance in economic well-being. Its acceptance and application as a method of wage-adjustment could only mean that there would be—as compared with past periods—no loss to wage-earners in purchasing power or in real income.

STANDARDIZATION OF OCCUPATIONS AND RATES OF PAY

Another prominent factor which also gradually developed in pre-war wage-determinations was that of standardization. The effort was constantly made by wage-earners to secure standardized rates in certain occupational groups irrespective of local conditions. This tendency was especially noticeable in organized trades, as in the metal and building crafts, and in certain highly organized industries, as bituminous coal mining and steam transportation.

In the case of the coal-mining industry, basic rates of pay were established by negotiation and agreement in what

¹ J. Noble Stockett, "Arbitral Determination of Railway Wages" (Houghton Mifflin Company, Boston, 1918), Chapter III—The Increased Cost of Living. Proceedings of Railway Wage Arbitrations Held under the Auspices of the United States Board of Mediation and Conciliation, 1910-1915. Herbert Feis, "Principles of Wage Settlement," Chapter IV (H. W. Wilson Company, New York, 1924).

was termed the Central Competitive Field, made up of Illinois, Indiana, Ohio and Western Pennsylvania. The rates of pay in other mining areas were related to these ruling rates, varying according to comparative physical factors, such as the thickness and character of the coal seams, and the ease or difficulty of mining coal. Wages and working conditions were, therefore, practically standardized on a national basis, with due allowance for variations in local conditions of mining.

On the railroads, the highly organized engine and train crews, popularly known as "The Brotherhoods," at first carried on relations with the individual railroads. Afterwards, negotiations and collective bargaining developed according to geographical sections known as the East, Southeast and West, the railroads being grouped respectively for these designations as (1) North of the Ohio and Potomac and East of the Mississippi, (2) South of the Ohio and Potomac and East of the Mississippi, and (3) West of the Mississippi River. This geographical grouping for industrial relations and the determination of wages was brought about primarily through its acceptance by railway managements for the purpose of protecting their own interests. They found it expedient to have wages and working conditions standardized in certain areas, in order to nullify the tactics of the labor organizations in playing one individual railroad against another for the purpose of establishing precedents for collective bargaining.

Standardization was also strongly supported by the railway labor organizations. Before our entrance into the World War the unions of engine and train crews had effectively organized the "Eight-Hour Day Movement" on a national basis. At the same time, they were attempting

to eliminate territorial differentials in wage-rates.¹ Standardization had been generally put into effect in railway service, with the exception of a favorable differential in rates of pay in the West over the East and Southeast. Wartime investigations, however, disclosed the fallacy of the traditional idea, extending back to the California "gold rush" of 1849, that cost of living was higher in the West than in the East. As a consequence, the United States Railroad Administration practically standardized wage-rates for almost all classes of railway employees on the basis of the country as a whole.

A further aspect of standardization of wage-rates was also evident in the pre-war period in connection with the methods of adjusting wages in the navy yards and arsenals. It was provided by law that the boards charged with determining wage standards should investigate conditions in the territory adjacent to government arsenals and yards and make their findings on the basis of rates paid for similar work in private industries.

Still another vital question relative to standardization prior to the war, and which is still the center of much controversy, had to do with the standardizing of rates of pay and working conditions of skilled occupations, as in the building and metal trades. With the increasing division of labor resulting from the constant extension of the use of machinery, skilled work, such as for example that of machinists, became more and more subdivided. Machine workers were utilized to a constantly greater extent on processes which had before been done by hand. Skilled crafts became concerned in making their occupational

¹ "The Arbitral Determination of Railway Wages," by J. Noble Stockett, Jr., 1918, Chapter I, Standardization. Exhibit entitled "Standardization" or Extracts from Pre-War Arbitration Awards Submitted to U. S. R. R. Labor Board, Chicago, 1921, by Railway Employees' Department, American Federation of Labor. "Report of the Eight-Hour Commission," Washington, Government Printing Office, 1916. Feis, "Principles of Wage Settlement," Chapter I.

standards as inclusive as possible, while, on the other hand, the employers resisted any effort to have a semi-skilled machine operator receive the same rates of pay as a skilled craftsman. As a consequence, there has been constant controversy during the past twenty years as to the definition of skilled crafts and the scope of application of their wage standards.

The significance and wide extent of the changes thus taking place, or the effects of mechanical methods in eliminating skilled craftsmen, were forcibly expressed by Mr. John Frey, of the Molders' Union, writing in *The American Federationist* as early as May, 1916, as follows:¹

Of late, this separation of craft knowledge and craft skill has actually taken place in an ever widening area and with an ever increasing acceleration. Its process is shown in the two main forms which it has been taking. The first of these is the introduction of machinery and the standardization of tools, materials, products and processes, which makes production possible on a large scale and the specialization of the workmen. Each workman under such circumstances needs and can exercise only a little craft knowledge and a little craft skill. But he is still a craftsman, tho only a narrow one and subject to much competition from below. The second form, more insidious and more dangerous than the first, but to the significance of which most of us have not yet become aroused, is the gathering up of all this scattered craft knowledge, systematizing it and concentrating it in the hands of the employer and then doling it out again only in the form of minute instructions, giving to each worker only the knowledge needed for the mechanical performance of a particular relatively minute task. This process it is evident separates skill and knowledge even in their narrow relationship. When it is completed the worker is no longer

¹ "Modern Industry and Craft Skill," by John P. Frey in *American Federationist*, May 1916, pp. 365-6, as contained in "Readings in Trade Unionism," by David J. Saposs, pp. 283-4.

a craftsman in any sense, but is an animated tool of the management. He has no need of special craft knowledge or craft skill, or any power to acquire them if he had, and any man who walks the street is a competitor for his job.

There is no body of skilled workmen to-day safe from the one or the other of these forces tending to deprive them of their unique craft knowledge and skill. Only what may be termed frontier trades are dependent now on all-around craftsmen. These trades are likely at any time to be standardized and systematized and to fall under the influence of this double process of specialization. The problem thus raised is the greatest one which organized labor faces. For if we do not wish to see the American workman reduced to a great semi-skilled and perhaps little organized mass, a new mode of protection must be found for the working conditions and standards of living which unions have secured, and some means must be discovered of giving back to the worker what he is fast losing in the narrowing of the skill and the theft of his craft knowledge. It is another problem which the organized workmen must solve for themselves and for society.

Under these circumstances the progressive degeneration of craftsmanship and the progressive degradation of skilled craftsmen seem inevitable.

The movement thus described by Mr. Frey more than a decade ago has been intensified since the war by mass production methods, and the work of all-around skilled craftsmen in manufacturing and mining practically restricted to fields where machinery cannot be utilized.

PRACTICAL RESULTS

The period before the war, so far as wage determinations were concerned, may, therefore, be said to have been one which was not marked by the development and acceptance of any new principles of constructive action. In aca-

democratic circles, as well as in industrial life itself, the old order of thinking prevailed, in which the law of supply and demand was predominant. No hope of immediate betterment was held before industrial workers. Habits of saving, limitation of numbers, or increased efforts and productivity were put forward only as long-time bases for increased compensation. Even if these conditions were realized, however, the situation seemed to be without practical hope, because of the small extent to which the supply of labor was organized for collective bargaining purposes, and because of the fact that the policy of unrestricted immigration constantly made available a labor supply in excess of the demand arising from the very rapid expansion in mining and manufacturing.

As the unskilled and semi-skilled wage-earners found it difficult, if not impossible, to form and maintain organizations to protect themselves against the so-called inexorable law of supply and demand as applied to their rates of pay, and as they were also confronted with the competition of an unrestricted immigrant labor supply of low standards, the economic condition of these classes of industrial workers in 1914, when the World War began, had reached the danger line from both a human and a public standpoint. Their real wages were not sufficient to maintain themselves and their families according to standards of bare physical subsistence. In order to preserve family life, wives and children were forced to supplement the earnings of the heads of the family by seeking employment outside the home or as an alternative to destroy a normal family life by taking boarders or lodgers into the home. Children, even in their early teens, had to leave school and go to work.

Some of the principal industries, such as textiles in all its branches, as well as clothing manufacturing, largely

depended on woman and child labor, and were characterized by exceptionally low wage levels. In communities where other basic industries, such as iron and steel manufacturing and coal mining, were localized, secondary industries were established with the object of taking advantage of the low wage standards of the men by securing cheap woman and child labor from their families. The centralizing of cigar and "stogie," candy, paper box, clothing, and millinery manufacturing in Pittsburgh and other steel-manufacturing centers, and of hosiery, knit goods, and silk manufacturing in the anthracite coal-mining fields, and of shoe factories in bituminous coal-mining areas, were examples of this general tendency.¹

NEW PRINCIPLES ADVOCATED

Altho this was the situation as to actual methods and conditions, and altho new principles as to fixing wages were not generally accepted prior to the war, nevertheless, new conceptions as to what wages should be were constantly and earnestly put forward during this period, and vigorously advocated, especially in connection with wage-arbitration proceedings. As a matter of fact, the educational work done in this way, as well as the agitation car-

¹ For details as to this general situation, see:

Final Report of U. S. Commission on Industrial Relations, Washington, Government Printing Office, 1915.

Report of U. S. Immigration Commission—Vols. VI-XXVIII—Washington, 1910.

Bureau of Labor, "Women and Child Wage Earners in the United States," 1910, Senate Document No. 645, 61st Congress, 2nd Session.

U. S. Public Health Service, Bulletin No. 76, 1916.

U. S. Children's Bureau, Department of Labor, 1915, "Study of Infant Mortality in Johnstown, Pennsylvania."

U. S. Children's Bureau, Department of Labor, 1915, "Study of Infant Mortality in Montclair, New Jersey."

U. S. Children's Bureau, Department of Labor, 1917, "Study of Infant Mortality in Manchester, New Hampshire."

U. S. Provost Marshal, Second Report to the Secretary of War on the Selective Draft Service, December, 1918.

The Pittsburgh Survey, 1910, Russell Sage Foundation.

"A Living Wage," John A. Ryan, 1920.

"Labor's Crisis," Sigmund Mendelsohn, 1920.

"Conditions of Labor in American Industry," Lauck and Sydenstricker, 1917.

ried on by certain social agencies, was the most significant feature of the period immediately preceding the war.

The facts as to wages and working conditions which had been developed by governmental and private inquiries were so startling and so fundamental in their industrial, social, and civic significance that it was clearly apparent that they could not continue to be ignored when considered from any standpoint—whether one of humanity, public welfare, or even from the point of view of profit or the future effectiveness and productiveness of industry. To students, investigators, or industrial leaders with foresight, and to all groups of enlightened public opinion, it became increasingly evident that industry needed a constructive program for determining wages which (1) would lead to a wider and more equitable dissemination of economic welfare, (2) would make possible an upstanding, dependable citizenship in a self-governing republic such as ours, and which (3) in conjunction with improved methods of management, would bring about greater productive efficiency in industry, and a larger and more stable measure of national prosperity.

The gradual emergence of this point of view was in reality the most significant aspect of the pre-war period so far as the determination of wages was concerned. Opinion was slowly crystallizing toward changed principles and practical methods when we entered the World War. This interregnum, so to speak, temporarily put aside the movement then in progress, but the theories as to wage-fixing which were being advanced in the years 1914-1916 without practical success, have finally become, as we shall see later, the commonplaces of the post-war industrial world, and have not only met with general acceptance and application, but in some of their aspects have been elaborated and sanctioned in a way that even the most

visionary advocate in pre-war years could not have anticipated in his wildest dreams.

THE "SUBSISTENCE MINIMUM"

Social and charitable workers were the first to see the necessity for new conditions and to advocate the beginnings of their attainment. This was, as might have been expected, for the reason that their work and daily activities brought them into immediate contact with the human and social evils of the prevailing wage system. They soon discovered that poverty, dependency, and delinquency were the inevitable outgrowth of conditions then existing. As they proceeded in their studies of the status of wage-earners they found that among families in the lowest industrial scale the requirements of physical life alone—food, shelter, clothing, and fuel—necessitated a certain minimum family income, and when the earnings of the husband, or the collective earnings of husband, wife and children, fell below the ability to satisfy these bare animal necessities, the family became a public charge. The earnings of the head of the family, it was therefore concluded, should never, under any conditions, be less than sufficient to cover the requirements of minimum family subsistence.

The next step was to find out what wages and earnings actually were, and to compare them with these minimum requirements. This comparison developed the astounding fact that, among the multitude of unskilled American workers, average earnings were generally inadequate; in other words, that the heads of families could not provide their families with a bare physical subsistence. Equally startling was the discovery also that even this was difficult when the wages of the head of the family were supplemented by the earnings of children, who should have been in school, and by the contributions of wives and mothers,

who; instead of engaging in outside employment or taking boarders and lodgers in the home, should have had their energies free to devote exclusively to their children and their households. It was therefore apparent that competition, or the free play of the forces of supply and demand, in determining wages for these classes, should be so checked that the lowest wage-rates should not fall below the danger point—the point where the wage-earner and his family could not satisfy elementary subsistence needs.

THE RESULTS OF BUDGETARY STUDIES

Investigations were made to determine what this basic wage-rate should be. These inquiries consisted of budgetary studies for the purpose of ascertaining what the minimum requirements for food, shelter, fuel, clothing and lighting of an average unskilled wage-earner's family would cost on the basis of contemporaneous prices. Scientific analyses were prepared as to the food values necessary for workingmen and their wives and children of school age. Computations were then made as to the outlay necessary for food ordinarily purchased by wage-earners in order to provide proper nourishment on the basis of these scientifically determined food requirements. Direct investigations were also conducted in industrial localities to find out the cost of necessary housing, clothing, fuel, and light and sundries. These items were then brought together, and their aggregate cost disclosed the amount of family income essential to the physical maintenance alone of an average wage-earner's family. No allowance was made for comforts, luxuries, recreation, or savings. The minimum budget represented the minimum cost of bare subsistence.

As early as 1901, the United States Bureau of Labor had made a general study of more than 25,000 families of

wage-earners in all parts of the country. Included in this study was a very large proportion of native white and older immigrant families, and the average annual family income shown was \$750. The object of the inquiry was to ascertain the cost of living of industrial workers, and no attempt was made to analyze the adequacy of the incomes earned or the standards of life based on these incomes.¹

The budgetary facts disclosed by this investigation, however, were of great value to those which followed, principally under private auspices, for the direct purpose of showing the minimum cost of proper subsistence of wage-earners and their families. The most notable of these were those made by Louise Bolard More, of Columbia University, of 200 families in New York City during the years 1903-05; by Doctor R. C. Chapin, of 642 families in New York City in 1907, under the auspices of the Association for Improving the Condition of the Poor; by J. C. Kennedy and others of the University of Chicago, in 1914, of 184 families of the Chicago Stockyards District; by Frank H. Streightoff in the same year for families in New York, Buffalo, Syracuse, Elmira and Albany, for the New York Factory Investigating Commission; by the Bureau of Personal Service of New York City, in 1914; and by Esther L. Little and W. J. Henry Cotton, in 1914, of "A Suggested Budget for a Textile Worker's Family in Philadelphia," the investigators being graduate students in the University of Pennsylvania.²

The most exhaustive of these studies was that made by Doctor Chapin. His conclusion was that in 1907 "an income of \$900 or over" for a wage-earner's family

¹ Eighteenth Annual Report of the Commissioner of Labor on Cost of Living, Washington, Government Printing Office, 1901.

² Reprints of all these Budgetary Studies are to be found in Bulletin 7, "Standards of Living," Bureau of Applied Economics, Washington, 1920.

"probably permits the maintenance of a normal standard, at least so far as the physical man is concerned." The economic and social effects of lower incomes were also shown by him at that time to be as follows:

Annual Family Income	\$400- \$599	\$600- \$799	\$800- \$999	\$900- \$1099	\$1100 and over
Per Cent. of Families Underfed	76	32	22	9	0
Per Cent. of Families Underclothed	88	57	32	18	6
Per Cent. of Families Overcrowded	68	58	53	36	21
Per Cent. of Families Underfed and Underclothed....	68	16	10	2	0

This conclusion of Doctor Chapin as to a minimum annual family income of \$900 being essential to a subsistence standard of living was corroborated by an inquiry of the British Board of Trade into the cost of living in American towns in 1909. Mrs. Louise B. More's investigation in 1906, in New York City, also showed that "at least \$728 a year" was essential. A special committee of the New York State Conference on Charities and Corrections reported in 1907 that on the basis of a conservative estimate of basic needs "\$825 is sufficient for an average family of five individuals." Professor J. C. Kennedy's investigation in 1914 of the families of Chicago Stockyard workers stated that the "necessary minimum expenditure for each family of five would be \$800" annually.

Doctor Chapin's conclusions were also verified by the reports during the same year of the New York Factory Investigating Commission and the New York City Bureau of Standards. About seven years later—in 1914—the minimum budget for a textile worker's family in Philadelphia was estimated at \$1,071. In 1915 the Chicago Street Railway Conductors and Motormen, in the course

of arbitration proceedings, claimed that \$1,210 a year was essential to meet the costs of the minimum requirements of their families. During the following year, the Legislative Committee of the American Federation of Labor at a Congressional committee hearing on the so-called Nolan Bill providing a three-dollar-a-day minimum wage for government employees, submitted a budget of \$766 as a minimum standard. In explaining this estimate, Mr. Arthur E. Holder, of the Legislative Committee, stated that \$766 would "simply purchase a bare subsistence and is much below a decent living standard," adding: "You will observe that I have tabooed every form of 'luxury.' Receiving \$765.95 a year, there could be no riding on street cars for this workingman's family, no tobacco, no candy, no books, no Sunday-school contributions, nothing for the church; no newspapers, no movies, no lodge dues, no insurance, no postage stamps and no doctor's bills. . . ."

MINIMUM REQUIREMENTS AND PREVAILING WAGES

From the foregoing summary, the significant point which stands out in connection with the historical development of the principles and methods of wage determination, is that from 1903 to 1916 a large body of opinion, supported by budgetary estimates, prepared under public and private auspices, had as a rule fixed upon a sum ranging from \$800 to \$900 per annum as the annual income which an unskilled laborer and his family should receive in order to maintain a bare physical subsistence, and, as a consequence, the fixing of wages so as to yield at least this income was publicly advocated despite the fact that, under contemporaneous conditions, the family income of industrial workers was, as a rule, much less. The Federal Immigration Commission's investigation of 15,726 workmen's families in 1908-1909, in all branches of industry

and in all sections of the country, showed an average family income of only \$720 per year. In iron and steel manufacturing, the average family income was only \$568, in bituminous coal mining \$577, in anthracite coal mining, \$618, in silk mills \$635, in the woolen and worsted mills and in sugar refining only \$681, and in leather manufacturing only \$671. The Russell Sage Foundation in 1908 found the average annual income of steel workers in Homestead, Pennsylvania, to be only \$349, and in 1909-1910 the University of Chicago Settlement, in the Stockyards District, reported the families of workers, principally of races of recent immigration, to have a yearly income of only \$442. The results of all these investigations, moreover, showed family incomes as the collective result of the earnings of husbands, wives, and children, and were not based on the earnings of the head of the family alone.

But the amount of family income of industrial workers during this period is not the fact of primary importance. The significant point is that from the results of the prevailing method of determining wage-rates under the more or less unrestricted play of supply and demand, came the acute realization that some other principle should be invoked to check the evils of this method. The beginning of a new point of view was expressed in the claim that the wages of the unskilled workers—those on the danger line—should be sufficient to provide at least a subsistence level of living for themselves and their families. This was further elaborated by showing that it should be made possible for the wage-earner himself to earn this minimum income, so that his children might remain in school and his wife might follow her normal life as a wife and mother. Industries which did not have a wage scale in conformity with these minimum subsistence standards were denounced as parasitic and inimical to the public welfare.

BASIC STANDARDS DEVELOPED

During this period two minimum levels or standards were developed for use in wage-determination. They may be briefly defined as follows:

(1) The "pauper or poverty level," which represented roughly a standard of living just above the line where families were obliged to accept aid from charity or where they would run into serious debt. Industries paying wages which did not permit a higher level than this were termed parasitical and anti-social, and were condemned as causing high rates of infant mortality, encouraging woman and child labor, and developing "family incomes" instead of individual wage standards.

(2) The "minimum of subsistence level," which was based essentially on mere animal existence and allowed little, if anything, for the needs of men as social creatures. At this level was no allowance for temporary unemployment, and no provision for the savings that are necessary to take care of sickness, accident, or old age. It was claimed that workers receiving this wage were only a few weeks removed from the possibility of dependency.

Both of these standards, with emphasis, as a matter of course, on the latter, were put forward as a bulwark against the serious effects upon wages of the unhampered play of the forces of supply and demand.

LABOR OFFICIALLY DECLARED NOT TO BE A
COMMODITY

An official and general sanction of the point of view that labor was not a commodity was established by the Congress in 1916. Under the provisions of the so-called Clayton Act, passed in that year, it was declared that "labor was not a commodity or article of commerce."

This public declaration brought to the forefront the social and human side of the wage problem and repudiated the theory that the price of labor, as in the case of ordinary commodities, could be determined solely by the law of supply and demand. The obvious conclusion was that questions of humanity, as well as social and civic effects, must be taken into consideration in fixing the compensation of industrial workers. The embodiment of this fundamental principle in a Federal statute, aside from its bearing upon the legal status of labor organizations, had a stimulating effect upon public opinion and upon the public attitude toward the wage problem, and really signaled the breaking away from the old view-points in determining the compensation of labor.

THE STANDARD OF "HEALTH AND MODEST COMFORT"

Under these conditions, it was but a step to the development of further principles in connection with the theory of what a basic wage should be. This was brought forward in the form of a declaration that a bare physical level for the lowest-paid workers was not sufficient; that the subsistence standard had been advanced merely to show the danger-line below which earnings should not be permitted to fall; that the unskilled laborer and his family as human beings were entitled to something more than a bare animal existence; and that there should, therefore, be made possible to them a standard of living of "modest comfort and health," with some opportunity for the ordinary decencies of life and for recreation.

This new conception or higher standard of protest against the old law of supply and demand, which was destined to have a tremendous influence in the future, originated on the Pacific Coast in the Departments of

Economics of the University of Washington and the University of California. Technically it became later known, in a general way in connection with wage controversies, as the "living wage" as contrasted with the "subsistence wage standard." The original occasions which led to its development were wage arbitrations in 1917 between street railway companies and their employees in Seattle, Washington, and in Oakland, California.

THE SEATTLE AND SAN FRANCISCO AWARDS, 1917

In December, 1917, an arbitration board, which had been earlier appointed in Seattle to determine a wage dispute between the local traction company and its employees, made an award which was destined to have a far-reaching effect in later years. The Chairman of the Board was Doctor Henry Suzzalo, at that time President of the University of Washington. He called upon the faculty of the Economics and Sociology Department of the University to assist him. The late Dr. Carlton Parker was at that time head of the department, and with him were associated Professor William F. Ogburn and others. They made a careful study of living conditions among street railway employees in the city, and prepared a budget for the consideration of the Board in making its award. This budget, as defined by the Arbitration Board in its decision, "may be called a minimum comfort budget and is slightly higher than a minimum health budget. The standard set may, therefore, be said to have been two steps higher than the minimum subsistence level."

It was further explained by the Board that the budget was not an ideal but a generalized one. A family of five was chosen as the basis for the following reasons:

The budget is for a family of five. Three children are chosen for various reasons. (a) Three children at least are

necessary for the race to perpetuate itself. (b) Federal and State experts do not make out budgets for less than families of five; thus neither public nor expert opinion sanctions a smaller standard. (c) Standards of a warring and industrially competing nation would seem to demand three children as a minimum. (d) Unmarried men are less desirable than married men, individually and socially, physically and morally; and the economic barrier to marriage is recognized as an important one. (e) The family of five, while larger than the average in the company's employ, may nevertheless be taken as the standard family of workmen receiving the maximum hourly rate, and the lower differentials worked out from this rate.

Clothing and housing allowances were made on the basis of decency and modest comfort. A standard of proper nourishment of the family was developed through dietary studies on the assumption that about 12,000 calories per day were required, divided as follows:

Man	3,400
Woman	2,700
Boy (13-14 years).....	2,700
Girl (8-9 years).....	2,000
Boy (5-6 years).....	1,500

Allowances in a modest way were made for amusements, recreation and health. The insurance and savings item was larger than actually occurred, because wages prior to the award of the Board were not sufficient to permit savings or the taking out of insurance. The moderateness of these allowances by the Board, altho they aroused widespread comment and were unprecedented at the time of the award, may be seen from the following transcript of this section of the budget:

Amusements (movies, vacations, picnics, etc.).....	\$ 30.00
Education and literature.....	11.00
Insurance and savings.....	130.00
Comforts (tobacco, candy, Christmas, etc.).....	30.00
Organizations	20.00
Dental and medical care.....	60.00
Incidentals (stamps, barbers, stationery, etc.).....	25.00
Household (furniture, laundry, tools, etc.).....	40.00
Miscellaneous (exigencies and waste).....	20.00
	<hr/>
	\$366.00

The total cost of the budget accepted by the Board for fixing wages as a standard of minimum comfort for one year for a family of five was \$1,505.60.¹

In September, 1917, another Arbitration Board in Oakland, California, which had been appointed to adjust the wages of the street railway employees of that city, asked Professor M. E. Jaffa, of the College of Agriculture of the University of California, to prepare a study relative to recent increases in living costs. As reports had also been requested from several other members of the faculty, Professor Jaffa finally left the matter of total family income to the economists and emphasized in his report the purely nutritional aspects of food in relation to the earnings of workingmen's families, the minimum requirements of an average family before the danger line of undernourishment was reached, and the consequent effect of low wages on health.²

For the same Board, Doctor Jessica B. Peixotto, of the University of California faculty, prepared a detailed budget of the minimum outlay required for a wage-earner's

¹ "Standards of Living: A Compilation of Budgetary Studies," Bureau of Applied Economics, Washington, D. C., 1920, pp. 96-101.

² *Ibid*—pp. 119-125.

family of husband, wife, and three children of school age, in San Francisco and Oakland. The amount she estimated at \$1,476 per annum, with the statement that it covered "a minimum standard of wholesome living and not mere subsistence." . . . "It would seem, then," she declared, "that the present scale of wages is such that a family of man, wife and three children of school age cannot be maintained without getting into debt or receiving aid on much less than \$110 a month," continuing:

When the normal breadwinner is paid less than this sum, one of three things, any one of them harmful for the group and for the community, is likely to happen:

1. Other members of the family will have to work to make out the income; or

2. There will be less food than is necessary for the men to do efficient work. The risks of ill health to all members of the group and the consequent costs to the group and to the society are equally plain; or

3. The group must go without many of the articles noted under Sundries and House Operations. The probabilities of stupidity, early breakdown, and dependency are evident, for the expression of the more subtle capacities, the capacity for foresight, for generosity, for sociability, depends on having some money for "Sundries." One of the most important differences between social dependents, potential or actual, and self-supporting citizens is that social dependents are willing to go without the money for "Sundries," and capable men and women recognize the imperative need for the money that will buy those things the term covers.

THE PACKING-HOUSE AWARD

These Pacific Coast conceptions of a minimum standard of living for the worker, based on health and comfort, were immediately reflected in other sections of the country. As a result of the unrest and dissatisfaction in the Slaugh-

tering and Meat Packing Industry in 1917, Judge Samuel Alschuler, of the United States Circuit Court, was appointed Arbitrator and Administrator in the industry by President Wilson. When sitting as an arbitrator to adjust wages, the principle of a wage for the lowest-paid worker sufficient to support himself and family in health and modest comfort, was urged before and accepted by him as a guiding principle in making his award.

SUBSISTENCE AND MINIMUM STANDARDS COMPARED

The precedents thus established had a pronounced effect upon wartime and post-war wage adjustments, and were the basis, as we shall see later, of many significant controversies. The examples already cited, however, represent the strictly pre-war developments. In order that these offsetting conceptions upon the "commodity," or the so-called law of supply and demand theories of wages, may be quickly grasped, the subsistence and health-and-comfort standards, developed before the war, are shown below in chronological order. The differences in the costs of the various budgets show roughly the differences in the standards which were put forward in this period:

A. Subsistence Level	Date	Amount
1. Wage Earners' Budgets in New York City, Louise B. More.....	1906	\$ 836.25
2. Standard of Living in New York City, Doctor R. C. Chapin.....	1907	900.00
3. Family Budgets in Chicago Stock Yards District, Professor J. C. Kennedy and others.....	1914	733.62
4. Costs and Standards of Living in New York State, New York Factory Investigating Commission..	1914	876.43
5. Cost of Living of Unskilled Laborer's family, New York City, N. Y. Bureau of Personal Service.....	1917	980.42

B. <i>Minimum Health and Comfort Level</i>	<i>Date</i>	<i>Amount</i>
1. Minimum Budgetary Estimate for Pacific Coast Workers, Doctor Jessica B. Peixotto, University of California	1917	\$1,476.40
2. Budget Awarded in Seattle and Tacoma Street Railway Arbitration	1917	1,505.60

The contrast in the costs as well as in the fundamental conceptions of the two standards is apparent. The significance obviously consists in the accompanying demand, in connection with the higher standard, that the alleged law of supply and demand should not be permitted to force wage-rates to a mere physical level of existence, or, in other words, to a point where they would not yield sufficient earnings to enable a wage-earner to support his family in health and with reasonable comfort.

THE THEORY OF INCREASED PRODUCTIVE EFFICIENCY

During the period immediately preceding the Great War, or during the years 1913-1915, another wage theory was also developed, which, altho then unaccepted, had a fundamental and far-reaching effect upon future thinking and action. It was known at the time, and later, as the "theory of increased productive efficiency." When first put forward it was attacked as "academic" and "visionary," but later it was accepted by organized labor as the fundamental feature of its constructive wage policy, and finally became the basis of the revolutionary program of industry itself after the World War. For these reasons its origin and development are of great interest.

The minimum subsistence and health-and-comfort standards of living and compensation, as advocated in the pre-

war period, were designed primarily to protect wage-earners on the lowest margin of the industrial scale. This additional conception—that of compensation for productive efficiency—had for its purpose the establishment of the claim of the more skilled workers for a larger participation in profits and revenues. It was first advanced in 1913 in a wage arbitration by the Brotherhood of Locomotive Firemen and Enginemen, and in the two succeeding years was also vigorously put forward by the Brotherhood of Locomotive Engineers and other railway labor organizations. The exhaustive analyses of railway operating and financial performance which were developed, and the comprehensiveness with which the theory was worked out, may be best seen from the presentation made jointly by the engineers and firemen to an arbitration board sitting in Chicago in 1915, to pass upon a wage dispute between these two classes of employees and all the railroads west of the Mississippi River. Summarily stated, it was as follows:¹

During recent years the Western Railroads have made extraordinary gains in operating efficiency. By the installation of locomotives of greater tractive power and cars of greater capacity, by the addition of a greater number of cars to freight and passenger trains, by the elimination of curves and the reduction of grades, and also by the strengthening of roadbed and structures, remarkable increases in freight train loads have been accomplished, and it has been possible to move a constantly increasing volume of traffic, or of ton and passenger miles. These developments have been attended by a three-fold effect upon Engineers and Firemen:

¹ Briefs submitted by Presidents W. S. Carter and Warren S. Stone, and W. Jett Lauck, Economist, in behalf of Brotherhoods of Locomotive Engineers and Locomotive Firemen and Enginemen. *Western Arbitration, 1914-1915*, under auspices of United States Board of Mediation and Conciliation, pp. 73-86. Stockett, "The Arbitral Determination of Railway Wages," Chapter IV.

(1) There has been a marked increase in their labors and responsibilities.

(2) The Productive Efficiency of Engineers and Firemen, or, in other words, the volume of traffic handled per Engineer and Fireman, has been greatly increased. The Engineers and Firemen employed by these representative Western Railroads, on a very conservative basis of calculation, which grants every advantage to the Railroads, for each \$1,000 paid, hauled a volume of combined freight and passenger traffic from 40 to 50 per cent. greater in 1913 than in 1890. On individual Railroads the gains made in Productive Efficiency in many cases were even more remarkable than those mentioned above.

(3) This increased productivity has been attended by a decrease in costs to the railroads, in terms of wage payments to Engineers and Firemen for each unit of traffic handled, or, in other words, it has cost the Railroads less in outlay to Engineers and Firemen to transport ton miles and passenger miles. During this same period, 1890-1913, the outlay in terms of Engineers and Firemen for each 1,000 ton miles handled by these twenty-four representative Western Railroads declined from 65.2 cents to 32.1 cents, or in other words, each 1,000 ton miles handled cost 33.1 cents less in wages to Engineers and Firemen in 1913 than in 1890.

(4) There is no doubt, and it has been freely acknowledged and repeatedly stated, that the growth of the large revenue gains discussed in the preceding section have been in part due to additional capital investment in Western Railroads, which should receive a liberal return for its use and the risk involved. A complete analysis of the increased operating efficiency of Western Railroads, therefore, brings up the question as to whether the revenue gains, which have resulted from the additional capital investments, managerial ability, and the

increased work and productivity of Engineers and Firemen and other employees, have been sufficient, after meeting the advances in operating costs, to pay a fair remuneration to additional capital investment and leave a surplus over and above all these outlays for increased compensation to Locomotive Engineers and Firemen.

(5) A study of the financial and operating performance of Western Railroads during the past five years brings an unequivocal and affirmative answer to this question. These gains are now contained in the accumulated surplus and other assets of the Railroads, and Locomotive Engineers and Firemen are entitled to a further participation in these gains because of their efficiency and because of their increased work, duties and responsibilities.

(6) In addition to the amounts, as stated above, which are now shown to be available, according to the sworn statements of the Railroads to the Interstate Commerce Commission, for the remuneration of the increased work and productive efficiency for Locomotive Engineers and Firemen and other employees, additional sums amounting to hundreds of millions of dollars would also be available to the present time, had the finances of the Western Railroads been wisely and properly managed. A review of the past history of Western Railroads, in general, discloses the fact, however, that the extraordinary gains in revenue, which have arisen from the bounty of the Federal and State Governments, the populating of the country, the development of trade and industry, the adoption of mechanical devices and improved operating methods, added capital investments, and the increasing work and efficiency of employees, have to a large degree been absorbed by fictitious capitalization, or dissipated by improper or misguided financial management.

(a) During the twenty years following 1850, the Federal Government, together with the State of Texas, made

land grants to Western Railroads to aid in their construction, to the amount of 305,114 square miles. This is equivalent, approximately, to all the area east of the Mississippi River and north of the Ohio and Potomac Rivers, with the exception only of the States of Wisconsin and Michigan. The unfortunate feature of this land-grant policy was that these great subsidies were diverted from their original purposes to the enrichment of a few financial adventurers. A number of Western Railroads, such as the so-called Pacific Lines, were built in a spirit of financial corruption, by collusive construction contracts, stock manipulation, excess capitalization, and the defrauding of the Government and the public. The value of the extensive areas of lands granted was capitalized and distributed in the form of securities to the stockholders. In other instances, the value or income-producing power of the land was capitalized. A few Railroads, such as the Northern and Southern Pacifics, and the Atchison, Topeka and Santa Fé, retained very valuable holdings of timber and minerals, despite the stipulation that such lands be sold to settlers in small tracts. They are now among the unreported assets of these transportation companies. The Southern Pacific Company alone is now estimated to have oil and timber holdings ranging in value from \$100,000,000 to \$700,000,000, which are reported to the Interstate Commerce Commission at a book value of slightly more than \$40,000,000.

(b) During the years following the construction of the Western Railroads through Government aid, and extending into the early nineties, the greater number were characterized either by financial managements which dissipated their resources in the form of special distributions to stockholders, or by stock manipulations, or they capitalized cumulatively the expansion of trade and business, and gains in operating efficiency. The hundreds of millions of dollars of fictitious capital issued

during this period served to absorb and conceal the increases in operating revenues, and not only constitute a present drain upon the operating performance of the transportation companies, but will continue in the future to absorb revenue.

(c) After the panic of 1893, and the reorganization of a number of Western Railroads which had been forced into the hands of receivers by that financial catastrophe, a tendency toward the consolidation of independent lines into large systems became very pronounced. The movement progressed so rapidly that at the present time a comparatively few independent Railroads control the entire Western transportation industry. Of the ninety-eight Railroads engaged in the present Arbitration, practically eighty are controlled by thirteen independent, proprietary systems. A few bankers, by their control of the avenues of credit and the market for the sale of securities, by becoming reorganization managers of certain Railroads and forming voting trusts, by acting as fiscal agents, and by the purchase of stock, have finally secured control of the Western Railroad situation. These banking institutions are, in turn, through interlocking directorates and stock ownership, controlled by two distinct financial groups—the Morgan group and the Rockefeller group. It truly may be said, therefore, the Morgan and Rockefeller interests dominate the entire matter of financial control over the economic interest and advancement of locomotive Engineers and Firemen and other employees. This has a two-fold aspect: the potential control of working conditions and compensation of employees, as well as their general economic welfare and progress, is in the hands of these two groups of affiliated banking interests; and railway presidents are made and unmade by these dominating financial interests, and the fundamental policy required of them is to develop as large an earning power as possible in order to produce market value for securities and to pay dividends on

securities which have been issued without actual investment or additions to the earning value of the properties.

(d) As a result of the methods of financing or selling securities developed under this banking control of Western Railroads, large discounts and commissions have been paid which have been without jurisdiction. By way of illustration, the recent investigation of the St. Louis and San Francisco Railroad by the Interstate Commerce Commission disclosed the fact that discounts and securities were paid to banks and syndicates which aggregated the enormous total of \$32,152,602 during the period 1896-1913. Enormous bonuses to stockholders have also been granted during this same period of years. More than \$250,000,000 was distributed in this way during the period 1900-1910 by eight representative Western Railroads alone. By the sale of securities at much less than their prevailing market prices, these companies were obviously deprived of cash resources which they should have had, and at the same time issued excess capitalization which became a drain upon operating revenue. If it had not been for these practises, the financial status of the Railroads which are parties to the present proceedings would be much more satisfactory, and much greater amounts of surplus revenues would be available.

(e) Recent Railroad reorganizations have also been made the basis for the flotation of immense amounts of fictitious securities which have actually absorbed existing revenue, through unwarranted dividend and interest requirements, or will be made the basis for the absorption of future revenue gains.

(f) An indication of the extent to which the financial condition of Western Railroads has been adversely affected by financial mismanagement, and a startling illustration of the absorption of revenue gains produced by operating efficiency and increased work and output

of Locomotive Engineers and Firemen and other employees, has been afforded by an analysis of the dividend disbursements of only fourteen companies during the past fiscal year—a subnormal period of industrial depression. These companies alone were found to have paid dividends in 1914 on fictitious stock issues amounting to \$43,167,599. This does not account by any means for all of the excess stock of Western Railroads which are engaged in these proceedings, but only for a number of representative and illustrative cases. A comprehensive estimate would also have to take fictitious bond issues into consideration. If the future outlook were also considered, hundreds of millions of dollars of fictitious capitalization would be discovered which has not as yet received remuneration but which may become a drain upon operating revenues.

It will be noted that the claim was made that the net gains secured from the increased productive efficiency of railway engine and train crews, as well as from the investment of new capital, from managerial efficiency, and from government land grants, had been improperly absorbed or dissipated by railroad financial management, and, as a consequence, neither employees, travelers nor shippers had received a fair participation in these productive gains. The overturning of the existing financial structure and management of the railroads was not advocated, but the demand was made for the granting of a just share to employees in revenue gains arising from their increases in productive efficiency before further corporate distribution of funds was permitted.

The representatives of the railroads replied to this argument by the counter-claim that decreases in costs of operation had been made possible by increases in capital investment, and improved facilities had lessened rather than increased the physical labors of employees. From this it

followed, they concluded, that capital and not employees had the economic and moral right to the revenue gains, or profits, which had accrued from the development of a greater productive efficiency.¹

The relative claims of the railroads and their engine crews, as buttressed by exhaustive exhibits of the operating and financial performance of the various companies, were not officially recognized in the awards of the arbitration boards, especially in the Western arbitration, where the supreme effort was made. Very close attention was given to the argument and exhibits, and there was extended discussion, but the final decisions were compromises without much regard to evidence, and without passing upon the fundamental principles and theories which had been advanced.

These cases, however, marked the beginnings of a new era in wage-adjustments. The theories advanced were not practically accepted or applied in the period before the war, but the seeds of a new idea were sown, much thought and agitation was provoked, exceedingly valuable data were collected and printed, and an educational movement inaugurated which was destined to have undreamed-of practical results during the post-war period.

THE SITUATION WHEN WE ENTERED THE WORLD WAR

Up to the time, therefore, of our entrance into the World War in 1917, there had been no distinct change in thought or practise as to old wage theories. The law of supply and demand was subconsciously accepted in a general way without serious question. Increases in the cost of living had also practically been taken into consideration in wage-

¹ "The Arbitral Determination of Railway Wages," Chapter IV. "Proceedings and Exhibits of Eastern Firemen's Arbitration," New York, 1913, and "Western Engineer's and Firemen's Arbitration," 1915. United States Board of Mediation and Conciliation, Washington, D. C.

fixing. On the other hand, the "subsistence standard," with the necessary wage to support it, had been effectively advanced as the minimum below which wages should not be permitted to fall. Immediately before our declaration of war, a higher basic standard, designated as that of "minimum health and comfort," had also been put forward as a further check upon the low earnings arising from the commodity theory of wages. The sanction of public opinion had also been given in the Clayton Act of 1916 to the declaration that labor was not a commodity or article of commerce.

In addition to these minimum standards of wage-determination, the more comprehensive principle known as "increased productive efficiency," or the right of employees to share in the productive gains of industry in accordance with their contributions thereto, had been very ably presented by some of the railroad "Brotherhoods" against the opposition of the railway managers.

None of these new opinions or theories, however, had been widely sanctioned by public opinion or by the formal decisions of arbitration boards. They were being urged and discussed, and opinion was beginning to be centered upon them as bases for possible changes in practise in wage-adjustments, when the current of thought and action was temporarily but entirely diverted as the result of the war emergency of 1917.

CHAPTER III

THE WAR PERIOD—AN INTERREGNUM

The period of our participation in the Great War, so far as any bearing upon the principles or theories of wages was concerned, actually constituted an interregnum. During part of the year 1917 and the whole of 1918, the previous movement toward constructive change practically ceased. It was lost sight of in the all-absorbing problem of maintaining and accelerating industrial production for essential war purposes.

While the war was going on, "wages and hours of labor," as has been correctly stated, "were rarely determined upon a sound or scientific basis. As a rule, the governing factor was necessity. . . . Speeding up and increasing production were the first considerations in every industry; the cost was a factor of second importance or of no importance whatsoever. . . . Employers began bidding against each other for skilled workers, and soon found themselves obliged to resort to the same tactics to secure any kind of labor. . . . This meant that wage-rates were adjusted largely on the basis of the maximum demands of employees as modified by the maximum concessions which could be wrung from employers."¹

NECESSARY CONTROL OF CAPITAL AND LABOR

This end was finally accomplished by the government arranging a truce for the period of the war between capital and labor, and the establishment of the War Industries Board, the Labor Policies Board, and the National War

¹ "The Industrial Code," Lauck and Watts. Funk & Wagnalls Company, 1922.

Labor Board. The first two agencies were primarily concerned with policies of control and administration. The function of the latter was fundamentally judicial. It had to do with the interpretation and application of the principles and standards which had been officially adopted as a guide to the adjustment of wages and conditions. The principles, which were mandatory upon the War Labor Board in making decisions, were originally agreed to by labor as represented by the American Federation of Labor, and by capital acting through the National Industrial Conference Board. Afterwards, these principles were officially proclaimed by President Wilson on April 8, 1918, and thus made binding upon all government departments and procurement agencies for the duration of the war.

The general course of procedure which capital and labor voluntarily agreed to follow, and which, in principle, was adhered to throughout the war period, briefly stated, was to maintain the pre-war status as to industrial relations. If an industrial plant had been unionized before the war it was by agreement to remain unionized during the war; but if a plant had not been unionized before the war, it was stipulated that advantage should not be taken of the wartime emergency to force its management into a recognition of the union. On the other hand, all industrial workers, irrespective of pre-war conditions, were guaranteed the right of organization and collective bargaining. Employers also agreed to refrain from any discrimination against employees because of affiliation with labor organizations.

COST-OF-LIVING METHOD OF WAGE ADJUSTMENT ADOPTED

Regarding wage-rates, it was likewise agreed that pre-war standards of real wages were to be maintained. Funda-

mentally this required that rates of pay should be adjusted at regular intervals in accordance with fluctuations in living costs.

During the first months of the conflict, when the attempt was being made to adjust industry to war needs, difficulty was experienced in securing a sound basis or index for determining changes in living costs either nationally or by localities. The newly created wage-adjustment boards in the mining, manufacturing, and transportation industries had to do the best they could with the data available. It was soon evident, however, that an accurate, scientific index was absolutely necessary in order to reach uniform as well as just decisions. In the autumn of 1917, therefore, after the first fixing of wages in the shipyards of the Pacific Coast by the Shipbuilding Wage Adjustment Board, its chairman, Mr. V. Everit Macy, took up the matter with President Wilson, and as a result, Dr. Royal Meeker, Commissioner of Labor Statistics, was instructed to formulate an index based on pre-war conditions, and by constant investigation to ascertain and publish regularly a living-cost index for the period of the war. Large appropriations to expedite this important undertaking were supplied by the President from the war emergency funds under his control.

BUDGETARY AND COST-OF-LIVING INVESTIGATIONS

The Commissioner of Labor Statistics immediately made an investigation of the cost of living of representative families of industrial workers in the principal cities and industrial centers of the country. This comprehensive cost-of-living and budgetary survey covered 12,096 families in 92 localities. Average family budgets were evolved from the data obtained, and future changes in prices of

food, clothing, fuel, light, housing, and sundries weighted in accordance with the relative importance of different items in these average budgets. A continuing basis of measuring changes in living costs was thus obtained.

These results or indices were accepted as official by all wartime wage adjustment agencies. In addition to original awards on wage controversies, the general policy was also adopted of making changes in wages after the lapse of a stipulated time in the future, usually by six-month periods, on complaint of one or both of the parties, based on variations—as a rule upward—in living costs. Some awards carried clauses providing for automatic changes in wage-rates each six months, should there be important increases or decreases in the cost-of-living index. In still other instances, wage adjustment agencies, on their own motion and without complaint, raised wages as living costs rapidly mounted. This method of adjusting rates of pay to price advances was the fundamental wage policy followed during the war.

STANDARDIZATION OF RATES OF PAY

At first it was agreed by government officials, employers, and representatives of labor organizations, that in making adjustments of wages according to living-cost changes, local standards and the custom of localities should also be taken into consideration. This principle was practically abandoned after a time, however, for two reasons: (1) the intense competition for labor demonstrated the wisdom of having the same rates for similar work and services throughout the country, in order to avoid the migration of workers from one section to another because of the lure of better conditions and higher earnings; and (2) preconceived notions as to variations in the cost of living in different geographical areas, which had previously been the

basis of district differentials in wage rates, were nullified by the findings of governmental agencies such as the so-called Lane Railway Wage Commission, in the latter part of 1917, and later the investigations conducted by the Bureau of Labor Statistics of the Department of Labor. The conclusions reached from these nation-wide surveys was that the cost of living was practically the same throughout the country, or, in other words, variations in one section were offset by different tendencies in another area, and in general the level of the cost of living did not vary in any substantial way from one section to another.

In the principal industries and trades, rates of pay of industrial workers were, therefore, standardized. Employees of shipyards received the same rates of compensation for similar work on the Atlantic as on the Pacific Coast. Likewise, the building trades, railway employees, metal trades, and all those engaged in the basic, essential industries, were placed on an equal footing as to compensation, irrespective of geographical location.

This tendency was further stimulated by the efforts of skilled craftsmen—especially in the organized occupations—to broaden the classification of certain designated occupations in the building and metal trades, and in railroading and ship-building. Machine operators, and semi-skilled occupations arising from machine and factory processes in the division of labor, were successfully claimed to fall into the category of skilled craftsmen, and as a result received the uniform journeymen's rates. Obviously, this procedure brought under the maximum rate of pay for an occupation all those who, in a division of labor by machine processes, had been receiving a considerable number of slightly varying rates; in other words, it tended to standardize workmen upward to the highest rate of an all-around journeyman. In a few other cases, all workers

in a broad general occupation, who had hitherto been classified on a lower scale than skilled craftsmen, were elevated to the skilled craft scale of pay.

As the net result, one of the most striking wartime developments in the fixing of wages was the more or less arbitrary, but practically necessary, standardization of wage rates nationally or by extended districts, and also by broad occupational definitions.

THE "LIVING WAGE"

Where rates of pay before the war had been too low to permit of a standard of health and modest comfort for the wage-earner and his family, it was claimed early in the war that the index of living costs should be ignored and wages should be arbitrarily increased to a point where the health and efficiency of the workers would be maintained in the face of the need for maximum production. Just as machinery should be kept at its highest efficiency, it was also declared to be sound public policy, by proper wage increases, to conserve the human factor of production, or labor, unimpaired. The maximum productive efficiency of these classes of workers, it was held, would thus be maintained, even tho it were necessary to raise their rates of compensation much higher than would be indicated by increased living costs. A policy of this kind, of course, involved principally the unskilled workers at the bottom of the scale of industrial occupations.

This fundamental exception to the general method of procedure of changing rates in accordance with changes in living costs, did not receive any formal sanction until the establishment of the National War Labor Board in the early part of 1918. The principles of the Board, after sanctioning the usual wartime basis of wage-determination by adjustment of wages to advances in living costs with

due consideration to the customs and standards of different localities, declared as binding upon the Board that:

1. The right of all workers, including common laborers, to a living wage, is hereby declared.
2. In fixing wages, minimum rates of pay shall be established which will insure the subsistence of the worker and his family in health and reasonable comfort.

Obviously, this principle had developed from the street railway wage arbitrations at Seattle and San Francisco in the autumn of 1917, previously described, and from the Chicago Stockyards case of about the same date. It also soon became apparent that employers and representatives of the public, in originally accepting in conference the principle of a "living wage," had not taken into account the real significance and implications incident to the practical application of the principle.

At special executive sessions of the War Labor Board, held in Washington in July, 1918, the matter was thoroughly considered in all its aspects. Experts from all parts of the country, including those who the previous year had assisted in the preparation of the Seattle and San Francisco "minimum standards of health and comfort," testified. The Board also had budgetary studies prepared by their own staff, which showed the rate of wages required to enable unskilled workers to maintain either a "subsistence standard" of living or a level of "health and reasonable comfort." The resultant rates were so much higher in amount per hour, however, than those prevailing at the time, that the Board feared the dislocating effect upon production of practically applying the principle during the war period.¹

After prolonged discussion and consideration, it was

¹ Executive Proceedings of the National War Labor Board, Washington, July, 1918.

finally decided, for reasons of expediency, not to apply this principle in a general or arbitrary way, but only to sanction it in specific cases where wages were abnormally low and where the physical maintenance of labor for war production was being impaired. The specific case which had brought the principle up for consideration—the Machinists of Waynesboro, Pennsylvania, vs. Employers—was one of this character. In the decision rendered, the cost of living was disregarded as a guide, and the existing rates of pay—15 to 20 cents an hour—advanced to 40 cents an hour, which was decided upon at the time as a necessary minimum hourly rate of pay for unskilled laborers. Accompanying the decision, however, a resolution was adopted, setting forth the attitude of the Board to the “living wage” principle. It was resolved:

That this war is not only a war of arms, but also a war of workshops; a competition in the quantitative production and distribution of munitions and war supplies, a contest in industrial resourcefulness and energy;

That the period of the war is not a normal period of industrial expansion from which the employer should expect unusual profits or the employees abnormal wages; that it is an interregnum in which industry is pursued only for common cause and common ends;

That capital should have only such reasonable returns as will assure its use for the world's and Nation's cause, while the physical well-being of labor and its physical and mental effectiveness in a comfort reasonable in view of the exigencies of the war should likewise be assured;

That this board should be careful in its conclusions not to make orders in this interregnum, based on approved views of progress in normal times, which, under war conditions, might seriously impair the present economic structure of our country;

That the declaration of our principles as to the living wage

and an established minimum should be construed in the light of these considerations;

That for the present the board or its section should consider and decide each case involving these principles on its particular facts and reserve any definite rule of decision until its judgments have been sufficiently numerous and their operation sufficiently clear to make generalization safe.

This resolution was submitted and adopted at the request of former President William H. Taft (now Chief Justice of the Supreme Court), who was at that time one of the public Joint-Chairmen of the National War Labor Board.¹ Its chief significance was three-fold: (1) in the precedents established in the future activities of the Board, where it was practically invoked in the adjustment of exceptionally low wage standards: (2) in the intimation that the principle was one which might be deserving of sanction under normal peace-time conditions, and (3) the injection of this principle into the wartime code for industry gave it a prominence which stimulated its discussion and advocacy in the period of post-war reconstruction.

THE EFFECTS OF THE WAR

Because of the truce which had been arranged between capital and labor, the war period, therefore, was not marked by any decided changes in the theory and actual adjustment of wages. When the Armistice was signed, both capital and labor were, fundamentally speaking, highly dissatisfied. As cost of living had tended to advance more rapidly than money wages during the war period, labor, as a rule, was anxious to throw off all restraints, and by the use of organized pressure to secure immediate advances in rates of pay and improvements in working

¹ Minutes of the National War Labor Board, July, 1918. Report of the Secretary of National War Labor Board, 1919. "The Industrial Code," Lauck and Watts, 1922, Chapter IV, and also pp. 124-129.

conditions. Employers were no less desirous to free themselves from the control of governmental agencies, and to prepare for the period of reconstruction and severe readjustments which they saw clearly ahead of them.

As a matter of fact, however, there were many underlying tendencies that the war had developed, which were to have a constraining influence on wages in the future. The advantage in industry of mass production and cooperative efficiency had been made apparent. It had been demonstrated that with proper cooperation between capital and labor, industrial output could be wonderfully accelerated and increased, and altho wage rates per hour or day might be higher, the actual labor costs in terms of units of product under these new conditions might be lower. To many industrial and labor leaders, the war experience afforded the basis of a vision of what might be accomplished in the future under proper leadership and with a real spirit of cooperation.

Government control of industry, the constant pressure for increased production, as well as the physical examinations under the Selective Service Law, had also made impressions upon the public mind as to the human and social evils of the low wage scales prevailing prior to the conflict.¹ Both from the standpoint of proper national defense and from that of realizing the highest productive efficiency of industry, the war had shown that earnings of industrial workers, especially those in the lowest scale, must be adequate for physical needs and healthful living requirements. The supreme effort to make "the world safe for democracy" had also brought with it the accompanying demand for "democracy in industry," which meant, in addition to a share in industrial management and control,

¹ United States Provost Marshal—Second Report to the Secretary of War on the Operation of the Selective Service System to December 20, 1918. Washington, Government Printing Office, 1919; pp. 154-157.

the advocacy of principles for the more equitable participation of wage-earners in the output of industry itself.¹

All of these more or less intangible factors, while attended with no concrete results during the war, were destined to have a profound effect in the post-war years.

¹ "War Time Strikes and Their Adjustment," Alexander M. Bing. New York, 1921. Pp. 273-288.

CHAPTER IV

POST-WAR CONFLICT AND RECONSTRUCTION

The three years following the close of the war represented a transition from the old order to the one now prevailing. It was a period marked by unprecedented industrial unrest and conflict, as well as by a widespread and earnest attempt to realize a larger measure of democracy in industry. There was a strong movement, on the one hand, which had for its purpose a return to the old laws of supply and demand and the use of economic strength in determining wages, while, on the other hand, there was an even more aggressive movement, the object of which was to put aside the past and to inaugurate a new industrial era. This latter movement was relatively not so strong industrially and financially as the former, but the lack of financial resources was largely compensated by its determination, aggressiveness, and enthusiasm for the establishment of a larger participation of employees in the control and output of industry based on new ideas and principles developed during the war.

PROGRESSIVE OPINION AND CONSTRUCTIVE INDUSTRIAL STATESMANSHIP

An influential group, composed of students, statesmen, and publicists, as well as some representatives of both capital and labor, wished to carry over into the years of peace, the experience in wage-fixing and industrial relations—both as to practises and new ideas—which had been developed by the war. They claimed that wartime rates of pay should not be reduced, as pre-war wage-scales had

been too low. It was also declared that old wage theories should be abandoned, and a new industrial code should be sanctioned which should set forth more equitable, humane, and democratic principles for determining wages and industrial relations. They also wished to substitute for pre-war industrial conflict, a system for the judicial settlement of wage disputes with these new principles as a guide. This attitude was nowhere better expressed than in the statement issued shortly after the Armistice by the National Catholic War Council in Washington. Its recommendation for post-war reconstruction was, in part, as follows:

The general level of wages attained during the war should not be lowered. In a few industries, especially some directly and peculiarly connected with the carrying on of war, wages have reached a plane upon which they can not possibly continue for this grade of occupations. But the number of workers in this situation is an extremely small proportion of the entire wage-earning population. The overwhelming majority should not be compelled or suffered to undergo any reduction in their rates of remuneration, for two reasons. First, because the average rate of pay has not increased faster than the cost of living; second, because a considerable majority of the wage-earners of the United States, both men and women, were not receiving living wages when prices began to rise in 1915. . . . Therefore, wages on the whole should not be reduced even when the cost of living recedes from its present high level.

Even if the great majority of workers were now in receipt of more than living wages, there are no good reasons why rates of pay should be lowered. After all, a living wage is not necessarily the full measure of justice. All the Catholic authorities on the subject explicitly declare that this is only the minimum of justice. In a country as rich as ours, there are very few cases in which it is possible to prove that the

worker would be getting more than that to which he has a right if he were paid something in excess of this ethical minimum. Why, then, should we assume that this is the normal share of almost the whole laboring population? Since our industrial resources and instrumentalities are sufficient to provide more than a living wage for a very large proportion of the workers, why should we acquiesce in a theory which denies them this measure of the comforts of life? Such a policy is not only of very questionable morality, but is unsound economically. The large demand for goods, which is created and maintained by high rates of wages and high purchasing power by the masses, is the surest guaranty of a continuous and general operation of industrial establishments. It is the most effective instrument of prosperity for labor and capital alike.

Protestant churches of all denominations also supported the principles underlying this pronouncement. The Inter-church World Movement itself in 1919 called a conference in New York City to formulate a nation-wide, constructive basis of procedure. Two industrial conferences composed of representatives of capital, labor, and the public were also convened by President Wilson in the years 1919-1920 and urged by him to formulate a new constructive program looking toward industrial justice and permanent industrial peace and democracy.

REVERSION TO INDUSTRIAL CONFLICT

Organized capital and labor, however, were unable to agree on a definition of collective bargaining. On this rock the attempts toward a new constructive policy were shattered. New principles of wage-determination never really passed beyond the phase of agitation to formal joint-discussion. This deplorable condition of affairs was brought about by extremists in the forces of both capital and labor.

A large section composed of the less foresighted members of the capitalistic and managerial groups desired to eliminate all wartime restrictions, especially in connection with industrial relations. They looked upon the growth of government regulation during the war as a menace. They advocated freedom in fixing prices of commodities and answered the popular post-war criticism against high prices and profiteering by the claim that excessive prices were due to high wages. To increase still more the rates of pay of industrial workers was to their minds only adding another link to the "vicious circle" of higher wages and, in turn, higher prices.

Organized labor, on the other hand, was discontented and impatient because rates of pay had not kept pace with the rapid rise of living costs prior to the Armistice. After the cessation of conflict and the gradual removal of government control of prices, this tendency became even more pronounced. Real wages rapidly declined, and urgent demands were made for higher rates of pay. Delays in adjusting these demands led to a nation-wide strike of bituminous coal miners in the autumn of 1919, and of a so-called "outlaw" railroad strike of switchmen and other employees in the early part of 1920. Railroad workers, against the instructions of their own union officials, stopped work and for several months caused serious dislocations and breakdowns in the transportation systems.

There was, in addition, widespread dissatisfaction in other basic industries, accompanied by many strikes. Individual workmen were restive under trade-union discipline. The great majority claimed that they had borne a loss of real wages during the war. Since the Armistice, they further declared, the removal of price-control agencies had resulted in such a skyrocketing of living costs, and in such further decreases in real wages, that they had no

alternative but to throw aside all restraints and to use their organized strength to protect their economic welfare. They contended that they could not suffer further delays in securing wage adjustments, but were forced by current conditions to resort to direct action.

WAGE ADJUSTMENTS OF MINE WORKERS AND RAILWAY EMPLOYEES

In the meantime, in the early part of the year 1920 the Transportation Act had been passed by the Congress, making provision for the return of the railroads to private ownership and operation, and creating the Railroad Labor Board for the adjustment of outstanding wage controversies. All classes of employees at once submitted their complaints. They denounced the "vicious circle" theory, as to the alleged relation between wages and prices, as wrong in fact and principle. They contended that rates of pay should at least be advanced to keep pace with living costs, but that the cost-of-living principle in itself was unacceptable, as it merely perpetuated, at best, preexisting standards. The demand was also made that all employees not receiving a "living wage" be granted a wage sufficient to maintain an average family on a level of "minimum health and decency," and above this basic wage existing differentials should be maintained for higher grade employees in accordance with their skill, responsibility, hazard, and productive efficiency.¹

The United Mine Workers of America, after intervention by the Federal Government, agreed to end their strike and submit their grievances to arbitration. An arbitration board was selected by the President, and hearings began in Washington in January, 1920. In presenting their

¹ Proceedings Before, and Exhibits Submitted to United States Railroad Labor Board, Washington, D. C., May, 1920.

demands as to wages, the representatives of the mine workers took practically the same fundamental position as the railroad employees did later. They repudiated the cost-of-living method of wage adjustments as a wartime measure not adapted to the normal conditions of industry, and one which, if permanently adopted, would leave the laboring classes without hope of economic advancement. In addition to asking just and reasonable increases in rates of pay to pick-miners, they made their chief argument and presentation in behalf of rates requested for day men, on the ground that such rates were essential, under existing conditions of work, to enable a mine worker to earn a "living-wage" or to support himself and his family on a minimum level of health and modest comfort.¹

THE "HEALTH AND DECENCY" BUDGET OF THE UNITED STATES DEPARTMENT OF LABOR

In advocating the "living wage" principle, the representatives of the labor organizations, as might be expected, relied upon past precedents, such as the Seattle Street Railways and the Packing House Awards of 1917-1918, and also submitted budgetary studies which had previously been prepared, such as the Seattle and San Francisco budgets of 1917, as well as those prepared by Professor William F. Ogburn for the consideration of the National War Labor Board in the year 1918.

Soon after the close of the war, in connection with the adjustment of Government employees' salaries by a Congressional Committee on Reclassification, the United States Bureau of Labor Statistics was requested to prepare a budgetary study on the basis of "minimum health and

¹ Proceedings Before the United States Bituminous Coal Commission, Washington, Department of the Interior, 1920.

decency" for the average family of a Government clerk in the City of Washington.

This task was accomplished with the greatest scientific care and accuracy, and with proper reference to the previous investigations made by the Bureau as to actual living costs of wage-earning families. The first budget, published in 1919, was tentative, but it was revised in 1920 after further investigations by the Bureau, and by the findings of a sub-committee of the National Conference on Social Work with special reference to the industrial worker.

The level of living which it was aimed to establish in this budget may be best described in the words of the Bureau's own explanation, as follows:¹

Previous studies of the subject have analyzed the conception of budget level and have distinguished several levels. Some of the more important of these are as follows:

(a) The pauper or poverty level. This represents roughly a standard of living just above where families receive aid from charity or where they run into serious debt.

(b) The minimum of subsistence level. This is based essentially on mere animal existence and allows little or nothing for the needs of men as social creatures.

(c) The minimum of health and comfort level. This represents a slightly higher level than that of subsistence, providing not only for the material needs of food, shelter, and body covering, but also for certain comforts, such as clothing sufficient for bodily comfort and to maintain the wearer's instinct of self-respect and decency, some insurance against the more important misfortunes—death, disability, and fire—good education for the children, some amusement, and some expenditures for self-development.

Inasmuch as the primary aim of this study was to furnish

¹ United States Bureau of Labor Statistics, Washington, 1920.

information for use by the Joint Commission of Congress on Reclassification of Salaries, the minimum of health, decency, and comfort was kept in mind in determining the quantity budget and in selecting quantities and ascertaining prices of articles of the budget. . . .

BUDGET LEVEL USED IN THIS STUDY

Finally, after long consideration, it was decided to use as a working basis a budget level which can be best expressed perhaps by the phrase "a standard of health and decency." This phrase is not entirely precise in meaning. No phrase of the kind can very well be wholly satisfactory. The budget herewith suggested is intended to give the average family, consisting of a husband, wife, and three children below the age of 14 years:

(1) A sufficiency of nourishing food for the maintenance of health, particularly the children's health;

(2) Housing in low-rent neighborhoods and within the smallest possible number of rooms consistent with decency, but with sufficient light, heat, and toilet facilities for the maintenance of health and decency;

(3) The upkeep of household equipment, such as kitchen utensils, bedding, and linen, necessary for health, but with no provision for the purchase of additional furniture.

(4) Clothing sufficient for warmth, of a sufficiently good quality to be economical, but with no further regard for appearance and style than is necessary to permit the family members to appear in public and within their rather narrow social circle without slovenliness or loss of self-respect.

(5) A surplus over the above expenditures which would permit of only a minimum outlay for such necessary demands as—

- (a) Street-car fares to and from work and necessary rides to stores and markets;
- (b) The keeping up of a modest amount of insurance;
- (c) Medical and dental care;

- (d) Contributions to churches and labor or beneficial organizations;
- (e) Simple amusements, such as the moving picture once in a while, occasional street-car rides for pleasure, some Christmas gifts for the children, etc.
- (f) Daily newspaper.

THE STANDARD FAMILY

This budget has been worked out for a family consisting of husband, wife, and three dependent children—a boy of 11, a girl of 5, and a boy of 2 years of age. The number in the family and the ages of the children conform closely to the standards used by the Bureau of Labor Statistics and other investigators in the past. The determining factor in selecting the standard family, however, was the fact that a family of this particular size and composition represents actual existing families in the United States. The average number in the white families scheduled by the Board of Labor Statistics was 4.9 individuals (equivalent to 3.33 adult males), which corresponds very closely with the standard family of 5 individuals (equivalent to 3.35 adult males). The assumption that the three children of the family are, respectively, a boy aged 2 years, a girl aged 5 years, and a boy aged 11 years, is, of course, arbitrary and is solely for the purpose of making precise calculations as to food and clothing consumption. The children in this standard family are growing children, not yet able to add anything to the family income, and not so expensive to maintain as they will become a few years later. This standard family is about half way between the family with no children and the family with grown children capable of self-support.

BUDGET OF HEALTH AND DECENCY NOT INTENDED AS AN IDEAL

It needs to be emphasized that the budget level adopted in the present study is in no way intended as an ideal budget. It was intended to establish a bottom level of health and

decency below which a family can not go without danger of physical and moral deterioration. This budget does not include many comforts which should be included in a proper "American standard of living."

Thus no provision is directly made for savings other than insurance, nor for vacations, nor for books and other educational purposes.

On the other hand, a family with the items listed in this budget should be able to maintain itself in health and modest comfort. It would have a sufficiency of food, respectable clothing, sanitary housing, and a minimum of the essential "sundries."

THE COST OF A BUDGET LEVEL NOT NECESSARILY A FIXED MONEY COST

The annual expense of maintaining the budget level above described may be arrived at by obtaining and totaling the current prices on each of the individual items entering into the budget.

In subsequent labor controversies and arbitrations of wage disputes this budget became of the utmost importance because of its official character. For this reason it had an authoritative influence which previous studies, mainly emanating from private sources, lacked. It therefore became the center of discussions revolving around the "living wage" principle. It was constantly put forward in the adjustments of wages of railroad employees, mine workers and other classes of wage-earners during the highly controversial years immediately following its publication.

OFFICIAL SANCTIONS OF THE COST-OF-LIVING AND LIVING-WAGE PRINCIPLES

In addition to the outstanding precedent furnished by the budget of the United States Bureau of Labor Sta-

tistics, there were other noteworthy sanctions during this period of the living-wage principle. Chief among those with an official or public aspect were those of the newly created Court of Industrial Relations in Kansas and the Bureau of Municipal Research of the City of Philadelphia, both of which will be discussed later.¹ There were also significant declarations by economists and publicists.

THE UNITED STATES RAILROAD LABOR BOARD

Despite these important precedents, however, the United States Railroad Labor Board, as the result of the proceedings which were inaugurated before it and which have already been outlined, altho granting large increases in general wage rates in 1920 averaging about 27 per cent., based its awards, without deviation, upon old methods and principles. The advances in rates of pay were made in terms of a certain number of cents per hour or day in order to maintain the preexisting differentials in rates between occupations. The general rate of increase, as thus applied, was computed, however, on the principle of bringing the compensation of employees up to advances in living costs as compared with the pre-war period. No recognition was given to the principle that a wage should be sufficient to guarantee a minimum standard of healthful and decent living.

THE UNITED STATES BITUMINOUS COAL MINING COMMISSION

A striking contrast was afforded by the decision of the Bituminous Coal Commission. This body openly repudiated "cost of living" as a basis of determining advances in rates of pay and substituted therefor the principle of a "living wage" for the lowest-paid mine workers. They

¹ See Chapter VII.

stated that advances in living costs would permit only a 14 per cent. increase in rates of pay, but they had put this method aside, and, proceeding on the basis of the living-wage principle, had granted a general increase in wages of 31 per cent.

The chairman of this Commission, Mr. Robinson, of California, had been a member of the American delegation to the Peace Conference at Paris, and a member of the committee which had assisted in framing the principles and standards of the International Labor Office of the League of Nations. It was undoubtedly this experience which influenced his attitude and, in turn, that of the Commission.

THE UNITED STATES ANTHRACITE COAL MINING COMMISSION

A board of arbitration appointed by President Wilson, as the result of an agreement between the operators and mine workers, and designated as the Anthracite Coal Mining Commission, also convened about six months after the Bituminous Coal Commission had made its award, to pass upon differences then existing as to wages and working conditions in the anthracite coal-mining region.

More elaborate and exhaustive arguments and exhibits were presented by the representatives of both operators and mine workers than had been the case in the previous soft-coal arbitration. Especial emphasis was placed on the "living wage" claim by the mine workers in these presentations. They also put forward in very complete form the justification of a higher wage on the basis of "increased productive efficiency," which marked the first instance of the use of this principle in post-war adjustments. They claimed too that both consumers and mine workers were

being exploited by an anthracite coal monopoly, which absorbed an undue proportion of output, and concluded by demanding for the employees a greater share in the net returns of the industry as a reward for increased work and productivity.¹

The representatives of the operators, on the other hand, took a strictly defensive position. They contended that wages were adequate and compared favorably with rates paid by industries in the same territory for similar work.

The award of the neutral chairman of the Commission, Dr. W. O. Thompson, President of Ohio State University, ignored, however, all the facts and arguments placed before it with the exception of the increased cost of living. Consideration of the exhibits and claims bearing on "monopoly" and "productive efficiency" were denied on the ground that such matters were beyond the jurisdiction of the Commission. No pronouncement was made as to the "living wage." A straight increase of 17 per cent. in rates of pay was awarded. The net result was that the decision represented no constructive advance in the judicial determination of wages. As a matter of fact, it was a reversion to certain pre-war types of arbitration awards, which entirely disregarded the evidence presented, and based their findings upon compromises between members of the board.²

FEDERAL ELECTRIC RAILWAY COMMISSION SANCTIONS LIVING WAGE

Prior to the bituminous and anthracite wage arbitrations, President Wilson had also appointed a commission, known

¹ Proceedings Before the Anthracite Coal Mining Commission, Scranton, Penna., 1920.

² Award of the Anthracite Coal Mining Commission, Washington, Government Printing Office, 1920.

as the Federal Electric Railway Commission, for the purpose of investigating conditions and recommending a constructive program for the physical and financial rehabilitation of the street railway industry.

The employees of the industry, as represented by the Amalgamated Association of Street and Electric Railway Employees, made a detailed submission to the Commission during the course of its public hearings, conceding that the financial and physical disabilities of the industry should be remedied, but also claiming, as a condition of its rehabilitation, that there should be proper guaranties to the labor employed. They advanced the "productive efficiency" and "living wage" arguments as to wages, asserting that the employees by their cooperation had reduced operating costs and should have a greater participation in net revenue gains, one form of which should consist in the assurance of a wage sufficient to provide for a "minimum standard of health and comfort" for employees and their families.

The final report of the Commission recognized this demand for a "living wage" guaranty, and unanimously reported in its favor.¹ While this declaration as to the "living wage" had no immediate, practical bearing on wage adjustments, its ultimate significance as a sanction for the living-wage principle was very great. Especially was this true because of the character of the personnel of the Commission. In addition to appointees from the industry itself, it included representatives of the United States Treasury, Department of Commerce, Department of Labor, National Association of Railway and Utility Commissioners, American Cities League of Mayors, and the Investment Bankers Association.

¹ Report of the Federal Electric Railway Commission, Washington, Government Printing Office, 1920.

THE INDUSTRIAL BREAKDOWN OF 1920-1921

Irrespective of these decisions, however, industrial unrest grew in intensity and in extent. The primary cause was the skyrocketing of prices. Altho real wages rapidly declined, employers and public officials declared that high wages were the fundamental cause of high prices. Wage earners in turn contended that there was no relation between wages and prices. In the course of wage controversies, the unions also disseminated data to show that producers and distributors were exploiting consumers and unjustly putting the stigma on labor.

Finally, the consumers rebelled. They refused to buy longer at the high prices, and this determination, as popularly expressed in "the buyers' strike," led in large part to a nation-wide commercial and industrial collapse in the latter part of 1920. Manufacturing plants, including the basic industries, suspended operations, and industrial workers were thrown out of employment. Orders for commodities were cancelled. Surplus stocks were liquidated at ruinous prices, and widespread failures occurred in the retail and wholesale trades. The extent of the breakdown was further aggravated by the inability of foreign markets to buy American products, and by the abrupt falling of prices for farm products, accompanied simultaneously by a collapse of agricultural values and purchasing power.

DEFLATION OF WAGES TEMPORARILY ADOPTED

These adverse conditions produced immediately two warring sets of views as to the policies to be pursued for the rehabilitation of trade and industry. Manufacturing, transportation, and business interests, considered as a whole, claimed that there must be a drastic cutting down

of wage-rates, so that prices might be reduced and production and trade resumed. They argued that wages had been inflated during the war and must now be deflated. Prosperity, it was contended, could not be revived until there was a return to "normalcy," this term being used in the sense of a resumption of industry and trade on the basis of pre-war wage and price levels.

In the smaller, diversified industries, as well as in the basic industries which were unorganized, as for example in steel and textile mills, wage-rates were arbitrarily and drastically cut as a condition to the resumption of production. In organized coal-mining areas there could be no reduction on account of existing agreements. In other highly unionized industries, also, the wage cuts were restricted in extent. In still other industries, where publicly established agencies for wage-adjustments existed, as on the railroads, the question of lower wages came up for judicial consideration and action.

PROCEEDINGS BEFORE THE UNITED STATES
RAILROAD LABOR BOARD

By the early months of 1921, a bitter struggle as to fundamental principles and policies had developed on a national basis, involving more than 2,000,000 railway employees, and was centered before the recently created Railroad Labor Board. The representatives of the carriers claimed that drastic wage reductions were an essential preliminary to the physical and financial rehabilitation of the transportation system. The employees, on the other hand, replied that a policy of lower wages would cause a still further decline in purchasing power, and would militate against permanent prosperity, while the maintenance of existing wages in the higher grades of occupations and the payment of a "living wage" to unskilled workers would

revivify and stimulate production and trade. Moreover, the union representatives declared that the earnings of workers in manufacturing and transportation at rates of pay then prevailing were inadequate from the standpoint of the physical and social well-being of employees, even on the basis of reduced living costs, and should be increased rather than decreased.

The representatives of the unions further argued that the difficulties of the railroads were not due to high wages and, as a consequence, to high labor costs, for the reason that because of the increased productive efficiency of railway employees during recent years, labor costs per unit of traffic handled had actually declined. What the railroad really needed, it was asserted, was additional capital in order that their inadequacies in roadbed and equipment might be remedied, and their operating costs reduced. This much-needed capital, it was declared, should be furnished by the investment bankers and financiers, who were primarily responsible for the then existing financial plight of the railroads because of their practises in former years of over-capitalizing the companies or unwisely distributing their productive gains. Those in financial control of the transportation industry, it was concluded, wished to reduce wages, and thus secure a margin of net revenue as a basis for obtaining credit, when as a matter of sound policy they should secure credit and capital directly without attacking wages.

By these economies and efficiencies, it was pointed out, railway management could make possible large revenue gains and at the same time maintain and even increase the rates of pay of employees. Finally, it was asserted that the Transportation Act had guaranteed a fair return to capital invested, and likewise a just and reasonable wage to labor, and inasmuch as the wages then paid to the great

mass of employees were not sufficient to maintain a proper standard of living for their families, to reduce rates of pay would be violative of the fundamental meaning of the law, whatever the conditions might be. The Transportation Act, it was claimed, contemplated a "living wage" for employees as an irreducible minimum.

SENATOR CUMMINS' INTERPRETATION OF THE
TRANSPORTATION ACT IN 1922

Upon the refusal of the Railroad Labor Board to rule upon this interpretation of the term "just and reasonable wage" for all classes of low-paid employees, the contention was carried by the unions in 1922 to the Senate Committee on Interstate Commerce, which had had legislative charge of the passage of the Transportation Act in 1920. During the course of the hearing, on April 17, 1922, Senator Albert B. Cummins, chairman of the committee and one of the authors of the Transportation Act, in commenting on its labor provisions, upheld the contention of the railroad workers. During the course of the hearing, the following significant colloquy occurred:

Senator LaFollette: "In applying the rule of 'just and reasonable' in wages, as laid down in the Transportation Act, Congress adopted the same phraseology as it did in dealing with rates."

Mr. Lauck: "Yes, Sir."

Senator LaFollette: "And commodities."

Mr. Lauck: "Yes, Sir."

Senator LaFollette: "And omits all regard to the human element."

Mr. Lauck: "Yes; there are absolutely no human standards set forth specifically. I think really the intent of Congress"—

The Chairman (Senator Cummins), interposing: "*I think the words 'just and reasonable' do embrace that.*"

Mr. Lauck: "I think it would imply that, but the railroads interpret that to mean 'comparative' with other industries, and bring forth the argument that the railroads should not have more highly paid clerks or employees. Of course, the answer to that is that this is a semi-public body of workers, and they must consider standards that in the restrictions of other industries would not be considered."

The Chairman: "My view of it is that here are two men, and one man may agree to work for the other at any wage that he would be willing to accept, whether it is just and reasonable or not, *but when organized society comes to fixing the wage, it is no more right to fix a wage below the point of living and comfortable living than it is to fix a return on capital below a reasonable point.*"

Mr. Lauck: "That is our contention exactly, Mr. Chairman."

The Chairman: "I think you are right about it."

Senator Cummins afterwards publicly declared that it was his intention to amend the Transportation Act of 1920 by including the specific statement that the term "just and reasonable" wage implied the conception of a "living wage" for workers in the lowest-paid scale of occupation. His subsequent illness and death prevented the consummation of this purpose.

GENERAL PROTESTS AGAINST EXTREME DEFLATION

Outside of the labor movement, there were also authoritative students of industrial conditions as well as prominent leaders in industry who realized the unsoundness of a policy of extreme labor deflation. They believed that a general readjustment of wartime rates of pay and working conditions was inevitable. They also keenly realized that such a procedure should be attended with the utmost caution and with due consideration of other facts involved, if post-war labor readjustments were to make for the

revival and prosperity of industry. The rectifying of managerial inefficiencies, the elimination of wasteful methods and practises, and the securing of the cooperation and good-will of industrial workers, were pointed out as essential to the return of normal industrial conditions, and often more necessary than a cut in wage-rates. As representative of this form of enlightened and disinterested opinion, statements by a distinguished student and educator, Doctor Charles W. Eliot, President Emeritus of Harvard University, and of a prominent banker and industrial executive, Mr. Sam A. Lewisohn, may be cited. Both citations are taken from a discussion before the Economic Club of Boston in April, 1921, on the question of a "Comprehensive and Considerable Reduction of Wages as the Only Road to Normal Production and Reasonable Cost of Living."¹

Speaking to this question, Mr. Lewisohn, in part, said:

On the other hand, aside from the matter of the political and social solidarity of this country, and approaching the question entirely from the viewpoint of materialistic economics, it is of primary importance that labor does not become resentful and suspicious. Low costs are obviously not merely a matter of low or even of reasonable wages. It is just as much a matter of efficiency as all you who are manufacturers here will recognize. Production standards—the amount of work performed by each unit each day—is a large factor in your costs. In view of the great deterioration in the capital goods of the country since the war, the necessity of increased efficiency is self-evident. Now, of course, the efficiency of labor depends to quite some extent on the state of the labor market,—whether labor is scarce or plentiful. The average man will naturally work harder when he realizes that if he loses his job he cannot get another. But, for—

¹ *The Consensus*, Volume VI, No. 2, May, 1921. Published quarterly by the National Economic League, Boston, Mass.

tunately, there are other factors in producing efficiency—the most important is that of good-will—and we cannot expect to maintain and develop this good-will in the long run if this process of wage readjustment is not tactfully handled.

Now, I would suggest that there is a tendency to oversimplify all problems similar to the industrial cul-de-sac that we are facing in this country. An attempt is made to find a panacea and not infrequently the prescribing of a panacea involves making one particular group the scapegoat for all the ills with which we are troubled. It is so much easier to utter recriminations than to work out one's problems constructively. The difficulties involved in the present situation as in all depressions are not at all simple but on the contrary exceedingly complex, and this time more than usual. There is much difference of opinion among the experts as to diagnosis and cure. The necessity for wage readjustment tho an important element is (it should be kept in mind) only one factor. An increase in the volume of trade will not be obtained by wage cuts alone. (Tho almost unnecessary to an audience such as this let me remind you of the many factors involved.) The European chaos, the continued tightness of money, high interest rates, the psychology of the consumer and of business men generally, each one plays the appropriate rôle. It is a rash individual indeed who would care to be dogmatic at such a time. There are many vicious circles that are troublesome in the situation. In many cases, as has been shown, the decline in wages has lagged behind the decline in the cost of living. In other cases it is difficult to demonstrate to labor the reasonableness of wage cuts until retail prices come down more in line with wholesale prices.

To illustrate the complexity of the problems involved in different industries, let us take as an example the trade in which we have seemingly the most flagrant illustration of wage inflation. In the building trade it would appear superficially that wage inflation is the main source of the chaotic conditions that prevail there. But a talk with any one well

versed with the situation in that trade will disabuse the inquirer. The causes are very much more complex than appear on the surface. For example, the *building material* problem is one of the difficulties involved. Brick, before the war, was approximately \$6 a thousand. It went to \$32 a thousand last July and now is \$16 a thousand and difficult to get at that. Owing to war conditions labor has flocked from the industry to the factories and no new apprentices have appeared to take their place. The scandalous inefficiency of the individual workman is partly caused by this exodus. In this industry we have also to face the fact that the employees owe loyalty to no one employer but are constantly shifting from one to another and that the whole employment system is very badly organized. Conservative labor leaders of the building trades are just as much alarmed over the situation as the employers. The difficulty of securing loans is another complicating factor. I merely instance this situation in the building trade to illustrate by one example the complexity of conditions that prevail in almost every industry, and to indicate that, however important a factor wage readjustment may be, wage reduction *alone* will not solve our problems.

Doctor Eliot, in the same connection, said:

I agree with what Mr. Lewisohn has just said about the necessity, under present circumstances, of proceeding slowly in regard to the reduction of wages. The reduction is, of course, inevitable before we can recover a satisfactory condition in our industries. But, fortunately, there are a good many other things that can be done to improve the present product in our industries, and to increase the total output without reducing wages immediately.

Many employers are protecting themselves from loss by running their factories on half time, or two-thirds time, without reducing wages, in the hope that by this process they can keep their force together, and sell their diminished product

without making any significant loss, even on the present sluggish market. This may be a prudent, self-protecting course, but it is no contribution to a just settlement of the industrial problem; because it leaves Labor discontented and Capital insecure.

There is another great change going on in thousands of places scattered all over the country, namely, the acceptance by employers of the method of cooperative management, the method which, if it is carried out thoroughly, involves teaching representatives of the employees all about the business in which they are concerned. It does not involve any diminution of authority in the management; but it does involve greater knowledge of the business in superintendents, foremen, and the rank and file. And this, to my thinking, is one of the most promising of the present industrial phenomena, likely to lead to a wholesome evolution in the conduct of American industries and, by and by, in the conduct of the industries of other nations; because when employees are persuaded that they are partners with the employer, that the plant is theirs in a true sense, and that it is for their interest to make it as profitable as possible by stopping wastes, effecting economies, and improving discipline, the gain is so enormous that no nation which does not adopt cooperative management will be able to compete with us. The duty of the hour is to get cooperative management in operation in as many single plants, or unified groups of plants, as possible all over the country—in combination wherever practicable with some form of profit-sharing, and always with preventive medicine, sanitation, wholesome family life, and school and play facilities. Every successful effort in this direction should be published far and wide, by advertisement if free insertion is denied.

The employers of this country now have it in their power to take a long step forward toward sound industrial relations. If they have the intelligence and the good will, they can put American industry in a masterly position in the competition of the world. Now you know that competition with the

world has some formidable aspects; but this is the way to meet all its dangers.

DEFLATION POLICY ADOPTED

Altho the foregoing forms of admonition, as well as the contentions of industrial workers, were fundamentally sound, as later developments proved, they were practically unavailing. Extreme policies of wage deflation were followed. The Railroad Labor Board granted the request of railway managements for a reduction of rates of pay of employees on the ground of the current decline in living costs and the unprofitable condition of the transportation industry, and ignored all other factors affecting wages. Similar policies were adopted in many other branches of industry.

These conditions added to the widespread industrial dissatisfaction and conflict. In the summer of 1922, a strike of all railway employees, other than train and engine crews, was threatened, but was finally restricted to a nation-wide strike of the shop crafts, which, however, was disastrous to the transportation industry and to business in general. As the result, the Railroad Labor Board lost its prestige permanently, and was finally eliminated by special legislation.

Despite these and other untoward conditions, the general policy of attempting to revive industry and trade by wage deflation, or, in other words, by reducing rates of pay in accordance with lower living costs, continued for more than a year. There was no encouraging change, however, in the existing condition of industrial depression. It was not until the beginning of 1923 that sound thinking and constructive action prevailed and the country was again started toward a period of unprecedented prosperity—both as to duration of time and as to the extent of its effect.

CHAPTER V

THE EMERGENCE OF A NEW CON- STRUCTIVE POLICY

Because of the long-continued industrial and commercial depression in the United States, together with the accompanying impoverished condition of Great Britain and Europe, industrial leaders and financiers were stimulated to the consideration of new policies and principles for rehabilitating economic conditions. As the result, an entirely new conception as to determining wages was soon accepted and put into practical operation.

After the year 1922 it became evident to students of business conditions that there were no markets abroad for American products, and that there would be no foreign demand for some time, with the exception of that created by the purchasing power of credits extended by this country, either open or in the shape of formal loans. It was, therefore, apparent that prosperity in the United States was dependent upon increasing the purchasing power in the domestic market, so that the people might absorb manufactured and agricultural products in larger quantities. Obviously, purchasing power could not be rapidly increased unless wages and incomes were also increased. It was the contemplation of these facts that finally led to the practical application of an entirely new theory of wage-determination.

NEW DEFINITIONS OF "NORMALCY"

Up to 1922 the burden of all business discussions, as well as of political debates bearing upon financial and industrial problems, was the constantly reiterated decla-

ration that there "must be a return to normalcy." This statement, as a matter of fact, was the slogan of the Republican party in the Presidential campaign of 1920 and was subsequently adopted as the most sound course of procedure by conservative industrial and financial interests. With the exception of the protests put forward in wage arbitrations by representatives of employees, this attitude had been, as a rule, accepted without analysis, as meaning a revision to pre-war wages, industrial conditions, and prices. It was argued that all inflation and extravagance brought about by the war should be eliminated, and, when this was done, not only industry and trade, but life in general might be resumed upon a normal basis. A "return to normalcy," as thus conceived, was thoughtlessly made synonymous with a return to prosperity.

A NEW THEORY OF PROSPERITY

Despite the protests of the advocates of a more enlightened policy, these views as to "normalcy" and prosperity prevailed, as has already been described, until the latter part of 1922. After more than two years of loss and depression, industrial and financial leaders, for the first time since the war, began to realize that the prosperity of the country really depended upon the prosperity of the individual citizen instead of the prosperity of the individual being conditioned upon the prosperity of the country. The fallacy of wage-cuts as means of heading off threatened depression or reviving prosperity had already been vividly and disastrously demonstrated by the adverse conditions following the business collapse of 1920-1921. Cut off from foreign markets by European inability to buy, it became evident that future prosperity was dependent upon the consuming power of our own markets. It was also realized that the road to prosperity

by way of greater consuming power lay in increased wages and incomes, and higher standards of living for the people. This fact was very forcibly stated by many representative industrial leaders. As typical of this changing attitude, Colonel Robert F. Stewart, Chairman of the Board of the Standard Oil Company of Indiana, in December, 1922, declared:¹

It were suicide to attempt to beat down wages and salaries to the bare level of the cost of living, and when I say "living" I mean a good living; the kind of living that permits a thrifty man to build his own home, to properly clothe, feed and educate his wife and children. One industry can not profit at the expense of another. In this country our prosperity is best assured by the prosperity of the entire people, not of this class or that class, and for American industry as a whole to seek to hold down the pay envelop so that it provides only the bare necessities of life, were to weaken, and eventually to wreck, the greatest market which American industry possesses—the American market.

Finally, the turning point came early in 1923, when the Secretary of Commerce, Herbert Hoover, publicly and unequivocally condemned the fallacy of assuming that the pre-war standards of living were "normal" standards. On the contrary, he vigorously stated, post-war "normal" standards were vastly different, and future prosperity, in turn, was contingent upon still further improving these living standards. His statements were so revolutionary at the time and were so significant in their bearing upon future developments, that liberal quotations may be profitably cited from them. In a speech delivered in the early part of 1923, Secretary Hoover said, in part:²

We must get our minds away from the notion that pre-

¹ Bulletin of American Petroleum Institute, December 8, 1922.

² See Press Release by Department of Commerce of Speech of Mr. Hoover, delivered May 8, 1923.

war standards of living and volume of business would be normal now. *Normalcy is a vastly higher and more comfortable standard than 1913. We must not judge the state of business activity by pre-war figures, but by a highly increased base.*

There has been in the past decade an unparalleled growth of our industrial and commercial efficiency and our consequent ability to consume. I do not refer to that growth of productivity which should naturally be expected to accompany the increment of 14 millions of our population during the last decade, nor do I refer to the increase in dollar figures due to higher prices. . . . But exhaustive study from many angles of production over average periods ten years apart, before and since the war, would indicate that while our productivity should have increased about 15 per cent., due to the increase in population, yet the actual increase has been from 25 to 30 per cent., indicating an increase in efficiency of somewhere from 10 to 15 per cent. . . . We have been able to add to our standards of living by the more general distribution of many articles which were either altogether luxuries ten years ago, or which were luxuries to a large portion of the population. Thus an increased proportion of the population are using electric lights, telephones, automobiles and better housing—and have added movies and what not to their daily routine. A rough estimate would show that we could to-day supply each person the same amount of commodities that he consumed ten years ago, and lay off about 2,000,000 from work.

Some people have looked upon these additions of new commodities and services in the daily expenditure of our people as representing extravagances, but as a matter of fact they are no entrenchment upon savings. They are the product of better organized effort.

I wish to impress again that I am not confusing the natural increment that would arise from increased population, or not confusing the increased dollar figures due to higher prices, but that this is an actual increase of commodities and

services per capita in the population. It is due to the increased skill, the advancement of science, to temperance, to the improvement of processes, more labor saving devices—but most of all it is due to the tremendous strides made in industrial administration and commercial organization in the elimination of waste in effort and materials.

Nor has it been accomplished by imposing increased physical effort upon our workers. On the contrary, actual physical effort to-day is less than ten years ago. There has been in this period a definite decrease in the physical effort, due to improved methods. Nor has it been accomplished by any revolutionary discovery in science. It is the result of steady improvement in management and method all along the line. It is an accumulation of better practise in the elimination of waste. *It is a monument to the directing brains of commerce and industry and the development in intelligence and skill of the American workingman.* The result has been a lift in the standard of living in the whole of our people, manual worker and brain worker alike. This is the real index of economic progress.

Shortly afterwards, these significant utterances by Secretary Hoover were sanctioned by Mr. Julius M. Barnes, at that time President of the United States Chamber of Commerce. In two articles in the June and August (1923) issues of *The Nation's Business*, the official organ of the Chamber of Commerce, Mr. Barnes said, in part:

Between the census of 1900 and 1920, twenty years of significant industrial development in this country, our population increased 40 per cent, and the volume product of our farms increased 38 per cent, so that we are securing the home production which maintains our people.

In that period the volume production of our mines, coal and metals, increased 128 per cent; showing that this base of all industry was adequately maintained and developed and the volume of the products of our industry, the volume of

fabricated products, in 1920, exceeded that of 1900 by 95 per cent.

The significance of that in human application is this: that if you deduct from that ever-increasing flow of factory product, those things which are of current consumption—food and clothing—and estimate the residue, as has been done by careful calculation, at 25 per cent., annually, of addition to permanent household capital—the things we use for the further creation of wealth and earning power—it is a fair assumption that the average home in America in 1920 possesses three times the things that the home in 1900 had.

. . . We have a theory, which we have sustained and demonstrated and proved by every analysis which can be applied, that production itself, by its economy and the security of its earning power which it itself creates, has vastly enlarged the area of common possession and thus greatly raised the general standard of common living.

The wheat crop of to-day requires by careful estimate the expenditure of seven million days' labor, but that wheat crop produced under the conditions before the harvester and reaper were invented, and the appliances which followed them, would require 130 million days' labor.

We have saved 123 million days' labor in the production of one of our five cereal crops by the American genius for invention and the substitution of mechanical appliances for manual labor. Were those workers released to unemployment and idleness? You know they were not. You know that only by this process can we find the workers to aid old industries in their expansion and to create the new ones which science and invention are constantly placing before us. There is always an increased demand for labor by the very economies of displacement.

The transportation industry of this country has developed its efficiency along with other industry. When you remember that in 1875 the railroad car of this country was 65 per cent. dead weight and 35 per cent. earnings, and that last year a special type of car for coal and ore was developed

which was only 20 per cent. dead weight and 80 per cent. earnings, you can see that science and invention and research have made progress in the railroad industry as in all other industry.

When you measure the progress of these railroads by those tests which we normally apply to test the efficiency of industry, you find in the transportation service in 1913, 166,000 ton miles moved per employee; in 1922, 243,000 ton miles moved per employee; in 1913, 19,000 passenger miles per employee, and in 1922, 21,600.

It is manifest that the standard of living can only be advanced and maintained by the creation of more and more articles for division among American Homes.

It is manifest that this increasing volume must press into more and more homes, facilitated by the economies of costs which mass production itself secures, and *aided in its distribution by more widely distributed buying power, which enlarged competition for workers itself assures.*

It is, however, necessary and proper that, with this demonstration of vast increase in material wealth, we should make sure that such wealth is fairly and equitably distributed, not by law and edict, with all the inequalities and injustices which follow such application of human judgment in authority, but that it be fairly and equitably distributed by the social system and the natural processes of trade in which individual superiority obtains its reward by the attraction of superior service.

REVOLUTIONARY CHANGES IN ATTITUDE OF FINANCIERS, INDUSTRIALISTS, AND LABOR LEADERS

These significant statements as to fundamental changes necessary in theory and practise in considering the rehabilitation of industry and the compensation and living standards of industrial workers, were accepted by other representative leaders of industry and of public opinion, and soon met with widespread sanction and action, includ-

ing the enthusiastic support of the organized labor movement itself. Increased productivity of labor and industry, advancing wages, higher living standards and greater consuming or purchasing power, rapidly became the avowed policy and practical program of American industry.

This new constructive program was primarily developed as the way toward the revival of prosperity in trade and industry. From these new teachings, however, and their practical application, inevitably came sweeping conclusions as to living standards and theories regarding the determination of wages—conclusions which, from a practical standpoint, completely overthrew preexisting theories and policies. In the light of the new attitude, it was at once perfectly clear that the cost of living as a wage adjustment factor was no longer tenable except for the maintenance of existing standards. The “productive efficiency” theory of wages, on the other hand, took the *dominant* place. If labor and other costs of production could be lowered, wages, it was held, could be increased indefinitely without disturbing margins of profit. As a consequence, living standards could be constantly elevated. Expressed in another form, lower costs made possible higher wages, and this greater compensation to workers, in turn, meant the establishment of better living standards, with the result that the increasing demand for commodities thus created by the expansion in purchasing power arising from higher wages and living standards would inevitably produce the objective desired by all, namely, general activity and prosperity in commerce, manufacturing, transportation, and finance. The self-interest of those engaged in economic undertakings, as well as of those dependent upon these factors, therefore, directly stimulated all groups and classes eagerly to accept and apply the new doctrines once their soundness had been practically demonstrated.

CHAPTER VI

ABANDONMENT OF THE COST-OF-LIVING AND SUPPLY-AND-DEMAND THEORIES

The theories of adjusting wages according to changes in living costs or according to variations in the supply of labor had no place in the new order of thinking. They were soon, therefore, disregarded both in theory and in practise, and, finally, definitely abandoned by all enlightened industrial interests and by all judicially-minded arbitration and wage-adjustment boards.

THE GENERAL CHANGE IN ATTITUDE

The representatives of labor, as already pointed out, had always undeviatingly claimed that the idea of adjusting wages periodically in accordance with an index of living costs was first introduced during the war solely as a war measure, and that it was then assented to by organized labor only as a patriotic arrangement during a national emergency. Under normal conditions, they had further asserted, the only utility of a cost-of-living index was to assure that there would be no backward step in economic progress. During a period of rising prices, there should be, it was declared, at least a corresponding increase in wage rates in order that the preexisting purchasing power of industrial workers and their families might be maintained. This attitude was forcibly expressed by the Executive Council of the American Federation of Labor in its report for 1921, as follows:¹

¹ Executive Council Report, A. F. of L. Proceedings, 1921, pp. 68-69. From "Readings in Trade Unionism," by David J. Saposs; New York, 1927, p. 272.

The American trade union movement believes that the lives of the working people should be made better with each passing day and year. The practise of fixing wages solely on the basis of the cost of living is a violation of the whole philosophy in progress and civilization and, furthermore, is a violation of sound economic theory and is utterly without logic or scientific support of any kind.

The same attitude was taken by labor as to the fixing of wage-rates according to the so-called laws of supply and demand. This was cogently and briefly expressed in an editorial of *The American Federationist* in 1919, as follows:¹

The workers are not interested in which particular economic theory shall be given preference. They have no faith in the theory advanced by Adam Smith that wages, like everything else, are governed by the law of supply and demand. There is at hand too much conclusive evidence that the law of supply and demand is not immutable and that it readily lends itself to manipulation and control. The wage-earners are no longer bewildered by the subtle logic of the wage-fund theory advanced by David Ricardo, James Mill or John Stuart Mill. No one in this enlightened age would attempt to advance this theory as a fitting answer to the wage-earners' yearning and craving for a better and happier life. Neither does Labor accept the conclusion advanced by La Salle in the so-called "iron law of wages."

In addition to and entirely apart from any changes which might occur in the price level or in the supply of labor, there were certain economic and social factors, according to the attitude of labor leaders, that should be carefully studied when adjudicating any matter involving wages. When prices were stationary, and even when they were

¹ "Why the Living Wage," in *American Federationist*, February, 1919, pp. 151-3.

falling, the underlying economic and social considerations, it was asserted, became the most important factors entering into the determination of wages. It was only when these were fulfilled in their entirety that the price level, it was claimed, could be allowed to affect earnings. These fundamentals were: (1) whether the original basis of wages was correct or just and reasonable, and (2) whether existing rates of pay were sufficient to maintain adequate living standards.

Constructive and intelligent students and industrial leaders, as has been set forth in the preceding discussion, also recognized that the basic pre-war or post-war standards of compensation may have been entirely inadequate or unfair, and that the subsequent readjustment of such standards according to changes in living costs would be a hopeless procedure, for the obvious reason that, under such a method, old inadequacies or injustices would be perpetuated, and there would be no opportunity to improve the living conditions or to advance the general economic and human well-being of industrial workers.

Specific examples have already been cited, as in the case of the award of the United States Bituminous Coal Commission of 1920, to show how the cost-of-living theory was set aside in favor of the "living wage" basis of wage adjustments. Additional illustrations may be further submitted, which show, irrespective of the "living wage" and other fundamental principles, how the tendency developed toward the repudiation of the cost-of-living and the commodity basis of wage adjustments.

The following significant citation indicates the general attitude. It is from an award of an arbitration board for the Springfield (Massachusetts) Street Railway Company and its employees, of which the chairman was Mr. James J.

Storrow, at that time a member of the nationally known Boston investment banking house of Lee Higginson and Co. In its decision, the Board said:¹

It may be said that if the Board of Arbitration is justified in causing wages to drop off sharply exactly in proportion to the drop in the cost of living this action must be predicated upon the assumption that the original basis upon which the wages were established was correct.

In the following year (1923), Mr. Henry C. Attwill, Chairman of the Public Service Commission of Massachusetts, as chairman of the board that arbitrated between the Eastern Massachusetts Street Railway Company and its employees, in his award said:

I have given careful consideration to the arguments advanced on behalf of the Company. *I do not think that I should be bound by the yardstick of the increased cost of living as determined by a government board.* Undoubtedly it should be given consideration, and it is helpful in the determination of the questions submitted, but *if wages of the employees are to be measured solely by that, there is no occasion for arbitration.*²

The prevailing opinion was further reflected in the conclusion of the study of railway arbitration principles by Dr. J. Noble Stockett, Jr., already referred to, which had been made before the war, but which so effectively stated the post-war attitude that it may be cited at this point.³

The underlying principle [it was stated] of the increased-cost-of-living argument is the maintenance of the standard of living. Taken by itself, therefore, it has no claim as a basis

¹ "Award of Board of Arbitration between the Springfield Street Railway Company et al and the Amalgamated Association of Street and Electric Railway Employees of America." February 23, 1922, p. 11.

² The italics in this quotation are ours, as in all succeeding quotations, unless otherwise noted.

³ J. Noble Stockett, Jr., "Arbitral Determination of Railway Wages." Houghton Mifflin Co., 1918 (p. 118).

for determining what share of the product rightfully belongs to the laborer; it merely aims to keep real wages at a constant level. Thus, the assumption upon which it rests is that the wage received prior to the demand for advance is a fair and adequate wage.

In the arbitration award covering points of difference in 1924 between the Worcester Consolidated Street Railway and the Springfield Street Railway, and its employees, the chairman of the arbitration board, Mr. Lewis C. Parker, disposed of all arguments based upon supply and demand, as follows:

While the law provides for public regulation of a street railway as a public utility as before stated, it does not control or supervise the settlement of wage and other disputes between the street railway and its employees, yet the great public benefit and necessity of street railways, and the great social, commercial, industrial and economic waste caused by strikes, let alone the attendant disorders and public inconvenience, make it essential that all disputes between street railways and their employees as to wages, hours and working conditions be settled, if agreement be not possible from conference, by Arbitration. *The law of supply and demand as a means of settling wage and other disputes between a street railway and its employees is a relic of the past and should not be considered in this period of social progress.*

The United States Railroad Labor Board also formally repudiated the commodity theory of wage determination. In a decision in 1922 it stated:

In this connection it should be said that the Labor Board has never adopted the theory that human labor is a commodity to be bought and sold upon the market, and consequently to be reduced to starvation wages during the periods of depression and unemployment.¹

¹ United States Railroad Labor Board, Decision No. 1074 (Docket 1300), effective July 1, 1922.

Sound public opinion had also revolted against the free play of economic forces in determining wage rates. As symptomatic of this, a brief excerpt from an editorial article in 1922, by William Allen White, the eminent publicist, may be cited. He declared that:¹

The labor market must go. Labor is not a commodity. The laborer is a citizen. And to function as a citizen the worker must have self-respect. He cannot have self-respect if he is a chattel on the block in a competitive market. His country must protect him against the greed which would make the laborer but one grade higher than the slave.

This attitude was also supported by the most enlightened industrial leadership. In a discussion before the Economic Club of Boston, under the auspices of the National Economic League, Mr. Sam A. Lewisohn, a prominent industrialist and banker, in this connection said:²

There has been much discussion as to whether labor is or is not a commodity. Even from an industrial point of view it is now generally recognized by all except the most backward employers that tho there is a certain element of bargaining that goes with engaging anybody's services that is not dissimilar to the purchase of a commodity, human beings, Mr. Burleson to the contrary, are human beings, and not machines. You can *buy* an adding machine but you must get *cooperation* from an accountant. Thus even from an industrial angle the social and human aspect is recognized. And when we approach the question of labor policies from a *national* point of view, the commodity theory must be wholly discarded. We must realize that those employed in industry are our fellow citizens, and that anything that produces social cleavage is a national danger.

¹ "As I See It," William Allen White. Washington (D. C.) *Sunday Star*, September 10, 1922.

² *The Consensus*, Vol. VI, No. 2, May 1921, published quarterly by the National Economic League, Boston, Massachusetts.

Citations could be multiplied as to the revolutionary change in attitude toward the commodity theory of wage-fixing, or toward cost of living as a wage-adjustment factor. As a matter of fact, both of these old ideas were either subordinated to or lost sight of in the new conception as to wage and industrial policies which came to the forefront after the year 1923.¹

ACTUAL EXPERIENCE SHOWS ABANDONMENT OF OLD THEORIES

Industrial experience itself since the year 1923 is an expression of this changed attitude. The practical procedure which industry has followed shows conclusively that no stress has been placed upon the index-of-living costs, or upon supply and demand as the bases for recurring wage adjustments. Quite the reverse has been true. This fact is demonstrated by the diagram opposite page 92, reproduced from the *Monthly Review* of the Federal Reserve Bank of New York.

The composite wage index of the diagram includes per capita earnings of factory operatives, railway employees, agricultural, building, and generally unskilled labor, salaries paid to teachers, and earnings of clerical help. It is, therefore, representative of all classes. If labor in the farming industry, which has been abnormally depressed since the war, were omitted, the rise in wages would be greater. The cost-of-living index is that of the United States Bureau of Labor Statistics.

It will be noted from the diagram that the trend of wages has been upward and the cost of living, on the other hand, downward, during the past five years. Mr. Carl Snyder, statistician of the New York Reserve Bank and author

¹ For further citations see Feis, "Principles of Wage Settlement," Chapters IV and V, and Chapter VII, Supplementary Note A.

of the wage index used in the diagram, in another connection points out that the gain in real wages during the three years preceding the year 1927, as shown by the spread between the wage and the cost-of-living index, was 20 to 25 per cent., and probably greater than at any time during the past half century.¹ The evidence from the practise of industry itself, aside from public opinion or any formal or judicial determination of wage rates, has been that the cost-of-living index has been definitely cast aside as a fundamental factor in arriving at changes in rates of pay of industrial workers.

WAGE ADJUSTMENTS IN LEADING INDUSTRIES HAVE DISREGARDED COST-OF-LIVING FACTOR

The returns from individual industries confirm the showing of the general indexes as to the relation between increases in wages and living costs. This is graphically set forth in the following table and chart. The table shows comparatively, in a descending scale, the increase in average weekly earnings of workers in the leading basic industries in 1926 as compared with the pre-war period. The horizontal bars and red vertical line show at a glance how earnings and rates of pay in all the principal branches of industry have advanced far beyond the increase in cost of living since 1913.

¹ *Journal of the American Statistical Association*, December, 1926, p. 469.

CHAPTER VII

ACCEPTANCE OF THE THEORY OF AN ADEQUATE BASIC WAGE

In the new constructive plan of industrial procedure, the so-called "living wage" standard, in sharp distinction to the "cost-of-living index" and the "commodity theory" of wages, met with a favorable reception. As the result of post-war agitation and education, it has been quite generally accepted in principle. In a number of important wage adjustments it has also been practically sanctioned and given concrete application.

As the cost-of-living and commodity theories declined in influence, the living-wage principle grew in strength. Its practicability, or the ability of industry to maintain such a basic standard, was for a time questioned, but after the year 1923, with the expansion of industrial output, the lowering of production costs and the growth of national income, the question of American industry being able to support its lowest grades of industrial workers and their families on a standard of health and modest comfort ceased to be a matter of serious controversy. Furthermore, since 1922, the year in which the living-wage movement reached the stage of national discussion and agitation, many declarations in favor of wage standards much higher than those necessary for the requirements of minimum health and decency have emanated from authoritative and influential sources.

ORIGIN OF THE TERM "LIVING WAGE"

The "living wage" standard had its origin in a formal way twenty years ago in Australia, when in 1907 Mr.

Justice Higgins, of the Australian Commonwealth Court of Conciliation and Arbitration, first declared that the principle of the "living wage" would be the foundation-stone of all industrial relations within the purview of that court. The Act of 1904 creating the Conciliation and Arbitration Court had provided that the minimum wages fixed by the court should be "fair and reasonable." In the Harvester case of 1907,¹ Mr. Justice Higgins stated that a "fair and reasonable" wage must mean a "living wage," and he then gave his famous standard for the determination of a living wage—"the normal needs of the average employee regarded as a human being in a civilized community." The "average" employee was also further described by this jurist as a married man with a wife and three dependent children. Since that time the living-wage principle has been accepted by every arbitration court in Australia.

ITS DEVELOPMENT IN AMERICA

The origin and development of the living-wage principle in this country has already been set forth chronologically in the preceding discussion. It will be recalled that in its early stages the movement took the form of a demand for an irreducible minimum wage, in order that industry and the State itself should be protected from the harmful effects of the low wage scales then prevailing. This minimum was first known as the "subsistence level" of living. It did not go farther than to provide for the bare physical needs of industrial workers and their families. It was a wage which was sufficient to maintain an average employee and his family only one step above poverty and dependency.

During the years immediately preceding the entrance of America into the World War, a further advance was made.

¹ *Ex Parte*, H. V. McKay, 2 Commonwealth Arbitration Reports, p. 1.

It was declared to be inhuman and anti-social to provide only for the mere animal existence of wage earners and their wives and children. Minimum rates of pay, it was asserted, should be adequate for the support of an average worker and his family on the basis of health and modest comfort. This contention was recognized, as already pointed out, by a Wage Arbitration Board in Seattle, Washington, in 1917, and by Mr. Justice Samuel Alschuler in Chicago in February, 1918, in a decision which affected the rates of pay of packing-house employees all over the country.

After our entrance into the war, the living wage was officially proclaimed by President Wilson as one of the guiding principles for the adjustment of the wages of those engaged in war production. It was also made mandatory upon the War Labor Board, the supreme court of industry, as it were, with jurisdiction over standards of work and compensation during the war period. The Board accepted the principle and applied it in specific cases, but did not carry its application to a practical conclusion in an extensive way because of the apprehension of interfering with the continuity of the production of commodities essential to the prosecution of the war. The principle was frequently invoked in specific instances to raise pre-war rates of pay to a point where the recipients could carry on without physical impairment during the war period. The War Labor Board held that this was as far as it could proceed under abnormal war conditions with the living-wage principle, which represented an "approved view of progress in normal times."

WIDESPREAD SANCTION OF THE LIVING-WAGE PRINCIPLE

As has been truly said, however, the war tore the scales from the eyes of numerous groups of people and "forced

us to see things as they really are," and in the light of this clearer vision, people came "to regard many conditions as intolerable which before had only seemed as inevitable."¹ This was especially true of the condition in which unskilled wage earners in manufacturing, mining, and transportation were living before the war. In any true sense, their wages could not be construed as "living wages" even after the attempt had been made during the war period to adjust them to rising costs of living. After the cessation of the conflict, enlightened public opinion, therefore, refused to acquiesce in this state of things. Its attitude had been fundamentally changed by the war. Pre-war notions as to wage standards and principles were no longer accepted. Within a year after the Armistice, church organizations without regard to denomination, statesmen, economists, publicists, national industrial conferences, arbitration boards and other public agencies having to do with wage adjustments and standards, unreservedly sanctioned the living-wage principle. Typical declarations from representative groups are given below as an indication of the widespread acceptance of the principle of the living wage during recent years.²

LABOR PROVISIONS OF THE TREATY OF PEACE

Practically a universal sanction to the living-wage principle by the leading commercial and industrial nations of the world was contained in the Labor Provisions of the Treaty of Peace in 1919. This pronouncement was in part as follows:³

¹ "The Human Needs of Labor," B. Seebohm Rowntree; London, 1918, pp. 9-10.

² For numerous citations for the period immediately following the war, see "The Sanction for a Living Wage: Employees' Exhibit of the United Mine Workers Before the U. S. Anthracite Coal Commission," Washington, 1920.

³ Treaty of Peace with Germany, 1919, Sec. II, Article 427.

The High Contracting Parties, recognising that the well-being, physical, moral, and intellectual, of industrial wage-earners is of supreme international importance, have framed, in order to further this great end, the permanent machinery provided for in Section 1, and associated with that of the League of Nations. . . .

Among these methods and principles, the following seem to the High Contracting Parties to be of special and urgent importance: . . .

Third. The payment to the employed of a wage adequate to maintain a reasonable standard of life as this is understood in their time and country.

LETTER OF PRESIDENT WILSON TO RAILROAD WORKERS, 1920

In a letter of February 13, 1920, to the Representatives of the Railroad Labor Organizations in the matter of referring the then pending wage demands of the latter to the newly-created Railroad Labor Board, President Wilson promised that the "living wage" principle, among other factors, would be considered in adjusting rates of pay. He said:

3. I shall at once constitute a committee of experts to take the data already available in the various records of the United States Railroad Administration, including the records of the Lane Commission and of the Board of Railroad Wages and Working Conditions, and to analyze the same so as to develop in the shortest possible time the facts bearing upon a just and reasonable basis of wages for the various classes of railroad employees with due regard to all factors reasonably bearing upon the problem and specifically to the factors of the average of wages paid for similar or analogous labor for other industries in this country, *the cost of living and a fair living wage*, so as to get the problems in shape for the earliest possible final disposition.

THE TRANSPORTATION ACT OF 1920

The Congress, in enacting the Transportation Act of 1920, stated that wages of railroad workers should be "just and reasonable" in the following section:

Sec. 307 (d). All the decisions of the Labor Board in respect to wages or salaries and of the Labor Board or an Adjustment Board in respect to working conditions of employees or subordinate officials of carriers shall establish rates of wages and salaries and standards of working conditions which in the opinion of the board are *just and reasonable*.

Senator Cummins, one of the authors of the Transportation Act, which established the Railroad Labor Board, as already pointed out, stated in a hearing before the Senate Committee on Interstate Commerce on April 17, 1922, during a discussion concerning the meaning of the labor provisions of that act, that "when organized society comes to fixing wages, it is no more right to fix a wage below the point of living, and comfortable living, than it is to fix a return on capital below a reasonable point." He also announced that he was going to have the Act amended to make its real meaning clear, but was unable to do this before his death in 1923.¹

PRESIDENT WILSON'S INDUSTRIAL CONFERENCE, 1920

During the autumn of 1919, a National Industrial Conference assembled in Washington at the invitation of President Wilson. It was made up of three sections, one representing employers, another employees, and the third, the general public. The President recommended that the Conference agree upon a series of fundamental principles which should be accepted as mandatory upon agencies con-

¹ See pp. 70-71.

cerned with the adjustment of wages and working conditions. The employer and employee groups, however, could not come to an agreement upon a principle for collective bargaining, and the work of the Conference came to naught.

Shortly thereafter, President Wilson called a second Conference composed entirely of representatives of the public. William B. Wilson, Secretary of Labor, was designated Chairman and Herbert Hoover, later Secretary of Commerce, Vice-Chairman.¹

This Conference was very successful. In its Report to the President, which set forth in a comprehensive form both principles and machinery for the judicial settlement of industrial disputes, the following recommendation was made in connection with the "living wage" principle.²

Considered from the standpoint of public interest, it is fundamental that the basic wage of all employees should be adequate to *maintain the employee and his family in reasonable comfort, and with adequate opportunity for the education of his children. When the wages of any group fall below this standard for any length of time, the situation becomes dangerous to the well-being of the state.* No country that seeks to protect its citizens from the unnecessary ravages of disease, degeneration and dangerous discontent, can consistently let the unhampered play of opposing forces result in the *suppression of wages below a decent subsistence level.*

¹ The distinguished public personnel of the Conference was:

Martin H. Glynn	Oscar S. Straus
Thomas W. Gregory	William O. Thompson
Richard Hooker	Henry C. Stuart
Stanley King	Frank W. Taussig
Samuel W. McCall	Henry J. Waters
Henry M. Robinson	George W. Wickersham
Julius Rosenwald	Owen D. Young
George T. Slade	
Willard E. Hotchkiss	
Henry R. Seager	
(Executive Secretaries)	

² Report of the President's Industrial Conference, Washington, Government Printing Office, 1920, p. 37.

Above that point, there may well be a fair field for the play of competition in determining the compensation for special ability, for special strength or special risk (where risk is unavoidable), *but below that point the matter becomes one of which the state, for the sake of its own preservation, must take account.*

PHILADELPHIA BUREAU OF MUNICIPAL RESEARCH

This bureau touched upon the subject in these words:¹

Nowadays very few persons object to the principle of a living wage. It is generally agreed that the humblest worker is entitled to a return for his services that will enable him to support himself and his family in decency and comfort and give his children a fair start in the world. If we have failed thus far to secure a living wage for all workers, it has been due largely to differences of opinion as to the methods to be employed and to a lack of understanding of what constitutes a living wage rather than to disapproval of its principle.

THE DECLARATIONS OF ECONOMISTS, STATESMEN
AND PUBLICISTS

The following declarations on the living-wage principle have been made by the men whose names stand above them:

JACOB H. HOLLANDER, PROFESSOR OF POLITICAL ECONOMY,
JOHNS HOPKINS UNIVERSITY

. . . A sufficient wage can best be assured the laborer by state intervention defining minimum wage conditions. This is the assertion of no new principle. From the beginning of modern factory legislation, the state has time and again intervened to establish a competitive base-line in industrial enter-

¹ "Workingmen's Standard of Living in Philadelphia," by William C. Beyer, Rebekah P. Davis, and Myra Thwing; Macmillan Company, New York, 1919, p. 1.

prise whenever it has become clear that free contract fails to insure conditions of employment compatible with the social interest. In this manner, the length of the working day, the employment of women and children, the safeguarding of dangerous processes, have heretofore been defined as to least favorable terms by legal enactment. The motive of such legislation has been to replace, by exercise of the state's police power, that minimum well-being which the wage-earner cannot secure for himself and which it is essential for the safeguarding of society, that he should enjoy. The same intervention is now invoked to establish as a minimum wage—for less than which it shall not be lawful for employers to contract or laborers to engage—an amount not less than the necessary cost of maintaining the worker's family in health and decency.¹

DR. J. NOBLE STOCKETT, JR., UNIVERSITY OF CHICAGO

The two fundamental principles which may fairly govern the wage determinations of arbitrators are the grant of a living wage to unskilled labor, and the maintenance of the standard of living of all employees. The first of these is the more important, since, with the upper grades of labor, there is no question of their securing enough to insure a decent standard of living. . . .

There is practical agreement nowadays among students of social conditions that no employee should receive compensation below an amount sufficient to secure a normal standard of living. The opinion is current that since the result of the wage contract is dependent upon the relative strength of the two parties, and since the employees are usually the weaker, employers should be limited in the exercise of their superior power by a provision that every wage must fulfil the requirements of a living wage. It is unnecessary to treat here of the reasons for the payment of a living wage. The

¹ "Abolition of Poverty," Jacob H. Hollander. Houghton Mifflin Company, 1919, pp. 68-69.

evil effects upon society and upon the laborer himself arising from the failure to receive such a wage are patent. Undoubtedly a living wage is a necessity; the real issue is whether it is possible to determine the essentials constituting a normal standard of living, and whether the amount of money required to purchase these essentials can be calculated within reasonably exact limits. . . . Summing up the attitude of American arbitration boards, it may be said that they favor granting a living wage to the lower-paid and unskilled employees.¹

PROFESSOR JOHN A. RYAN, CATHOLIC UNIVERSITY
OF AMERICA

To-day the doctrine that the laborer has a moral claim to at least a decent living wage is almost universally accepted by all intelligent and disinterested persons, while the legal minimum wage has found its way into the statute books of countries in three continents.²

FEDERAL JUDGE (FORMER U. S. SENATOR FROM IOWA)
WM. S. KENYON

Upon the question of a living wage Federal Judge William S. Kenyon, when he was in the Senate and Chairman of the Senate Committee on Education and Labor, on January 25, 1922, stated:

We desire before closing to refer to the vital question of a living wage. It may be said that a living wage is a wage which, with due regard to time lost from unavoidable causes, will insure the lowest paid workers an income sufficient to maintain himself and family at a level of health and modest comfort and with a reasonable degree to security against death, incapacity, and the contingencies of life, it being

¹ J. Noble Stockett, Jr., "The Arbitral Determination of Railway Wages." Boston: Houghton Mifflin Company, 1918, pp. 172, 67-68.

² "A Living Wage," John A. Ryan. New York, Macmillan Company, 1920, p. IV.

assumed, of course, that the wage-earner will contribute his full measure of productivity.

For the skilled or especially efficient worker there should be, of course, a differential equitably adjusted in accordance with the degree of skill, period of training, productivity, efficiency, etc. Skill and efficiency should be encouraged in every way and compensated fully and justly. They are perhaps the most valuable industrial assets any nation can have.

The principle of the living wage as a basis of wage adjustments recognizes the obligation of industry vested with a public or quasi-public interest to pay employees a sufficient wage which will permit them to maintain their families and prepare them for the duties and responsibilities of American citizenship. *A bare subsistence wage is not enough, and would mean the stagnation of our civilization.* An industry which cannot meet its obligation in this respect must be so organized that it will be able to do so.

In his bill submitted to the Senate in 1922 for the regulation of the bituminous coal industry, Judge Kenyon defined the living wage as follows:

7. The right of every unskilled or common laborer to earn a living wage sufficient to maintain a normal family in health and reasonable comfort, and to afford an opportunity for savings against unemployment, old age, and other contingencies is hereby declared and affirmed. Above this basic wage for unskilled workers, differentials in rates of pay for other mine workers shall be established for skill, experience, hazards of employment and productive efficiency.¹

WILLIAM ALLEN WHITE, EDITOR AND PUBLICIST²

It is easy for the statistician of the railroad owners to prove that there is no such thing as a living wage; to show

¹ "The Industrial Code," W. Jett Lauck and Claude S. Watts. Funk & Wagnalls Company, 1922, p. 567.

² "As I See It," William Allen White; Washington (D. C.) *Evening Star*, September 10, 1922.

that what would be a living wage for one man or family would be poverty or luxury for another. But the fact remains that wages must be set in reference to the cost of living. Labor otherwise becomes a commodity, and unless certain standards of living are predicated in any wage dispute, we shall get our labor down to a point where certain standards of citizenship also are forgotten. In spite of all we may say, economic status does affect intelligence and morals. And if we are to force labor down in a comparative market to a standard lower than the American average, we shall also force our nation's ideals down to a low standard.

It is begging the question to declare that a man with five children should have a "living wage" lower than a man with ten children. It is cheap to point out the fact that a man whose family is practically self-supporting must have a different living wage from the man with a houseful of little ones. For all that is beside the point. When an average man's family income is ascertained he should have enough every Saturday night to live decently in self-respect and educate his children. If he has no children, that is his loss, and if he has more than the average number of children, that is his gain. And the average man's wage should not be changed because of the exceptional man's advantage or disadvantage. . . .

When a living wage is established for the unskilled, then let every man's skill and intelligence have free play and let him sell these in the best market and for his own advancement. That is the philosophy of the living wage.

LEONARD WOOD, MAJOR-GENERAL, U. S. A., GOVERNOR-GENERAL OF CUBA AND OF THE PHILIPPINE ISLANDS¹

He should receive a wage that not only permits him to keep body and soul together, but enables him to lay by something for the future.

¹ "Leonard Wood on National Issues," compiled by E. J. David. Doubleday, Page & Co., 1920, p. 21.

THEODORE ROOSEVELT, TWENTY-SIXTH PRESIDENT OF
THE UNITED STATES¹

We hold with Lincoln that labor deserves higher consideration than capital. Therefore, we hold that labor has a right to the means of life—that there must be a living wage.

FREDERIC ALMY, GENERAL SECRETARY, CHARITY
ORGANIZATION, BUFFALO, NEW YORK²

Fortunately the price of men is going up in America. This is partly through organization and a higher standard of living, but legislation can assist. It is no more against freedom of contract to forbid a man to sell his labor for less than a living wage, than to forbid him to sell money at usury. Cheap men make cheap citizens, and it is just as much against public policy to buy men too cheap as to sell money too dear, no matter how much both parties may desire it. Pope Leo XIII declared for a living wage in 1891 in his encyclical "Rerum Novarum," and so did the Federal Council of the Protestant Churches of Christ in America in 1910. Higher wages do not make higher living, but they make higher living possible, and poor living is very costly to the State, especially with universal suffrage.

MARGARET DREIER ROBINS, PRESIDENT, WOMEN'S
TRADE UNION LEAGUE³

To-day, however, thoughtful men and women everywhere are realizing the individual and social menace of the low wage and there is a general recognition of the fact that in a great, rich, empty country able bodied men and women should find it possible to earn their living by their day's work. . . . The right to live and the right to earn a living

¹ Message to the First Session of the Fifty-seventh Congress. "Addresses and Presidential Messages," Putnam & Sons, New York, 1904, p. 294.

² Letter to New York Factory Investigation Commission, Report 1915, Vol. I, Appendix III, p. 642.

³ From Presidential Address to the Fourth Biennial Convention, National Women's Trade Union League, St. Louis, June 2, 1913.

are indistinguishable terms. . . . Just as . . . the most important knowledge to the employer is that a living wage is the first charge upon any industry. . . . A living wage must certainly mean sufficient reward for labor to provide health-giving food, good clothing, shelter with sunlight and air and warmth and comfort, education and recreation—books and music—sufficient reward to tide over periods of sickness or other unemployment and to make provision for a happy and serene old age. It must give opportunity and time not only for the development of the powers within us, but also for expression of human fellowship.

WALTER LIPPMAN, EDITOR, NEW REPUBLIC AND
EVENING WORLD, NEW YORK¹

Or you can insist . . . that a business which does not pay a living wage is not paying its labor costs; that such businesses are humanly insolvent, for in paying less than a living wage they are guilty of as bad business practise and far worse moral practise than if they were paying dividends out of assets.

JAMES ROSCOE DAY, CHANCELLOR OF SYRACUSE UNIVERSITY²

. . . Thinking men and women will say we must have the best conditions possible for our laboring men. The country demands it. Our civilization, our progress, our prosperity, have their roots in the contentment and thrift of the men of mechanic arts and manual labor. The better homes they live in, the more comforts within these homes, the nearer they live like the well-to-do, the more promptly their bills are paid, the more like other folk they and their wives dress, the more self-respecting their boys and girls are, the better it is for our land and country, the greater country we shall have. . . . It will be a sad day for this land when that man cannot dig enough out of life's task to make a happy

¹ *Supra* 1—8 March 27, 1915.

² "My Neighbor the Workingman," New York, Abingdon Press, 1920, p. 359.

home for his family. . . . And a land which does not provide for the possibilities of that family's self-support, in its laws and economics, and enforce those possibilities by a vigorous common sentiment should not call itself a Christian land.

We want, therefore, the highest and noblest estate for our fellow workers who labor for wage. It should be inculcated as a common sentiment, not as a concession and in no form of a charity. It must be arranged so that it is a right, as much as the right to trade at a profit, and to manufacture, and to build, and to invest for legitimate gain.

JOHN D. WORKS, FORMERLY JUSTICE OF THE SUPREME
COURT OF CALIFORNIA, AND UNITED
STATES SENATOR¹

If this class (the wage-earners) of our people were paid fair wages, living wages; were furnished with healthful and comfortable places in which to work, and were provided with sanitary places in which to live when the day's work is over, it would regenerate thousands of them. . . .

The world owes them an opportunity to make a living and the right to live respectably. . . .

OTTO H. KAHN, BANKER AND PHILANTHROPIST²

The principle on which one should deal with the labor question is very simple. It is the principle of the Golden Rule. I think the formula should be that, first of all, labor is entitled to a living wage. After that, capital is entitled to a living wage. What is left over belongs to both capital and labor, in such proportion as fairness and equity and reason shall determine in all cases. . . .

The worker must receive a wage which not only permits him to keep body and soul together, but to lay something by for a rainy day, to take care of his wife and children, and

¹ "Man's Duty to Man," Neale Publishing Company, 1919, p. 53.

² *National Civic Federation Review*, May 15, 1919. "Labor and the Golden Rule."

to have his due share of the comforts, joys and recreations of life.

JOSEPH HUSSLEIN, S. J.¹

Every toiler has the right to a living wage, a right which takes precedence over every other consideration, excepting only the right which the employer himself has to a remuneration which will enable him and his family to live in reasonable and moderate comfort according to their position in life. It is important moreover for both employer and employee that the continuance and welfare of the industry itself be wisely consulted. Beyond this there can be no question of any profits until the living wage has been paid to the employees. . . .

What then is a living wage? In general it is defined by Pope Leo XIII as a remuneration "sufficient to support the wage-earner in reasonable and frugal comfort." For the adult male worker, according to the spirit of the Encyclical, it is a wage "sufficient to enable him to maintain himself, his wife and his children in reasonable comfort." For the adult woman worker it is a wage whereby she can reasonably and decently support herself away from home.

CHARLES EDWARD RUSSELL, ECONOMIST AND AUTHOR²

In determining what is an equitable wage, there should be taken into consideration the profits of the industry concerned, the requirements (scientifically ascertained) for normal and wholesome life, with a reasonable margin to be added for comfort, culture and recreation.

ROBERT G. VALENTINE, FORMER COMMISSIONER OF
INDIAN AFFAIRS³

How, then, to settle the amount due the president, the office boy, and the truck hand? Clearly the first duty will be to

¹ "The World Problem," P. J. Kenedy and Sons, 1918, p. 91.

² Resolution by Mr. Charles Edward Russell, President's First National Industrial Conference, October 14, 1919, p. 288.

³ "Work and Pay: A Suggestion for Representative Government in Industry," reprinted from the *Quarterly Journal of Economics*, Vol. XXXI, February, 1917, p. 253.

establish a minimum rate below which no worker will be paid. And this minimum must be set on a flexible scale in the light of a thoroly contemporary knowledge of a wholesome standard of living in the locality—a standard that includes all the elements that make for a progressive citizenship.

PROFESSOR IRVING FISHER, YALE UNIVERSITY¹

I might read something that is pertinent on this subject, an article called "Social Standards for Industry in the National Conference, of Charities and Corrections at their Cleveland Meeting in 1912," giving the following definition of a living wage:

"A living wage for all who devote their time and energy to industrial occupations. The monetary qualification of a living wage varies according to local conditions, but must include enough to secure the elements of a normal standard of living, to provide for education and recreation; to care for immature members of the family; to maintain the family during the period of sickness, and to permit a reasonable saving for old age."

HENRY R. SEAGER, PROFESSOR OF ECONOMICS,
COLUMBIA UNIVERSITY²

To sum up my conclusions: The economic interest of society requires the payment of living wages to all workers, except, possibly, children learning trades and defectives, who must be treated as wards of the state.

CHARLES A. ELLWOOD, PROFESSOR OF SOCIOLOGY,
UNIVERSITY OF MISSOURI³

A normal family life evidently requires not only proper physical conditions, sufficient income to maintain a decent

¹ Testimony in Boston Elevated Railroad Arbitration (1914), in giving his views as to what constituted a living wage.

² "Theory of the Minimum Wage," *American Labor Legislation Review*, February, 1913, pp. 90-91.

³ "Sociology and Modern Social Problems." New edition, 1919, American Book Company, p. 176.

standard of living, and ethical, democratic relations between its members, but, above all, consideration of the child.

ATTITUDE OF THE CHURCHES

Since the close of the World War, the churches, without regard to denomination, have issued declarations in favor of the living-wage principle. Some typical expressions are as follows:

THE BAPTIST CHURCH¹

The determination of a national minimum provision for a living income.

FEDERAL COUNCIL OF THE CHURCHES OF CHRIST IN AMERICA²

Wage levels must be high enough to maintain a standard of living worthy of responsible free citizenship in a democracy.

THE METHODIST EPISCOPAL CHURCH³

We favor an equitable wage for laborers, which shall have the right of way over rent, interest and profits.

THE NATIONAL CATHOLIC WAR COUNCIL⁴

Even if the great majority of workers were now in receipt of more than living wages, there are no good reasons why rates of pay should be lowered. After all, a living wage is not necessarily the full measure of justice. All the Catholic authorities on the subject explicitly declare that this is only the *minimum* of justice. In a country as rich as ours, there

¹ "The Principles of Social Reconstruction; Social Service Committee of the Northern Baptist Convention." From Folder No. 28, published by the American Baptist Publication Society.

² The Church and Social Reconstruction: Federal Council of the Churches of Christ in America. Second Section of Statement.

³ Pastoral Letter by the Board of Bishops of the Methodist Episcopal Church. From *The Christian Advocate*, New York, May 23, 1919.

⁴ "Social Reconstruction," Reconstruction Pamphlets No. 1, National Catholic War Council, January, 1919, pp. 14-15.

are very few cases in which it is possible to prove that the worker would be getting more than that to which he has a right if he were paid something in excess of this ethical minimum. Why then, should we assume that this is the normal share of almost the whole laboring population? Since our industrial resources and instrumentalities are sufficient to provide more than a living wage for a very large proportion of the workers, why should we acquiesce in a theory which denies them this measure of the comforts of life? Such a policy is not only of very questionable morality, but is unsound economically. The large demand for goods which is created and maintained by high rates of wages and high purchasing power by the masses is the surest guarantee of a continuous and general operation of industrial establishments. It is the most effective instrument of prosperity for labor and capital alike.

From its Department of Social Action, the National Catholic Welfare Council, in a statement of October 31st, 1922, also issued the following comment on the attitude of the United States Railroad Labor Board toward the living-wage principle:

The Board declares that it has always granted a living wage, but it refuses to define what a living wage means. It quotes then the definition given by the employee representatives, as follows: "A wage which will support a family of five in health and reasonable comfort, such family being assumed to consist of a husband and a wife and three dependent children under sixteen years of age." "This constitutes," the Board declares, "a bit of mellifluous phraseology well calculated to deceive the unthinking."

In making its decision, the Railroad Labor Board has gone counter to Catholic social teaching. The Pastoral Letter of the American Hierarchy has a passage on the living wage which insists upon the right of a living wage, and points out the need of an adequate definition of the living wage and its realization in practise through whatever means are legiti-

mate and effective. The Pastoral Letter includes in its definition more liberal provisions than are found in the definition of the railroad employees. It says that "a living wage includes not merely decent maintenance for the present, but also a reasonable provision for such future needs as sickness, invalidity, and old age."

HARRY F. WARD, PROFESSOR OF SOCIOLOGY,
BOSTON UNIVERSITY¹

The principle of the living wage was so thoroughly incorporated in the life of the Hebrew community that when Paul writes to Timothy he cites it in illustration of the truth that a good soldier of Jesus Christ must accept his share of suffering. . . . "The harvest man who labors in the field must be the first to get a share of the crop." . . .

. . . In the face of the clear teaching of Scripture, the church dare not fail to proclaim the necessity of a living wage. If Christianity is to be expressed in a community life upon the earth, this principle is basic, and the pulpit must cry aloud without ceasing until it is put at the center of our industrial organization. In the face of modern social injustice, the church must ever uphold this ideal of a community life in which all persons have the means for full development in order that this ideal may call economists, legislators, and industrial leaders to work out the methods by which it can be realized. . . .

A living wage for adult male workers means a wage that will support a family, because the highest welfare of the community demands that all men shall be able to maintain a family, and that the family life shall not be broken down by the enforced labor of the mother and the children. The standard living wage for adult males is a wage which will maintain the average family of five—a man, wife, and three children under fourteen.

¹ "The Living Wage a Religious Necessity." American Baptist Publication Society, 1916. Pp. 3-8-10.

COL. DAVID CARNEGIE, F. R. S., EDINBURGH, FORMER MEMBER
IMPERIAL MUNITIONS BOARD, CANADA¹

Every one knows that there is something wrong in Society and Industry. There is no peace. Business, politics and Church are all disturbed. The war is blamed for the unrest. It is said that 45,000,000 people in Britain, and hundreds of millions throughout the world cannot be shaken up for four years without disturbing the peace. This is admitted, but we deceive ourselves if we think that the war is the cause of the industrial unrest. The war has aggravated the situation, but is not responsible for it. The cause lies a long way back. The war has forced the problems of Industry upon the Church. Chaplains and other preachers have had a baptism of light on the battlefield from men who never darkened a church door. They believe they have discovered why men discount organized religion. The Church has become aroused; she acknowledges that she has been negligent, and there is a need for repentance and a new birth. The Church sees the people of the world at loggerheads, and she is now standing by wringing her hands and lamenting her past indifference, powerless to help.

The Church now recognizes, when too late, that the workers have been undervalued, underpaid, underhoused and overworked. She sees that labor has now the power to secure, without the Church's help, what it considers fair in pay, in hours and conditions of work. The Church sees a conflict proceeding between labor and capital and the Government in which it appears that labor can dictate its own terms. The Church sees, further, the possibility of great national loss, if a party or class government with ignorance and power become autocratic, as in Russia to-day.

The Church believes it knows the rules of the game in Industry and in the disputes arising therefrom. She is anxious to tell them to the contending parties. Labor says it ought to have done that years ago when the employers

¹ "Can Church and Industry Unite?" Marshall Brothers, London, 1920, pp. 92-94.

had the upper hand. The Church admits that her attitude to the economic and social problems has never been properly defined, and that there has been a want of faith in her own principles and in the principles of Christ's teachings.

OPINIONS OF EMPLOYERS

PRINTING INDUSTRY—COMMERCIAL AND PERIODICAL BRANCHES—DECLARATIONS BY JOINT COUNCIL¹

Second. The industry to pay at least a reasonable living wage; scales below this to be adjusted in frank recognition of the basic principle involved.

The second cardinal point meets another issue squarely and decisively. In some jurisdictions the industry did not pay a reasonable living wage to some workers in 1914. Therefore, in such instances, the application of the first cardinal principle would not provide a reasonable living wage in 1920. It is the determination of the Joint Conference Council to give thorough consideration to the wage scales of 1914, and to find a way to correct these obviously inequitable conditions if it is possible to do so.

(a) Wages should be adjusted with due regard to the purchasing power of the wage and to the right of every man to an opportunity to earn a living at fair wages, to reasonable hours of work and working conditions, to a decent home and to the enjoyment of proper social conditions.

J. A. NORTON, AUDITOR, FIRESTONE TIRE AND RUBBER COMPANY²

Some of the advantages the living wage idea would give us, as we see them, are:

1. A more cooperative feeling between employer and employee.

¹ Cardinal Points of a Labor Policy Agreed Upon by International Joint Conference Council, Commercial and Periodical Branches, Printing Industry, 1920.

² "The Living Wage—What Is It?" By J. A. Norton, Auditor of Subsidiary Companies, the Firestone Tire & Rubber Co., in *Industrial Management*, September, 1919, p. 212.

2. A more intelligent working class and nation.
3. The unnecessary need of unions to protect the interests of its members.
4. The incentive for every man to do his best, be master of himself, and his own environment.
5. More capital, more and better homes, improved living conditions, with less immorality and crime.
6. A greatly reduced labor turnover.
7. The natural death of Bolshevism.

FREDERICK P. FISH, CHAIRMAN OF THE NATIONAL INDUSTRIAL CONFERENCE BOARD, EMPLOYER REPRESENTATIVE AT PRESIDENT'S FIRST INDUSTRIAL CONFERENCE, FORMER PRESIDENT OF THE AMERICAN BELL TELEPHONE COMPANY AND OF THE AMERICAN TELEPHONE & TELEGRAPH CO.¹

. . . Any industry that is worth providing, that is worth perpetuating, ought to be able to pay every one that enters into its employ a decent wage that will support him in a fair degree of comfort that is satisfactory to a right-minded man, and that will give him a chance for relaxation, a chance for saving something for old age or for accident.

MARK L. REQUA, FORMERLY GENERAL DIRECTOR OF THE OIL DIVISION, UNITED STATES FUEL ADMINISTRATION²

If I were to define the "spirit of the times" as applied to the management of any of our great corporations, I should say that it meant a broad humanitarian view of social problems, a sympathetic interest in the welfare and aspirations of the masses, a constant and intelligent effort to abolish the poverty line by helpful suggestion and wise counsel, a realization that the old order passeth, that labor is entitled to a just wage, rational hours, decent working conditions, and

¹ Address at Dinner, Economic Club, New York, December 10, 1919.

² Address before Conference of the Chambers of Commerce in the United States, Atlantic City, December, 1918.

that capital is entitled to a profit commensurate with the hazard of the particular industry in question, and both must work in harmony if either is to survive.

**REPRESENTATIVE OPINIONS OF ORGANIZED LABOR
RAILROAD LABOR ORGANIZATIONS¹**

Reduced to its simplest terms and form, our combined requests for an increase in rates of pay may be stated as follows:

1. A minimum living wage is requested for unskilled labor.
2. The establishment of differentials above the living wage rate for unskilled labor, corresponding to the relative degree of skill, hazard and responsibility.

To make this practically possible within several weeks, we respectfully request that your honorable body adopt the following policy:

1. Determine and award a living wage to unskilled workers.
2. Decide and announce the principle by which differentials above the minimum living wage rates are to be established for skill, responsibility, experience, training and hazard.

Such a decision on the part of your honorable body would place the great army of railroad workers upon the basis of a decent American standard of living; would provide special remuneration for skill, hazard and responsibility; and would thus guarantee an equitable participation of all classes of employees in the results of their labors. Existing strife and discontent between railway employees and management under these conditions would be immediately reduced and a permanent foundation would be laid for working relations on a peaceable basis. The highest interest of our country and the best interests of the railroad companies themselves would also be subserved by such action by the board as we request.

¹ Combined Request of all Railroad Brotherhoods and Other Labor Organizations before United States Railroad Labor Board, 1921.

A sure basis would be laid for railway employees both now and in the future to develop all the elements of a sound citizenship in our self-governing republic. Finally, from the standpoint of both the public and the railroads, the productive efficiency of all classes of railway workers would be increased, and better as well as more efficient and safe service, at lower costs, would be secured.

**LABOR GROUP, NATIONAL INDUSTRIAL CONFERENCE,
WASHINGTON, D. C., OCTOBER, 1919**

The right of all wage-earners, skilled and unskilled, to a living wage is hereby declared, which minimum wage shall insure the workers and their families to live in health and comfort in accord with the concepts and standards of American life.

**RECONSTRUCTION PROGRAM OF THE AMERICAN
FEDERATION OF LABOR**

The workers of the nation demand a living wage for all wage-earners, skilled or unskilled—a wage which will enable the worker and his family to live in health and comfort, provide a competence for illness and old age, and afford to all the opportunity of cultivating the best that is within mankind.

**E. J. MANION, PRESIDENT ORDER OF RAILROAD TELEGRAPHERS,
BEFORE UNITED STATES RAILROAD LABOR BOARD**

Briefly stated, the Board would be justified in making its award for telegraphers and other classes of railway employees on the principle of a living wage for the following reasons:

1. Because it is right.
2. Because it has the sanction of organized society.
3. Because of enlightened self-interest—the railroads would find that it would pay, because it would bring

about greater cooperation and greater production from their working forces.

4. Because of public policy, because it would do more than anything else to produce sound citizenship in our self-governing republic.

THE "SAVINGS" AND "CULTURAL" WAGE

As the principle of a "living wage" received widespread sanction and acceptance, the movement was accompanied by a growing demand for the establishment of a still higher minimum standard of compensation. It was held that it was not sufficient to provide earnings which would insure only a standard of health and modest comfort for the unskilled wage-earner and his family, but it was equally important that he should have surplus earnings for savings in order to protect himself and his family against the contingencies of unemployment, sickness, disability, old age, and death. This gave rise to the advocacy of the "savings wage" as the essential minimum standard. In one of his public addresses in 1921, President Harding made a statement on this point which became a standard as to the significance and content of the savings-wage conception. He said:¹

In our effort at establishing industrial justice we must see that the wage-earner is placed in an economically sound position. His lowest wage must be enough for comfort, enough to make his house a home, enough to insure that the struggle for existence shall not crowd out the things truly worth living for. There must be provision for education, for recreation and a margin for savings. There must be such freedom of action as will insure full play to the individual's abilities.

This was a highly pregnant statement. President Harding stated his conviction that the lowest wage paid to a

¹ From public address of President Warren G. Harding, New York City, May 23, 1921.

wage-earner must not only be sufficient to provide the material necessities of life, such as food, clothing and shelter; he must also get a sufficient wage to obtain a modest degree of comfort, to make "his house a home," to insure him "the things truly worth living for." The specific "things" mentioned were:

1. Provision for education.
2. Provision for recreation.
3. A margin for savings.
4. Freedom of action to insure full play to the individual's abilities.

This conception was further elaborated and advocated by James J. Davis, Secretary of Labor, in a number of articles and addresses. The following quotation may be taken as representative of his attitude:¹

War first gave us the living wage as a thing to think about. Since then it has stayed with us as a phrase, a label for the amount of money that it was supposed to represent. We still hear much about it, with a good deal of confusion as to what is meant by a living wage. The trend of events since the war has put the employer in the position of clinging to the original meaning of the term, as a wage adjusted to the actual cost of living. But to the wage-earner himself, the living wage has come to mean something more definite. If it means anything to him the living wage means a wage on which he can really live—that is, a pay envelop that will permit him to do a little more than merely meet the day-to-day cost of his necessities, and enjoy something of life in addition.

To my mind one of the significant developments of human society since the war is this frame of mind on the part of the worker. In his view living has become something above meeting the bare necessities of life. In his thoughts the merely living wage, in its original meaning, is something

¹ "The Saving and Earning Wage," by James J. Davis, Secretary of Labor.

obsolete. He will never willingly go back to it. To this fact we may well reconcile ourselves, and adjust our economic life to it. . . .

I am convinced that this wider conception of what constitutes a truly living wage is entertained not alone by the workman himself, but the American people as a whole have willingly conceded it to him. . . . There is no turning back the clock of time or events. . . .

This much is certain, that from now on our people in general will have to shape their way of life, their own ability to earn and to pay, so that henceforward a proper share of the simple good things that all of us have always enjoyed shall fall to the lot of the man who toils. One form in which this award must fall to him is in the form of a wage—call it what you will—in view of the loose meaning that has come to be attached to the old living wage. I prefer to call the new wage the buying and saving wage.

. . . In other words, they look to the pay envelop for their income. These constitute the great buying public in our country. They are purchasers of goods "made in the United States." It is for these that we should seek to provide not merely the living wage but the saving wage, for, if the American workman enjoys anything as much as spending, it is saving. To reward him a saving wage is no more than a just credit to the trait which has made him the greatest producer, the greatest buyer, the greatest market known to the world.

Let there be no doubt as to the American workman's ability and propensity to save. . .

This is one more reason why I feel sure that the saving wage must now for good and all take the place of the old meaningless living wage.

As a definition the saving wage is, I am aware, a very indefinite term. . . . The saver goes about his business without creating news. But I am convinced that he constitutes very largely the majority of our people. And that average saver, and a society awakened to his new and legitimate

demands, will somehow reach a balance between them as to what in the long run constitutes a general saving wage.

This is no new thing. For some time the most forward-looking of our employers have been paying the saving wage as a matter of course, perhaps without knowing it. My contention is that what these enlightened employers have been doing must become general. Sooner or later all the rest will have to catch up to them. I believe public opinion will compel it. Without our knowing it, great social changes have been working themselves out among us, and prominent in this evolution is the worker's demand for his share in the larger benefits of this new day. He is no longer a mere worker at a bench, an automaton. His intelligence has been expanded by new and rapid experiences. His tastes have been heightened along with the increase in his intelligence. He too has risen to the enjoyment of books, of pictures, music, the theater, a chance at the higher education, to cite but a few of his new demands. In other words, the newly enlightened workingman has risen to a new place as a human being and as a member of our rich community. Conscious of having taken that place, he is now entitled to insist upon enjoying all the advantages of it. Nor should we object to this, for it means the permanent enrichment of us all, in that the advancement of human society is always to be measured by the advancement of the worker himself.

The desirability of adding to the living wage standard, as generally advocated, an allowance for reasonable savings, has been generally realized and accepted. In the earlier living-wage movement, the need for savings had been recognized, but the point had not been stressed because in its practical aspects it was felt that emphasis should first be placed upon the necessity of raising the lower family incomes to the point where they would afford at least a healthy and decent standard of living, and after this had been done the question of provision for savings

would inevitably be raised. This is what actually happened, and during the past five years budgetary studies of minimum family requirements have generally included an allowance of at least 10 per cent. of the total for savings to protect the wage-earner and his family against the ordinary contingencies of life.

Quite recently a further upward impetus has been given to the basic wage conception by the striking declaration of the head of one of our largest industrial corporations. He gave expression to the opinion that the worker's income should be sufficient to provide for a proper "cultural life" and not merely for his physical needs. Furthermore, he expressed the hope that some day labor would become capital, or, in other words, that our great business and industrial undertakings would be owned by those who, in whatever capacity employed, gave to them their best efforts and their lives.

The industrialist who put forward this unusual point of view was Mr. Owen D. Young, Chairman of the Board of Directors of the General Electric Company. In the course of an address on industrial relations and conditions delivered at Harvard University on June 4, 1927, which was widely commented upon, he developed his point of view as to an adequate wage standard as follows:¹

Gradually we are reducing the area of conflict between the two. Slowly we are learning that low wages for labor do not necessarily mean high profits for capital. We are learning that an increasing wage level is wholly consistent with a diminishing commodity-price level. We are learning that productivity of labor is not measured alone by the hours of work, nor even by the test of physical fatigue in a particular job. What we need to deal with are not the limits to which men may go without physical exhaustion, but the limits within

¹ *Monthly Labor Review*, U. S. Bureau of Labor Statistics, November, 1927, pp. 45-48; see also *Forbes Magazine* for Dec. 1, 1927, p. 9.

which they may work with zest and spirit and pride of accomplishment. When zest departs, labor becomes drudgery. When exhaustion enters, labor becomes slavery. Zest is partly a matter of physical condition, but it is also largely influenced by mental reactions. These are common to all of us in every position. Are we doing well with our lives? Are we providing for our families—not merely clothes and food and shelter while we are working, but an insurance for them when our working time is ended either by age, disability, or death? Are we providing more cultural opportunities for ourselves and our children? In a word, are we free men? Here in America, we have raised the standard of political equality. Shall we be able to add to that, full equality in economic opportunity? No man is wholly free until he is both politically and economically free. No man with an uneconomic and failing business is free. He is unable to meet his obligations to his family, to society, and to himself. No man with an inadequate wage is free. He is unable to meet his obligations to his family, to society and to himself. No man is free who can provide only for physical needs. He must also be in a position to take advantage of cultural opportunities. Business, as the process of coordinating men's capital and effort in all fields of activity, will not have accomplished its full service until it shall have provided the opportunity for all men to be economically free. I have referred elsewhere to the cultural wage. I repeat it here as an appropriate term with which to measure the right earnings of every member of a sound society competent and willing to work. . . . The worker must be made to feel, must be made to realize, that he is a property owner. General Electric is operating, in a modest measure, along these lines now. A consciousness of independence must be created—at least a feeling on the part of the man, that he is working toward complete independence, and that what he gets in the world he earns—it is not handed out to him as pap.

Not merely a living wage, but a cultural wage, must be the basis for the solving of the economic system of to-morrow.

SIGNIFICANT CONTROVERSIES

The widespread interest in and sanction of the "living-wage" principle was also attended by determined efforts especially on the part of representatives of labor organizations to secure concrete decisions or awards with this principle as a basis. From the signing of the Armistice until the year 1922, when the climax was reached, the movement for the practical recognition of the living-wage principle constantly grew in scope and intensity. It was vigorously advocated before all forms of wage-adjustment agencies, before State legislatures, and in the halls of the Congress. Through the daily press and periodicals, it was brought prominently before the country as an issue for national discussion. With the decline in the humanitarian and reconstruction sentiment, however, which was so intense after the war, and with the advent of industrial activity after the year 1922, the living-wage movement as an urgent issue disappeared, but the broad, fundamental support remained and will undoubtedly vigorously assert itself in a practical way in the future.

As an issue for national determination, the living wage, as already pointed out, was brought forward most prominently in connection with wage arbitrations in the bituminous and anthracite coal-mining areas in 1920 and by proceedings inaugurated by all classes of railway employees before the United States Railroad Labor Board during the period 1920-1922.

In the cases involving the mine workers, a living wage was requested for all unskilled and semi-skilled "day" men or time workers, with corresponding increases in differentials above these groups for skilled workers and pickminers. In submissions before the Railroad Labor Board, demands were at first generally made for a living wage by

all groups whose earnings were below the rates of pay shown by budgetary studies to be necessary for the maintenance of an average wage-earner's family on the level of health and decency. Later, when all classes of employees became involved in the effort to resist wage-reductions, a concerted attempt was made to have the Railroad Labor Board recognize a minimum standard of "health and modest comfort" for the lowest grades, such as the maintenance-of-way employees, and corresponding changes in differentials in rates of pay above this minimum for occupations requiring skill, hazards and responsibilities. Expressed concretely, the attitude of the employees, as submitted to the Board, may be comprehensively illustrated by the following statement by their economist in one of the final hearings of the series of controversies of the period 1921-1922:¹

From the time of the first hearings before this Board in the Spring of 1920 up to the present day, the representatives of the employees, consistently and without variation, have urged the Board in making general wage adjustments to adopt the following course or procedure:

- First: To fix for the unskilled laborer, or the lowest-paid worker in the scale of railroad occupations, a "living wage," or a wage sufficient to support a standard of living based on health, decency, and a reasonable and modest degree of comfort, and
- Second: Above this basic, living wage, to establish differentials for the higher grades of railroad workers, such differentials to extend upward according to skill, hazard, responsibility, experience, training and productive efficiency.

¹ These proceedings involved all classes of transportation employees, numbering at that time about 2,500,000. See "Proceedings before the United States Railroad Labor Board," Chicago, 1921-1922. The records of the Labor Board are now at the U. S. Board of Mediation and Conciliation, Washington.

At the time the Board was created, differentials as between the different crafts and occupations had already been established by past experience, precedents, and labor adjustments. The Board, therefore, has had no difficulties to meet in the way of differentials. It has practically recognized differentials which existed prior to its organization. In rendering its decisions as to wages, the Board has based its action on the relation existing between different classes of employees and has maintained the preexisting differentials by adding to or subtracting from each group of workers an equal or practically an equal number of cents per hour or day, according as the award called for an increase or decrease in compensation.

The decisions of the Board have, therefore, been based primarily on the increase or decrease in the cost of living without regard to the adequacies of the basic wage in the industry paid to unskilled labor, and, as a consequence, without regard to the adequateness of the rates of pay of all other classes of workers of whatever skill or responsibility, for the reason that the wages of the higher skilled workers are necessarily related to the rate established for those at the bottom of the scale. The history of the Board, therefore, shows that it took the wage scale as it found it, and has raised it or lowered it in accordance with the rise or fall in retail prices of those articles which enter into the consumption of the railroad workers or their families. So far as we know there has been no consideration given as to the adequateness of railroad wages beyond the possible assumption contained in the decisions of the Board that—in view of the fact that the Board has not discussed the matter—it has accepted standards of compensation as it found them, deeming them to be just, reasonable and adequate. . . .

THE WAGE DECISION OF 1921

We had hoped that in 1920, when the work of the Board began, and when there were unprecedented business and trade activities and unprecedented railway traffic and income,

that the Board would recognize the need of a basic living wage for the unskilled worker in the transportation industry, and would revise and reconstruct the entire wage scale for the railroads on this basis. Several months before the Board was organized, the Bituminous Coal Commission had not hesitated to adopt such a policy. It repudiated the cost-of-living theory of wage adjustments, accepted the living wage as the basis of readjusting wages in the soft-coal industry, and increased the wages of unskilled workers in and around the mines 97 per cent., altho the mine workers themselves only claimed that the cost of living had advanced 85 per cent. This was done in March, 1920, or about two months before this Board began its deliberations.

On the other hand, when at the close of 1920 the tide of business and industrial activity turned—when expansion was succeeded by rapid and sudden contraction and by the falling off in railway traffic and income—and when in the early months of 1921 the railroad representatives, taking advantage of a slight decline in prices and especially of oversupply of labor because of unemployment, and especially a surplus of unskilled labor, asked the Board to reduce the rates of pay of all classes of railway employees, we relied upon the principle of the living wage for the unskilled worker as a "saving clause," to resist the attacks of the railroads based on their conception of labor as a commodity whose price should be determined by the law of supply and demand.

We contended at that time that the Board before giving ear to other considerations should determine whether or not the rates of pay of unskilled workers were sufficient to maintain a life of decency and health. This consideration was urged as paramount to all others, in our opinion, and until the principle of a living wage for unskilled workers was met, other reasons for wage reductions based on declining prices or cost of living or lower wages in other industries, we claimed, could not be equitably entertained by the Board.

Our conception of the status of the Board was, at that time, as it always has been, that it is a court of industrial

equity—the supreme court of equity in the Transportation Industry. It would be an insult to the intelligence of the Congress and of the people of the country in passing the Transportation Act, as well as to the dignity of the Board itself, if we were to concede what the representatives of the railroads actually assert, that this Board is nothing more than an agency for registering changes in the cost of living, and in the supply and price of labor. So we contended last year that the Board was not established for the purpose of giving its sanction to the unhampered play of ruthless economic forces, but should proceed upon the basis of industrial equity, economic justice, and upon the principles which are fundamental to a broad and enlightened social and public policy in a self-governing republic. . . .

DEFLATION OF UNSKILLED WORKERS IMPOSSIBLE

In appearing to-day in behalf of the unskilled workers, it is our purpose to demonstrate to the Board that such a program can not be accepted. We make this assertion after careful and deliberate consideration of all the facts as to prices or cost of living and of all the facts as to the reductions in rates of pay of unskilled or common laborers in other industries. It is our contention that, irrespective of all facts presented by the railroads, the Board should not take any action leading to a reduction in wages of unskilled workers. . . .

Moreover, it follows, logically, that if there is no ground upon which the Board can predicate a reduction in the rates of common laborers, there is, as a consequence, no ground upon which the Board, in our opinion, can justify any reductions in the rates of pay of any other classes. . . . The unskilled laborer is the base, or foundation, of the wage structure. Differentials to other employees are by longtime usage and by the previous decisions of this Board itself, built upon the basic rates of the unskilled laborer. If the rates for common laborers are maintained without change, therefore, as they should be, there can be no change in the rates of

other classes of employees, unless existing differentials are wiped out, and the policy is adopted of taking away from the different classes of railway employees, for the benefit of management, all surpluses in earnings which may exist above the actual physical needs of subsistence. This, of course, is inconceivable.

We can conceive that under the conditions of the existing breakdown in trade and industry, the Board may defer the question of a living wage, or what the earnings of unskilled employees *should be*, until a more propitious time, when normal conditions have developed. On the other hand, it is axiomatic that the Board cannot fail to consider at the present time what the lowest level of earnings *should not be*. There is a *stopping point* below which, for reasons of public policy as well as those bearing on efficiency and output in industry, rates of pay can not be permitted to fall. Moreover, there is a human view-point. Men who love humanity and who have a sense of public responsibility can not doom other men and their families to ill-health, misery, low morals, and their babies and children to malnutrition and to certain death.

THE EFFECT OF LOW WAGES UPON HEALTH AND MORALS

It is our purpose in asking the Board to subpoena the list of unbiased and distinguished experts which we submitted, to prove that if the Board should, in response to the complaint of the railroads, reduce the wages of section men and unskilled laborers below their present level, it would impair the efficiency of the railroads, it would be directly contrary to enlightened public policy, it would result in the physical and moral deterioration of these employees and their families, and it would, just as surely as I am standing here, result in the malnutrition and actual death of their children.

These are not mere sentimental or sensational statements. They are the solemn, terrible truth. They are capable of absolute demonstration by competent witnesses. Before these awful truths, vast compilations of statistics and elaborate

diagrams as to "wages in other industries" and "the decrease in the cost of living" shrink into nothingness. This matter of lowering the wages of unskilled men is not a statistical problem, or an economic or industrial question. It is a question of public policy, of public morals, of ethics, of humanity itself. In our conception of this Board, this fundamental question should be passed upon by this Board as a court of equity—as a public body charged with a public responsibility.

The controversy between transportation employees and managements was waged along these lines before the Labor Board in various proceedings, over a period of two years; and, as has been stated, it was taken up and discussed pro and con by the press, publicists, and leading figures in and agencies of industry and finance. Finally, when the majority of the Labor Board declared that the living-wage principle could not be practically accepted because of the depression then existing in manufacturing and transportation industries, the issue was transferred to the Congress. An appeal was made to the appropriate committees of both Houses by representatives of the Maintenance of Wage Employees, requesting that the term "just and reasonable" in the Transportation Act of 1920 be specifically interpreted as meaning a "living wage for unskilled employees" and made mandatory upon the Railroad Labor Board by a special amendment of the law. In a hearing upon this proposition before the Senate Committee on Interstate Commerce, Chairman Cummins stated, as has already been pointed out, that he agreed with this interpretation of the meaning of the phrase; later he declared that he would submit the amendment for a "living wage" to the Senate.¹ Before this could be accomplished, however, the antagonism of employees to the Railroad

¹ Ante, pp. 70-71, 98.

Labor Board became so pronounced that it resulted in 1925 in the repeal of the entire Labor Provisions of the Transportation Act of 1920.

At about the same time in 1922 that the agitation of the railway employees for a living wage reached its height, an acute situation had also developed from a national strike in the soft-coal fields, and especially in connection with disorders and the breakdown of civil government in certain coal-mining areas in West Virginia. Hearings had been conducted and an investigation made by the Senate Committee on Education and Labor.¹ In an effort to work out permanent peace on a constructive basis, the chairman of the committee, Senator William S. Kenyon, in a Report to the Senate recommended a code of fundamental principles for the regulation of industrial relations in the bituminous coal-mining industry, including the principle of a living wage for unskilled workers with the maintenance of wage differentials above the minimum for skilled workers. In his annual message of December 6, 1921, President Harding also urged the adoption of this, or a similar code, but no action was taken by the Congress.

THE PRACTICABILITY OF THE LIVING WAGE

In the course of the exhaustive analysis and discussion of the living wage during this period, its opponents, both in formal presentations to wage-adjustment agencies and in less formal public controversy, did not oppose the principle involved. They acknowledged that the principle was altogether worthy of acceptance, but from a practical standpoint it was "unsound," "visionary," "academic." Because of the financial burden which would be imposed either upon industry or upon the consuming public, the living wage, it was also asserted, could not be actually

¹ See pp. 102-103.

applied. This opposing attitude on the ground of impracticability was further supplemented by certain arguments relative to the actual size of the average wage-earner's family, the questionableness of giving unmarried workers the same basic compensation as the married ones, and similar technical points. A statement of the argument in opposition, as developed by proceedings before wage-arbitration boards and in general public discussion, may be summarily stated as follows:

1. If a living-wage standard should be established for unskilled workers, with corresponding increases in differentials for those above the minimum, the productive capacity of the country would not be sufficient, in terms of actual commodities, to meet the demand for the quantities of food, clothing, housing, and other commodities required.
2. The National Income was not large enough in terms of money to provide for the payment of a living wage as requested, without confiscating an undue share of profits, or the normal returns to capital, and would thus render industrial undertakings impossible. Millions of men would be thrown out of work, as industry, it was claimed, would be unable to employ them.
3. Proceeding further upon this assumption of the inadequacy of the National Income to meet the "living wage," it was asserted that if the living-wage principle was applied, prices would be correspondingly increased and there would be no gain in real wages. From this conclusion the further inference was drawn that if one class of wage-earners, as the railroad workers, should receive the "living wage," it would cause higher freight rates and increases in commodity

prices and result ultimately in the exploitation of all other classes of industrial workers.

4. The contention was also made that the use of a budgetary family of 5 members as a standard family (father, mother, and 3 dependent children) was unsound, as the Reports of the United States Census Bureau showed that the average American family consisted of only 4.4 persons. The assumption of a "normal" family of 5, therefore, meant, it was stated, that industry would be forced to pay for the support of millions of children who were supposititious, or in other words, did not actually exist. The Census, it was pointed out, in terms of figures showed only 35,000,000 family dependents, as contrasted with the standard budgetary studies, which, on the basis of 24,000,000 actual families, would provide wages for 73,000,000 dependent children, or 38,000,000 more than the Census actually reported. If a basic wage were to be established, it was concluded, therefore, it should be determined on the basis of a man and wife only, with specific allowances in addition for each child, as had already been done in France and other countries.
5. The Census also, it was stated, showed that for each family there were 1.36 male workers or a total of approximately 33,000,000 as compared with the 24,000,000 families. Why should each of these wage-earners, it was then asked, receive wages based on a family of 5, when for each average family there was more than one male worker, or an average excess of .36 male wage-earners per family? If each individual worker was supposed to support a "normal" family of 5, 1.36 workers per family should be supporting 6.8 persons per family.

6. Conditions as to living costs and prices, tastes and actual needs, it was further declared, were not the same in all localities, and hence there should be no standard "living wage," established by budgetary methods, for the country as a whole.
7. The use of the budget as a basis for the realization of a living wage, it was claimed also, was a futile means of fomenting industrial unrest and trouble, as it had been made a powerful means of appeal to the impossible desires and avarice of labor groups.
8. Finally, it was concluded that as an ideal humanitarian conception the living-wage principle was to be commended, but as a practical proposition it was fundamentally unsound and impossible of adoption for the reason that the compensation of workmen must be fundamentally based on their productivity.¹

To these adverse criticisms and arguments, the advocates of the "living wage" principle made reply, which, stated in summary form, was as follows:

1. In answer to the claim that the productive capacity of the country was not sufficient to assure a comfortable standard of living to each of the millions of families in the country, an inventory was made of the actual and potential productivity of the country, and it was shown that the national industries could meet the requirements for food, clothing, housing and other commodities essential to a general living-wage standard, and that there would still remain more than an

¹ For the most comprehensive presentation of the objections to the living-wage principle, see statement by John G. Walber, Executive Secretary, Bureau of Information, Eastern Railways, before U. S. Railroad Labor Board, Maintenance of Way Employees Case, Chicago, 1922; Statement on Behalf of the Railways before Senate Committee on Interstate Commerce, by Professor C. S. Duncan, Washington, 1922; *American Railroads*, published by Association of Railroad Executives, New York, issue of August 23, 1922 (Vol. III, No. 10); Article by Ben W. Hooper, Chairman, U. S. Railroad Labor Board, *Nation's Business*, June, 1923, entitled, "Living Wage and the National Income"; "Wages and the Family," by Paul H. Douglas, University of Chicago Press, 1925.

abundant surplus to exchange for coffee, tea, sugar, and other commodities which were necessary to healthful and comfortable living standards, but which were not produced in the United States. This analysis was made without reference to the possibilities of improving methods of production, but on the basis of actual, prevailing conditions.¹

2. As to the contention that the use of the family of five members as a unit was unsound, inasmuch as the Census figures showed that the average American family contains only 4.4 persons, it was stated that the choice of the three-child family did not rest at all upon Census averages. The reasons for such a choice were (1) that it was socially desirable that every family should have at least three children if the race was to perpetuate itself; (2) that the average marriage resulted in at least three children; (3) that usually during some period in the marriage life, at least three children were of dependent ages; and (4) that the living wage needs to provide a sufficient income to support a family at its period of maximum expense. This, it was argued, did not secure complete justice, as families with more than three children would suffer, but as a practical working proposition it was felt that the three-child unit secured approximate justice.²

As to the importance of the average family having at least three children if the race is to perpetuate itself, it was submitted that Doctor Louis I. Dublin, Statistician of the Metropolitan Life Insurance Company, gave a conclusive answer in an address before the

¹ "The Practicability of a Living Wage," Employees Exhibit No. 21, Before the United States Anthracite Coal Commission, Washington, 1920.

² Proceedings Before the U. S. Railroad Labor Board—Maintenance of Way Employees Case—1922, Especially Statement of Representative of Employees entitled "The Ability of the Country to Pay a Living Wage."

American Association for Advancement of Science, December 29, 1917. He stated:

It is obvious that the basis of every family is two individuals. The question then resolves itself as follows: How many children must be born to every family in order that two individuals may be raised to maturity? The number of children born must be more than two for a number of reasons. The first is the fact of mortality. The death rate is exceptionally high in the period of childhood, amounting in the first year of life to about 10 per cent. of the babies born. If we begin with 100,000 at birth and trace them through from year to year, we find that about 75,000 are alive at the average age of marriage. This is according to the mortality rate that prevails over a large portion of the United States. The rest have died. This fact alone would make it necessary that every marriage result in an average of two and one-half children in order that two persons may attain the average age of marriage and replace their parents in the population. But this assumes, first, that all persons marry, and, second, that every marriage is productive. As a matter of fact, all persons do not marry. In our own country from 12 to 15 per cent. do not marry until after the reproductive period, if at all. A considerable proportion of marriages, over 7 per cent., are sterile. When we make the necessary corrections in our figures, the average number of children per family which must be born is increased to close to four in order that the stock may maintain itself without increase or decrease.

The United States Bureau of Labor Statistics, the Chicago Council of Social Agencies, and other responsible authorities also gave official approval to this statement of Doctor Dublin.

In addition to this need for families of three children, the fundamental question, it was also pointed out, was not really a statistical one. Statistical averages included young married couples with as yet few or no children and also married couples with all their children grown and fully self-supporting. The question, however, concerned rather the average size of the average family at a particular, but very important, point in their career. It also embraced the opportunity for a single man to be able to be married and to pass successfully over this acutely stressful period of family development.

3. As to the ability of industry to pay a living wage, it was shown further by careful analysis, based on the Reports of the Census Bureau and the National Bureau of Economic Research, that the output of industry was sufficient to pay all unskilled workers a living wage, and also corresponding increases in differentials to those above the grade of unskilled laborers.

In this connection, it was emphasized further that the living wage was concerned solely with adult male heads of families, and that it did not directly apply to women or children gainfully employed; to proprietors and others engaged in business of their own; to professional people, to those engaged in anti-social work, or to chronic idlers or incapables. With these fundamental reservations in mind, it was then shown that, according to the United States Census of 1920, there were 41,609,192 persons, 10 years of age and over, engaged in various gainful occupations, but after eliminating the classes described in general above to which the living wage would not apply—women, proprietors, officials and managers, children and appren-

tices, farm laborers, servants, professional persons, members of United States Army and Navy, criminals, idlers, and inmates of public institutions, and the unemployed—there would remain only 17,423,077 persons to whom the living-wage principle would be applicable. Estimating the amount necessary to maintain a living-wage standard according to the budget of health and comfort issued by the U. S. Bureau of Labor Statistics in 1919, and increasing each unskilled worker to the amount his earnings fall below this figure, and also adding a similar amount to the earnings of those in the higher grades of occupations so that existing differentials in rates of pay would be maintained, it was estimated would add from 22 to 34 per cent. or from \$7,400,000,000 to \$11,370,000,000, to the national wage bill, according to 1922 conditions and the extent to which the living wage was applied. As the total amount paid in wages in 1918, according to the Bureau of Economic Research, was 33 billion dollars and the total national income was 61 billions, it was concluded that the national income was sufficient to stand a practical application of the living wage without increasing prices or unduly decreasing capital returns.

4. The economic result of applying the living-wage principle, or, in other words, of increasing the national wage bill from 22 to 34 per cent., it was further claimed, would not be a dead weight on industry, but would be absorbed by other balancing factors; part of the expense might be paid out of excess profits, or the entire expense might be offset by the increased efficiency of labor and management in reducing costs of production and eliminating waste. It was not logical, it was contended, to assume the indefinite continu-

ance of the then prevailing waste and inefficiencies of industry, as illustrated not only by general conditions but strikingly in specific instances, as in the overdeveloped bituminous coal industry, the underdeveloped or inadequate railway system, and the monopoly conditions in anthracite coal mining.

Higher wages, it was declared, would make possible greater productive efficiency of labor, increase labor's purchasing power, create a broader demand for commodities, and, furthermore, add to savings and tend to decrease the cost of capital. On the other hand, higher earnings would stimulate management toward improving facilities and processes, and reducing labor and other costs of production. The net result, therefore, of the application of the living-wage principle, it was concluded, would be (1) lower costs to industry, (2) lower prices and no exploitation of consumers, and (3) higher real wages to industrial workers.

5. Moreover, it was stated, the arguments against the financial practicability of the living wage were in general unconvincing, because they assumed the permanent continuance of existing conditions of production and distribution, and did not admit the possibility of advantageous changes. The same arguments, it was shown, had been advanced in past years against the establishment, successively, of a twelve, ten, nine and eight-hour standard work-day, the installation of safety devices in industry, woman and child labor legislation, minimum wage laws, and other restrictive legislation, and none of the predicted evils had been borne out by subsequent events. The contrary had really been true, for all past experience indicated that the acceptance of the living-wage principle in a reasonably practical way would stimulate the spirit of

industrial peace and cooperation, and would result in enormous gains in the productive efficiency of both capital and labor. From the experience along the lines of similar innovations in the past, the conclusion could be accepted, it was claimed, that if the living-wage principle should be applied with the accustomed sagacity and common sense of industrial leaders, no serious financial or other evil would result, but rather great industrial advantages. It was emphasized that no sudden application of the principle was planned, which might cause an industrial collapse, but only a gradual, sensible adoption of the idea, attended with the minimum possibilities in the way of dislocation of production and distribution.

6. Finally, it was pointed out that the living wage was not merely a matter of economics. It involved a fundamental moral principle. The boon to humanity resulting from its application, and the improvement to our social, political and religious life, could not, it was declared, be overestimated. Without the living wage our industrial achievements, on the other hand, it was claimed, were entirely materialistic and were built upon an indefensible foundation—upon the social and economic degradation of a large part of our citizenship. To say that the living wage was impossible or impracticable, therefore, it was concluded, was to offend America's fundamental sense of humanity, morality, and religion.

FORMAL PRECEDENTS ESTABLISHED

These arguments for and against the living-wage principle were, as has already been described, exhaustively advanced and defended in connection with controversies between capital and labor during the four years, 1919-

1922, and were extensively discussed in the press and on the floors of legislative bodies. The living-wage question was rapidly becoming an issue of national importance when the discussion at length began to lose its intensity, due to the revival of industry and business in 1923, and the adoption of a new industrial plan of procedure which stimulated the unprecedented development of industry during the next five years, and which accepted productivity and high rates of pay as fundamentals of prosperity.

In the case of the United States Railroad Labor Board, where the supreme effort was made to force the practical acceptance of the living-wage principle, no direct action was secured even after the late Senator Albert Cummins, Chairman of the Senate Committee on Interstate Commerce, had declared that the railroad employees were correct in interpreting the term "just and reasonable" wage, as defined in the Transportation Act of 1920, as meaning a "living wage." Elaborate majority and minority opinions were handed down by the Board. Altho the majority refused the immediate acceptance of the living-wage principle, this action was conditional, and was made upon the public declaration that further consideration would be given the matter when economic conditions improved.

As early as July, 1920, in its first wage award (Decision No. 2), the employees claimed that the Railroad Labor Board had led them to believe that it had accepted the living-wage principle. At that time the Board said:

The Board has endeavored to fix such wages as will provide a decent living and secure for the children of the wage earners opportunity for education, and yet to remember that no class of Americans should receive preferred treatment and that the great mass of the people must ultimately pay a great part of the increased cost of operation entailed by the increase in wages determined herein.

From that time forward the representatives of the employees constantly urged the Board to give a practical application to the living wage. Not until June 10, 1922, however, or almost two years after the declaration in Decision No. 2, did the Board give any further indication of its attitude. In Decision No. 1074 (Docket 1300), effective July 1, 1922, having to do with clerks, freight handlers, express handlers, station men, and other classes of employees, the Board said:

The Labor Board can not venture too far into the realms of economic prophecy, but it is generally conceded to be fairly plain and certain that our country has entered upon an era of gradually increasing business prosperity which will be liberally shared by the carriers. That the carriers shall have a fair opportunity to profit by the revival of business in order that they may expand their facilities is absolutely indispensable to their efficient service to the American public. Their unpreparedness now to cope with any greatly increased traffic is notorious. Every facility of railway transportation has been skimped for the last several years, and, as to mileage, there has been an actual decrease instead of an increase.

This statement, in the connection used, must not be misconstrued to mean that the employees should be called upon to bear the cost of railway rehabilitation, improved service and reduced rates. It simply means that it is only patriotic common sense and justice that every citizen, including the railway employee, should cooperate in a cordial spirit, should bear and forbear, until the carriers are back on their feet.

When this accomplishment is safely under way, *it will then be possible for the Railroad Labor Board to give increased consideration to all the intricate details incident to the scientific adjustment of the living and saving wage, with enlarged freedom from the complications of the "relevant circumstances" of the abnormal period which is now approaching its end.*

. . . In the settlement of these questions, it is the profound

desire of the Labor Board to do justice to the parties directly concerned, placing the human and social consideration above the purely economic, and, finally, to establish wages and conditions that will largely meet the hopes and aspirations of the employees, that will prove satisfactory to the carriers, and that will impose no unnecessary burdens on the public. This is not a Utopian conception in America.

This declaration, if it meant anything, clearly showed that the majority of the Labor Board had determined to accept and attempt practically to work out the "living wage" principle, as soon as, in its opinion, two sets of adverse conditions had been overcome: (1) the then unfavorable financial status of the railroad companies, and (2) the consequent necessity for the employees to cooperate in the economic rehabilitation of the transportation industry.

No action was taken by the Board, however, even with the renewal of prosperity in 1923. Its failure to give practical consideration to this and other fundamental principles in arriving at its decisions undoubtedly developed a serious lack of confidence in the Board by all classes of transportation employees, which finally culminated in open opposition and the repeal of the Labor Provisions of the Transportation Act.

This seeming incapacity, on the part of the majority of the Board, and especially of some of the representatives of the public, was a disaster from every standpoint. The labor provisions of the law, of which the establishment of the Board was a part, were an unprecedented constructive achievement; and had the Board functioned on the basis of the fundamental principles of the law, and not upon considerations of expediency, it would have commanded the support of the public, railroad managements, and railroad employees, and would have afforded an effec-

tive example for industrial courts, as it were, which might have been developed to settle judicially industrial disputes upon the basis of generally accepted rights and principles affecting all parties concerned. It is to be regretted that the majority of the members of the Board did not have the vision to realize the great constructive opportunities and possibilities which lay before them.

Other concrete judicial precedents, however, were developed in connection with the living-wage controversy. On this question the opinion of Circuit Judge Caldwell in the case of Ames vs. Union Pacific Railway Co. (62 Fed. Rep., p. 15) are particularly pertinent. At the time that Judge Caldwell rendered his decision the railroad was being operated by a Receiver. The Court said:

The rate now paid is not higher than the rate paid on other lines operated through similar country and under like conditions, and, in the opinion of the court, is not higher than it should be for the service rendered. The employes, with families to support, are seldom more than a few days' wages in advance of want; and, if their present wages were materially reduced, they could not live. *The highest and best service cannot be expected from men who are compelled to live in a state of pinch and want.*

"A court of equity will not pursue a niggardly and cheese-paring policy toward its employes. Intelligence, bodily vigor, and contentment are wanting among men who are compelled to work for inadequate wages. Sound public policy, no less than justice to the men, requires that they be paid a rate of wages that will enable them to live decently and comfortably, and school their children. Some corporations may pay their employes a less rate of wages than is here indicated, but a court of equity will not follow their bad example."

Reference has already been made to the decisions of Mr. Justice Samuel Alschuler, in the Packing House cases.

Altho the original award was handed down in 1918, the Administration of the Packing House plants continued for three years after the Armistice, and the original and succeeding decisions had a very strong post-war effect so far as the living-wage movement was concerned. In this connection, Mr. Justice Alschuler said:

The evidence for the employees, and employers as well, is unanimous to the effect that whatever the economic work-day is found to be, it should, under normal conditions, afford to the workmen a day's living wage for himself and family of average size—generally considered to be a wife and three children of about school age. The proposition itself is too clear to require elaboration. The superintendents agreed that while so-called market price of labor, as evidenced by what other industries pay for it, should have some influence, yet in any event it should be a living wage.

While it might seem that the term "living wage" should itself fix its boundaries and convey its significance, it is one of those phrases not capable of exact definition, but is quite dependent on the view-point of the one who employs it. While it might generally be understood to be a wage offering a living suited to one's condition in life, it could hardly be said, when an unreasonably low wage causes the condition in life of the employee to sink low, even tho his family manages to subsist thereon, that the condition of life of his family is thereby established, and that the wage paid is suited thereto. A living wage surely imports something more than this. On the other hand, the common laborer's living wage cannot under the existing order of things be said to include extravagances and superfluities which only those of large means can afford.

As early as 1920, the Federal Electric Railways Commission, appointed by President Wilson for the purpose of recommending financial and other measures for the rehabilitation of the street railways after the war, in its

final report also sanctioned the living-wage principle, as follows:¹

XII—The full cooperation of labor is essential to the highest prosperity and usefulness of the industry. The employees engaged in this occupation *should have a living wage* and humane hours of labor and working conditions.

In January, 1920, in a decision establishing wages and working conditions of bituminous coal-mine workers throughout the country, the United States Bituminous Coal Commission stated that it had fully accepted the living-wage principle as the basis of its wage changes.²

We have decided [the Commission said], to award as a substitute for the 14 per cent. increase authorized by Dr. Garfield, a wage increase that is considerably higher. In arriving at the present wage award we were guided by the principle that every industry must support its workers according to the American standard of living.

The legislature of the State of Kansas, in establishing a Court of Industrial Relations in 1920, gave its sanction to the living-wage principle, in Section 9 of the law, as follows:³

Section 9. It is hereby declared necessary for the promotion of the general welfare that workers engaged in any of said industries, employments, utilities or common carriers shall receive at all times a fair wage and have healthful and moral surroundings while engaged in such labor.

After its creation, the Kansas Court of Industrial Relations gave an extended interpretation and sanction to this section of the law, in a decision of March 29, 1920:⁴

¹ Report of the Federal Electric Railways Commission, Washington, Government Printing Office, 1920, p. 4.

² United States Bituminous Coal Comm'n., Award and Recommendations, Washington, Government Printing Office, 1920, p. 36.

³ Industrial Court Law, State of Kansas—Act Creating a Court of Industrial Relations, January, 1920, Section 9.

⁴ Kansas Court of Industrial Relations, State of Kansas vs. The Topeka Edison Company—Opinion and Order—March 29, 1920.

A living wage may [the Court declared] be defined as a wage which enables the worker to supply himself and those absolutely dependent upon him with sufficient food to maintain life and health; with a shelter from the inclemencies of the weather; with sufficient clothing to preserve the body from the cold and to enable persons to mingle among their fellows in such ways as may be necessary in the preservation of life. But it is not a living wage only which this court is commanded by the people of this State to assure workers engaged in these essential industries. . . .

During the ensuing year, an arbitration board was appointed for adjusting a wage dispute between the Connecticut Street Railway Company and its employees. The neutral Chairman was Associate Justice, Mr. John M. Beach, of the Supreme Court of Connecticut. The pronouncement of the Board was as follows:¹

The Board adopts the proposition, contended for by the men and not disputed by the Company, that the fundamental principle which ought to govern the wage determination of arbitrators is *the grant of a living wage*.

In the year 1922, Mr. James J. Storrow, a member of the banking house of Lee Higginson & Company of Boston, was the neutral Chairman of a similar arbitration board in Springfield, Massachusetts, which, as the basis of its award, declared for the minimum health and comfort standard. The Board said:²

Counsel for the Association has discussed standards of living and has aptly classified these, as:

- (1) Poverty or Bare Subsistence Level.
- (2) Minimum of Subsistence Level.
- (3) Minimum of Health and Comfort Level.
- (4) Level of the American Standard of Living.

¹ Arbitration Award—Connecticut Street Railway Company vs. its Employees, 1921.

² Arbitration Award—Springfield Street Railway Company et al vs. its Employees—February 23, 1922; p. 13.

We quite agree with counsel for the men that there exists no reason for applying here the standards of either the "Poverty Level" or the "Minimum of Subsistence Level"; . . . we think the standard to be aimed at here is, at least, the "Minimum of Health and Comfort Level" and by preference, what he describes as the "Level of the American Standard of Living."

In another Massachusetts street railway arbitration in 1921, the question of supply and demand came before the Board, and the Chairman, Mr. Thomas H. Mahoney, decided that the law of supply and demand could not be utilized to depress wages below a living wage. He said:¹

However that may be, it seems to us that the doctrine of the living wage, so called, has become firmly established in America. In other words, the swing of wages downwards in accordance with the law of supply and demand is arrested arbitrarily at a point which constitutes what is called a living wage.

In 1924, another street railway arbitration board in Worcester, Massachusetts, made the following declaration in its award:²

The Board believes that it is impossible to fix a wage rate by mathematical statistics. Bare cost-of-living statistics are important, yet American progress and stability demand that we consider also American standards of living. Increased efficiency and production, universal and advanced education, new inventions, the war, a disposition to treat labor with more liberality and, maybe, a little socialism have all combined to create an American standard of living above the

¹ Award in case of Massachusetts Northeastern Street Railway, 1921; quoted from Brief in Behalf of Employees, Arbitration between the United Electric Railways Company and Providence Division Number 618 of the Amalgamated Association of Street and Electric Railway Employees of America; May, 1925; p. 30.

² Award in Arbitration, between Worcester Consolidated Street Railway Company, *et al.*, and Amalgamated Association of Street and Electric Railway Employees of America and Local Divisions No. 22 and 448 thereof, April 25, 1924, Springfield, Massachusetts; page 17.

bare cost of living. It is economically sound that this should be so and it rebounds to the welfare of the country. It advances our civilization and increases our resources, physical, financial, moral and intellectual.

The majority opinion in a street railway arbitration award in Providence, Rhode Island, on July 1, 1925, discussed and sanctioned the living-wage principle as follows:¹

The principle of the living wage is an expression of the theory that wages should be so adjusted as to provide for all workers, standards of living which, as a minimum, permit the satisfaction of their basic needs for health and comfort. Its emphasis on needs makes it an ethical principle and a social expedient, but its ultimate effect upon future human resources provides for it an economic defense.

Altho Boards of Arbitration are practically unanimous in recognizing it as an important principle of wage fixation, some students of the wage problem still have grave doubts concerning the possibility of reconciling the principle of the living wage with the facts of economic life. When one is reminded that the living wage is a wage established on the basis of need without regard to the service performed, without regard to what has hitherto been the value of such service in the industrial community, and without regard to the organization of the industry to which it is assessed, it is evident, certainly, that the principle must be applied with caution to avoid the temporary industrial dislocation which would result from the immediate wholesale readjustment of the wage structure. The continuity of social progress itself demands that what is socially desirable be tempered at least (if not dominated) by what is for the moment, *economically possible*.

Nevertheless, this Board believes that the minimum wage

¹ Majority opinion, Award in Arbitration between the United Electric Railways Company and Providence Division Number 618 of the Amalgamated Association of Street and Electric Rwy. Employees of America; July 1, 1925; pp. 26-27.

in an industrial community should be a wage which provides a standard of living consistent with the requirements of decency, health and reasonable comfort. This principle is easily expressed; its application, however, is more difficult.

As late as January, 1926, the Public Service Commission of Pennsylvania formally sanctioned the living-wage principle in discussing the relation of the wages paid to fares charged by the Philadelphia Rapid Transit Company. A complaint had been made that the unusually high rate of 77 cents per hour paid by this Company to its motormen and conductors was excessive, and after a careful examination of budgetary studies and wage standards, the Commission said:¹

The Company frankly avows that its policy is one of high wages and good labor rather than low wages and poor labor. It points to the notable cooperation and loyalty of its men and its total absence of strikes for nearly fifteen years.

A study of the 77-cent wage from the view-point of economics and sociology shows that it produces annual earnings but little if any higher than the minimum budget necessary to maintain an average family on the basis of living costs in Philadelphia.

The foregoing evidence, and much more of like tenor, leads us to the conclusion that the wages paid by the Company are not unreasonable or excessive compensation for the labor performed.

In March, 1928, the "living and savings" wage standard was formally accepted in a written agreement between organized labor and management. At that time, Mitten Management, Inc., one of the most successful operators of street railway properties in the country, and the Amalgamated Association of Street and Electric Railway Em-

¹ Order of the Public Service Commission of Commonwealth of Penna., January 12, 1926, on Application Docket No. 11,417, 1924; p. 13-14.

ployees, one of the oldest and most conservative unions affiliated with the American Federation of Labor, in defining the principles and standards to govern their future relations, formally agreed that street railway employees should have an opportunity to participate in productive gains, "in addition to wages sufficient for the necessities of life, comfort and savings."

STANDARDS EVOLVED

Different wage standards, gradually extending upward in their scope and conception, were evolved and accepted as the result of the movement for a living wage, both in its pre-war and post-war developments. What should constitute a reasonable minimum standard of living varied in conception from time to time. Economists and social workers have defined and classified these levels of living. Prior to the World War, as has already been described, the minimum standards which had been developed were defined as "The Pauper or Poverty Level," and "The Minimum Subsistence Level" of living.¹ The evolution of higher standards since the war may be briefly summarized in chronological order as follows:

1. *The Minimum Health and Comfort Level.* This budgetary standard had its beginning, as already pointed out, in the Seattle Street Railway arbitration award of 1917. During the war it was sanctioned by the National War Labor Board, and after the War it was elaborately developed on a scientific basis by the United States Bureau of Labor Statistics. Under the designation of the "living wage" it was sanctioned by Federal and State labor agencies, by the churches without regard to denomination, and by leading statesmen, publicists and economists. It be-

¹ See p. 25.

came the platform, so to speak, of the "living wage" movement, which has been vigorously carried forward to the present day.

This standard of living not only makes provision for the physical needs of wage-earners and their families, but provides also for social needs—such as some degree of recreation, some reading matter, the essentials of health preservation, decent clothing for social intercourse, and the minimum amount of life and health insurance.

2. *The Savings or American Level of Living.* This budgetary level marked another step in advance of the level of the health-and-comfort standard. It arose from the contention, after 1922, that a mere "living wage" was not sufficient for American workmen, and that they should be enabled to look forward to the ownership of a home, the reasonable education of their children, the freedom of action to develop individual ability, and a margin of savings for protection against sickness, unemployment, old age and death. In its most generally accepted form, this budgetary level represented the minimum health-and-comfort level plus the opportunity to save. It may now be said, so far as general acceptance goes, to have superseded the health-and-comfort level as the irreducible minimum.

3. *The Cultural Wage or Standard of Living.* This conception of what should be the real status of the wage-earner and his family has recently been put forward by an industrial executive of national and international reputation.¹ It goes beyond the satisfaction of physical and social needs to the means of meeting the cultural requirements of the wage-earner and his family. It also lays down the dictum that men must be economically as well

¹ See quotation from address of Mr. Owen D. Young, chairman of the Board of Directors of the General Electric Co., pp. 122-123.

as politically free, and to meet this fundamental need declares that wage-earners should be paid sufficient not only to enable them to satisfy their physical, social, and cultural requirements but also to make it possible for them to become owners of the industrial undertakings in which they are employed.

This lofty but democratic conception, which is somewhat restrictedly expressed by the term "the cultural wage" or standard of living, may, of course, seem to be more or less in the realm of idealism at the present time. It is a striking fact, however, that, in a greater or less degree, it is now the settled policy of some of our basic industries to attempt to realize it by plans for extending participation in earnings and the selling of stock to employees of all classes. In a few cases the ideal has already been realized by employees acquiring control of large undertakings, such as the Philadelphia Rapid Transit Company under Mitten Management in Philadelphia, the A. Nash Tailoring Company of Cincinnati, the Bank of Italy in California, the Columbia Conserve Company of Indianapolis, the Dennison Manufacturing Company of Massachusetts, the Dutchess Bleacheries of New York, and others.¹

Eliminating from consideration, however, the elements of industrial democracy, and restricting the matter to the evolution of standards for measuring an adequate basic wage, it is clear that the "living-wage" movement since the war has practically advanced to a point where the standard of health and comfort, plus reasonable savings, has been sanctioned by enlightened public opinion as the irreducible minimum of compensation and living for the unskilled industrial workers. This minimum has not only

¹ "Political and Industrial Democracy," by W. Jett Lauck; Funk & Wagnalls Company, New York, 1927; pp. 276-272.

received a wide public acceptance, but also has gained the unqualified approval of forward-looking industrial managers. It has also been gradually receiving formal sanctions in the practical adjustment of wages by arbitration boards and other public agencies.

THE BUDGETARY METHOD ACCEPTED

Within recent years the opposition to the budgetary method for measuring the adequateness of wage standards has also largely disappeared. There is still criticism of the standards, or of the items going to make up a particular standard, as well as pertinent discussion as to the accuracy and widespread applicability of budgetary standards; but the consensus of the best economic opinion as well as the most authoritative official practise now is that the only sound basis for a wage determination on a standard of adequateness is a study of necessary family expenditures, and the working out of a wage rate sufficient to meet these expenditures within a reasonable number of hours of work each day or each week.

This budgetary method has been made necessary by the fact that American industry—because of conditions which have existed, with some notable exceptions—has not paid its unskilled workers an amount sufficient to maintain themselves and their families in health and decency. The low-grade industrial workers, indeed, have always been the residual sufferers in industry. They have been difficult to organize into unions, their bargaining power has been weak, and they have suffered not only from the exploitation of employers but also from the gains of more strongly organized wage-earners.

In attempting, therefore, to determine what adequate wages should be, *few standards can be found in industry as it now exists*. This has made necessary the budgetary

method, or the study of what the actual requirements are to maintain a family in health and modest comfort. After the most careful and comprehensive investigation, the necessary quantities of food, clothing, household furnishings, and sundries are listed and are then priced. The aggregate of the prices of these items represents the wage which must be earned if the family standard of living is to be healthy, decent, and modestly comfortable.

Actual experience has demonstrated the practicability of the budgetary method. It has been accepted as the only feasible method for determining minimum wages for women under the laws of a number of States, and, as is well known, this has been done with great practical success. What has been done on the basis of independent women workers, has been and can be successfully done in the basic industries for male heads of families. In Australia, Great Britain and other foreign countries the budget has long been successfully used for determining basic wage rates for all classes of wage-earners.

The budgetary method, therefore, is not new either in theory or in practise. It long ago passed the experimental stage, and its soundness is now generally accepted.

GENERAL CONCLUSIONS AS TO A LIVING OR ADEQUATE BASIC WAGE

As the outcome of the movement which has been in progress for the past two decades relative to an adequate basic wage for the lowest grades of industrial workers, several conclusions stand out clearly and in a most significant way at the present time.

In the first place, the principle of an adequate basic wage for industrial workers has been generally accepted and authoritatively sanctioned as desirable, not only from a humanitarian and civic point of view, but also from the

standpoint of the sound principles of industrial management and of general economics. The conception of the standard of living which this basic wage should make possible has advanced through the years from a level of bare subsistence of the wage-earner and his family to the recently advocated "cultural" standard, which would embrace not only physical and social requirements, but also cultural needs, together with the highest ideals of economic freedom. Practically, the minimum standard which has been reached at this time, or the point of actual acceptability, is the level of living provided by the so-called "savings wage," or a wage sufficient for a standard of living of minimum health and comfort for the wage-earner and his family, with the added provision for reasonable savings as a protection against sickness, accident, old age, and other contingencies of life.

The living or savings-wage movement has been, in a general way, absorbed during the past five years by the general acceptance in the United States of the so-called productive efficiency theory of wage payments, which would stimulate indefinite wage advances so long as labor costs of production are reduced and reasonable margins of profits sustained. The adoption of this principle has also been further supported by the theory that high rates of pay make for increased purchasing power, greater consumption of commodities, and the maintenance of widespread prosperity. As industry has proceeded under this new and enlightened program, wage earners have received general advances in their rates of compensation, until their earnings now in many instances represent unprecedented levels. As this process continues, the need will inevitably arise for a decision as to what the basic rates of pay for those lowest in the industrial scale should be. When specific occasions arise, the living or savings-wage principle

will undoubtedly thus be invoked and applied to the unskilled worker, with the addition of reasonable advances in the differentials above the unskilled which custom and tradition have heretofore sanctioned for the more skilled, hazardous, and responsible occupations.

Through the force of this inevitable tendency, the living or savings-wage principle will increasingly receive formal acceptance and practical application. Outside of the activities of organized labor itself, it will be stimulated by those industrial students and leaders who already believe that the maintenance of existing prosperity can be best assured by making possible higher earnings and, as a consequence, increased purchasing power for the millions of unskilled or semi-skilled industrial workers.

The productivity theory of wage payments, in other words, and its corollaries, have become predominant. They *assume* the "living wage" principle or the fixing of an adequate basic rate of compensation for those lowest in the industrial scale. This is implied and accepted as a starting point. The procedure of the new industrial order, in this respect, was well expressed by Mr. Lewis E. Pierson, former President of the United States Chamber of Commerce, in an address before that body in Washington in May, 1928, when he said:

We forgot the old idea of the living wage and asserted a new American doctrine which enlisted the cooperation of the worker with the implied declaration that his earnings were to be measured largely by his power to produce. . . .

It was evident that if, through the use of power machinery, the individual worker could be brought to produce more in a given time, he would be able to earn a corresponding increase in pay. We found that production and consumption must go hand in hand, that high wages represented the common denominator of both.

Finally, it is apparent that the living or savings-wage principle has been fully recognized as a problem of social and industrial statesmanship, the solution of which must not be deferred longer than necessary. The unskilled or semi-skilled workers, to the compensation of which the principle must be applied, as already stated, have traditionally been difficult, if not impossible, to organize effectively, and consequently have not had the economic strength to urge their claim for consideration. The members of the highly skilled craft organizations have also been so absorbed with their own interests that they have been indifferent to the needs of their less fortunate brothers. Only in the case of industrial unions, such as the United Mine Workers and the Amalgamated Clothing Workers, or in closely federated organizations, as the Building Trades, have unskilled workmen been raised to a living-wage level. Also, there have been a few instances where the employer, believing fundamentally in the economy of high wages, as in the case of the Ford Motor Company, has voluntarily placed the compensation of the unskilled on an adequate basis. In general terms, therefore, it may be said that altho the living or savings-wage standard is economically sound, the mainspring of the movement has been from those primarily interested in its social, political and humanitarian aspects.

Within the past few years, however, the fundamental conceptions of industrial progress have strikingly changed. With the increased mechanization of industry it has been accepted that low wages do not make for low labor costs. Furthermore, it has been widely realized that in their purchasing power the lowest grades of industrial workers have relatively suffered a great disadvantage. Moreover, while proceeding during recent years upon the theory that there may be indeterminate increases in wages so long as costs

are not increased and profits are not reduced, there has been no practical method worked out for an equitable distribution of increased labor productivity between the different groups of workmen. In raising wages, the old system of bargaining has been followed. With the development of more equitable methods of adjustment and the actual relation of the wages of the unskilled workers to their contribution to output, this group of wage-earners will undoubtedly be raised to a living or savings-standard of compensation and living. The remarkable growth in the National Income from 61 billions in 1922 to 90 billions in 1927, as shown by estimates from private and public authoritative sources,¹ in the face of lower prices and unprecedented wage advances, will also effectively eliminate any further contention as to the practicability of paying at least a "living wage" to unskilled workers.

¹ Estimates by the National Bureau of Economic Research, and the United States Treasury Department, 1928.

CHAPTER VIII

ACCEPTANCE AND GENERAL APPLICATION OF THE THEORY OF PRODUCTIVE EFFICIENCY

In outlining trends in the development of various wage theories, reference has already been made to the action of railroad firemen and engineers in their Eastern and Western arbitrations during the period 1913-1915, and to that of all classes of railway employees in the acute controversies before the former United States Railroad Labor Board during the years 1920-1922. On these two occasions, the union representatives developed and put forward the theory of "increased productive efficiency" as the justification for wage advances.¹

Stated in its simplest form, the claim was made that the labor and responsibilities of employees had become greater, their output in terms of traffic units handled had increased, labor costs according to the same standard had decreased, and as a consequence, the assertion was made that they were entitled to a large degree of participation in the resultant net revenue gains of the transportation industry. It was freely conceded that these gains had in large measure been made possible by increased capital investment, by new processes and inventions, and by managerial ability. After capital and management, however, had been properly rewarded, it was contended that labor should have a share in the revenue gains through higher wages and consumers and shippers a participation also in the form of lower freight and passenger rates. In other words, as the result of the increased productive efficiency developed by

¹ See pp. 32-40, 69-70.

labor and management, it was claimed that costs of operation had been reduced, and that both employees and consumers should share in the lower costs by receiving higher rates of pay and reductions in prices. The way to restore prosperity, it was claimed in 1921, was to increase wages and purchasing power and at the same time reduce prices in order to stimulate demand and to make quantity production at low costs possible.

No practical consideration was given to these theories either before the war or during the depression of the years 1920-1921. Industrial leaders, financiers, and statesmen held fast to the old beliefs that industry and trade could be revived only by a double deflation of both prices and wages. Two years later, however, in 1923, the "productive efficiency" theory, along with its corollary that high wages made for greater consumption of goods and corresponding expansion of industrial and commercial activity, became the foundation for the new industrial order which completely reversed all past theories and traditions as to methods of wage determination. Under the new constructive program it was held by leaders in industry that wages might be increased indefinitely, prices of commodities simultaneously lowered and profits enhanced, provided that, through the proper cooperation of capital, labor, and management, costs of production were reduced. High wages were also further accepted as a fundamental of prosperity, on the ground that a high level of compensation increased purchasing power, which in turn found expression in greater consumption or demand for commodities.

THE PRODUCTIVITY THEORY OF WAGES

From the very beginnings of the science of economics, its leading exponents had made a clear-cut distinction be-

tween wages and labor costs, and had pointed out the fallacy of assuming that low rates of pay to workmen necessarily meant lower costs of production. Adam Smith himself had pertinently commented on this fact as follows:¹

The wages of labour are the encouragement of industry, which, like every other human quality, improves in proportion to the encouragement it receives. A plentiful subsistence increases the bodily strength of the labourer and the comfortable hope of bettering his condition, and of ending his days perhaps in ease and plenty, animates him to exert that strength to the utmost. Where wages are high, accordingly, we shall always find the workmen more active, diligent, and expeditious, than where they are low; in England, for example, than in Scotland; in the neighbourhood of great towns, than in remote country places.

John Stuart Mill also discussed the same subject as follows:²

Wages, and the cost of labor; what labor brings in to the laborer, and what it costs to the capitalist; are ideas quite distinct, and which it is of the utmost importance to keep so. For this purpose it is essential not to designate them, as is almost always done, by the same name. Wages, in public discussions, both oral and printed, being looked upon from the same point of view of the payers, much oftener than from that of the receivers, nothing is more common than to say that wages are high or low, meaning only that the cost of labor is high or low. The reverse of this would be oftener the truth: the cost of labor is frequently at its highest where wages are lowest. . . .

We continually hear of the disadvantage under which the British producer labors, both in foreign markets and even in his own, through the lower wages paid by his foreign rivals. These lower wages, we are told, enable, or are always on the

¹ "The Wealth of Nations," Adam Smith, edited by Edwin Cannon. Methuen & Co., London, 1904; Vol. I, p. 83.

² "Principles of Political Economy," John Stuart Mill. Appleton, New York, 1874; p. 512, Vol. I; pp. 251, 252, 254, Vol. II.

point of enabling them to sell at lower prices, and to dislodge the English manufacturer from all markets in which he is not artificially protected.

Before examining this opinion on grounds of principle, it is worth while to bestow a moment's consideration upon it as a question of fact. Is it true that the wages of manufacturing labor are lower in foreign countries than in England, in any sense in which low wages are an advantage to the capitalist? The artisan of Ghent or Lyons may earn less wages in a day, but does he not do less work? Degrees of efficiency considered, does his labor cost less to his employer? Tho wages may be lower on the Continent, is not the Cost of Labor, which is the real element in the competition, very nearly the same? That it is so seems the opinion of competent judges, and is confirmed by the very little difference in the rate of profit between England and the Continental countries. But, if so, the opinion is absurd that English producers can be undersold by their Continental rivals from this cause. It is only in America that the supposition is *prima facie* admissible. In America wages are much higher than in England, if we mean by wages the daily earnings of a laborer; but the productive power of American labor is so great—its efficiency, combined with the favorable circumstances in which it is exerted, makes it worth so much to the purchaser—that the Cost of Labor is lower in America than in England; as is proved by the fact that the general rate of profits and of interest is very much higher.

General low wages never caused any country to undersell its rivals, nor did general high wages ever hinder it from doing so.

Henry Fawcett, Professor of Political Economy in the University of Cambridge, in discussing the same subject more than fifty years ago, pointed out the relatively higher productiveness of labor in the United States:¹

. . . The difficulty arises from confusing wages with cost

¹ "Manual of Political Economy," Henry Fawcett, M.P.; Macmillan, London, 1876; pp. 173-174, 231.

of labor; wages may be very low, and yet the labor be so inefficient, from causes previously explained, that the cost of labor may be extremely high. The English contractors who made the French railways could have engaged any number of French laborers at one-half the wages that were paid to English navvies; but so superior is the physical strength of an Englishman, that it was proved that one English navvy would do as much work as two French laborers. In this case, therefore, the cost of French labor would be as great as the cost of English labor, altho the wages of the English laborer were twice as great as those paid in France.

The chairman of the Birmingham Chamber of Commerce lately asserted that formerly the district round that town made nearly all the locks which were used throughout the world; but that at the present time the industrial appliances of America were so superior to our own, that America imported the metal of which locks are made from Staffordshire, and exported the manufactured locks to England, underselling us in our own market. Upon inquiry it is found that all the reasons which are given to account for this superiority of American industry, either directly or indirectly, arise from the imperfect education of our people. Altho higher wages are paid in the United States than in England, yet labor is said to be less costly in the former country, because the workmen there possess a quicker intelligence, greater ingenuity, and are more ready to avail themselves of improved mechanical appliances.

The following quotation from the writings of J. Schoenhof is practically the same as the doctrine of our present-day industrial statesmanship. He said:¹

. . . Tho cheap labor gets less remuneration per diem, its cheapness is no saving to the employers. More hands are required to do the same amount of work that better-paid labor does at the same cost.

It is a fortunate sign of the times that we are at last

¹ "The Economy of High Wages," J. Schoenhof; Putnam, New York, 1892; pp. 22, 31, 35, 63-65.

beginning to recognize the all-important and redeeming fact, that cheap labor by no means means cheap production; that, on the contrary, low cost of production and a high wage-rate go hand in hand.

If a high wage-rate is an impelling cause in this country to the introduction of improvements and the adoption of labor-saving processes, the low wage-rate per diem ruling elsewhere is an equally strong inducement for the continuance of rusty and antiquated methods.

A high rate of wages expresses a high rate of productiveness, and its converse a high consuming power. A relatively high consuming power, high standard of living, is required to make the laborer efficient, strong in body and in mind. Without this, labor remains economically more or less sterile, for which an adequate proof will be given in the further progress of this work, treating the industries of the country seriatim. Employers can therefore under no possibility lose where a permanently high rate of wages rules. They cannot possibly lose under a rising rate of wages even, as a rise in actual wages is only possible with a rise of the productive power of labor. A higher rate of wages than the one of a previous period simply registers the change which has gone on in the direction of improvement in the economy of production. *But, instead of being injured, the employer gains positively by the rise in the standard of wages through the increasing demand thereby created for the increasing product.*

It is then clearly evident that there is no greater fallacy than the doctrine that a low rate of wages is necessary to insure a low cost of production. In fact, the opposite is shown to be the true principle upon which the productive processes of nations rest.

Professor Alfred Marshall, also of the University of Cambridge, in his "Principles of Economics," published twenty years ago, commented on the relation of productiveness to low labor costs as follows:¹

¹"Principles of Economics," Alfred Marshall, Professor of Political Economy, University of Cambridge; Macmillan, London, 1907; p. 548.

. . . We have hitherto supposed that it is a matter of indifference to the employer whether he employs few or many people to do a piece of work, provided his total wages-bill for the work is the same. But that is not the case. Those workers who earn most in a week when paid at a given rate for their work, are those who are cheapest to their employers (and ultimately to the community, unless indeed they overstrain themselves, and work themselves out prematurely). For they use only the same amount of fixed capital as their slower fellow workers; and, since they turn out more work, each part of it has to bear a less charge on this account. The prime costs are equal in the two cases; but the total cost of that done by those who are more efficient, and get the higher time-wages, is lower than the total cost of that done by those who get the lower time-wages at the same rate of piece-work payment.

In the United States, Professor Seligman of Columbia University, very effectively illustrated the economy of high wages when accompanied by labor efficiency.¹

Economic production [he said], implies the turning out of the greatest product with the least cost. So far as the wages of labor form an element of cost, it would seem to follow that low wages or cheap labor is a necessary condition of low cost. Before accepting this ostensibly self-evident proposition, however, it is necessary to pursue the analysis further.

. . . In any single industry low wages do not necessarily mean low cost. The real cost of labor is to be measured by its productive efficiency. Just as the hundred-thousand-dollar railway president is cheap because an inferior and low-priced substitute would botch matters and increase expenses, so in the case of the ordinary wage-earner the real cost is to be measured by the ratio of wages to the product of labor. In the Philippines the contractors find it in the end cheaper to hire the Chinamen in preference to the natives, although the

¹ "Principles of Economics," Edwin R. A. Seligman, Professor of Political Economy, Columbia University; Longmans, Green & Co., New York, 1921; pp. 289-293.

former command larger wages; in the Southern cotton factories the white laborer is found more advantageous than the negro factory hand, who can be hired at a materially lower wage. Furthermore, in the same industry and with the same workmen neither an increase of wages nor a curtailment of labor time necessarily augments cost. Where a reduction of hours or an increase of wages succeeds in enhancing energy, care and sobriety, the output may be greater than before. Especially where fine machinery is used and a high grade of intelligence is required to secure the best results, we often find a true economy in high wages and a lower cost in shorter hours. . . .

. . . So far as labor is a factor of production, cost depends not merely upon wages, but upon wages as compared with output. Under certain conditions there is a true economy in high wages; the more a workman is paid, the less he may cost.

. . . The true reduction of labor cost of permanent importance is that caused by increased efficiency. The more of a man a laborer is, the better tool he becomes. Whatever society does to improve the individual will be more than repaid by an augmented production of wealth.

THE PRODUCTIVE EFFICIENCY THEORY BECOMES THE BASIS OF AMERICAN INDUSTRIAL STATESMANSHIP

This series of citations could be greatly multiplied by quoting from other economists. In the discussion of the principles and theory of economics, the economy of high wages had for many years been pointed out on the ground that they were as a rule synonymous with greater productive efficiency and reduced costs of operation. The fact that a high level of wages and productiveness was accompanied by rising standards of living and increased consumption of workingmen, which in turn constituted a market for the increased output of industry, had also been commented on by students of industry. It had also been realized and noted

that low prices might also occur along with a high level of compensation to workmen.

Prior to the war, however, these truths had received very little, if any, practical consideration and application. They had been recognized through the years, but their discussion had been limited to academic circles. The first practical adoption of the theory as a working basis was made by Mr. Henry Ford in 1914. He was the pioneer of the new era as to wage theories, but it was years before industry in general accepted his point of view. In establishing a \$5.00 minimum day-wage in the Ford Motor Company plants in the above-mentioned year, he pointed out that high wages could be paid and lower costs realized by a wider adoption of machines and machine processes, and if prices at the same time were lowered, sales would be stimulated by greater consumption. Under these conditions, profits per unit of output would decrease, but the aggregate of profits in money terms would increase. If this policy were extended to industry in general, he claimed, it would result in increasing general consumption and in placing the country on an assured basis of prosperity.

Industry in general, however, refused to change its traditional attitude until long after the war, and, even then, only after the adoption of the policy of wage and price deflation in 1921 had been found futile as a means of reviving prostrate trade and industry. Conditions were altered only after such leaders as Herbert Hoover, Secretary of Commerce, Julian M. Barnes, President of the United States Chamber of Commerce, and many others, had pointed out the fallacy of cutting wages as a stimulus to prosperity or of attempting to return to the so-called "normalcy" of pre-war conditions as to wages and prices.¹ With the new idea once practically and officially sanc-

¹ See pp. 79-83.

tioned by high authorities, however, it spread like wildfire and soon became the basis of general industrial practise.

EXTENT OF THE SANCTION OF THE NEW THEORY

Under the stimulus of this new wage conception, the so-called productive efficiency of industry—as developed by cooperation between workers and management, new inventions, processes, and methods, the installation of new machinery and other capital commitments—was generally accepted by American industry as a reasonable basis for indeterminate advances in wages. Higher wages were further justified by the assumption that increased compensation of the workers resulted in constant gains in purchasing power, which, in turn, permitted further industrial expansion and the maintenance of prosperity.

The extent to which industrial and financial leaders practically applied, sanctioned, and developed this new order in industry may be gathered from the following typical statements:

NATIONAL INDUSTRIAL CONFERENCE BOARD¹:

Another factor in the changed character of the wage problem is the modified attitude of employers toward wage adjustments. A stubborn and unresponsive market, sharp competition or a declining price level have always been taken as an invitation to reduce costs, if possible. Until the last decade the wage-cost seemed the most obvious point at which to effect substantial savings, and consequently a reduction in prices usually called for a reduction in wages. The depression of 1920-21 brought home to many employers the doubtful economic wisdom of cutting wages except as a last resort, because the general wage deflation at that time paralyzed the domestic market. Consequently, the wages were once the first point of attack upon high costs, they have become practically the last, and savings have been effected instead through the greater application of inventive genius and power to the

¹ "Wages in the United States," New York, 1914-1926; pp. 3-4, 11-12.

processes of manufacture, through standardization of product and simplification of distributive machinery. In other words, better management has, where possible, taken up the slack and effected necessary economies without intervention with wage levels in any serious way. Of course, wage adjustments become necessary or advisable from time to time, but industry appears to have departed from the practise, prevalent during the chaotic war and post-war years, of raising or lowering wage scales in establishments throughout an entire industry almost simultaneously and in a drastic way. Such departures from the accepted wage level as have occurred during recent years, with few exceptions have been the result of individual plant action, dictated by circumstances obtaining in that particular establishment or locality, and have not reflected a general policy for the industry as a whole.

Wages and Productive Efficiency

The question naturally suggests itself as to how long new efficiencies in operation can compensate for the maintenance of high wages in periods of depression or permit the increase of wages without a corresponding increase in prices. It may be that industry has so far accomplished only the most obvious improvements in process and shortening of operations; that this movement, only in its infancy, may be developed far beyond what can be imagined at the present time. On the other hand, it may be that, particularly in certain types of industries, the limit of possible improvement is already in sight, and that beyond this point the best scientific effort will be helpless before physical laws which cannot be circumvented. The future alone will hold the answer, but it is certainly too soon to doubt that substantial increase in the efficiency of operation in some fields is still to be made.

Labor's Share in Increased Efficiency

Another aspect of this same question relates to the right of labor to share in the fruits of these economies. Labor's argument, briefly stated in general terms, holds that since, in the final analysis, it is labor which applies and makes effective

the improved agencies of production, it is rightly entitled to share in the increased wealth created. While it is undoubtedly true that the most brilliantly conceived mechanical aid to production is worthless without human direction, it is still open to question whether this makes a case for labor's demand. That fatigue induced by the monotony of work has been increased by the further mechanization of industry, which has been an important feature of improved processes, is undoubtedly possible. On the other hand, physical exertion in many cases has been lightened through the greater application of power, and the determination of relative nervous strain under former conditions, as compared with the present, is a question requiring further investigation by the physiologist or psychologist before final judgment is possible. In any case it is clear that the increase in output per worker in recent years is due altogether to the greater use of machinery and power and to better management, that is, to the use of more capital and managerial intelligence, and not to any greater effort or more efficient application on the part of labor itself. Production efficiencies have for the most part been evolved through careful research and experimentation on the part of highly skilled engineering staffs, and this work has been financed by the employer without any assurance that it would bring him a return. It seems reasonable, therefore, that when this investment has turned out profitably the credit and the profits which result should accrue to the employer and to the investors who supplied the capital for the experiment, and who would not have been likely to undertake it except for the prospect of profit.

HENRY H. WILLIAMS, MANUFACTURER, PHILADELPHIA¹:

I think that there would be very little dissent to the idea that the enormously increased production made possible by power and machines should be distributed broadly and widely throughout our population. The rising tide of education and enlightenment will bring disaster if any serious attempt is

¹ *Industrial Management*, June, 1927, pp. 324-326. Letter and article by Henry H. Williams, "High Wages and Prosperity."

made to concentrate into the hands of the few the advantages of modern production methods. Moreover, any such attempt is entirely unnecessary; there will be plenty indeed for the able and for the lucky, if production and widespread distribution are aided and fostered and encouraged in every possible way. . . .

The remarkable part about all this is that high wages seem everywhere to be an advance requisite to the adoption of machinery. The increased productivity resulting from the use of machinery makes high wages possible, but paradoxically enough it seems necessary to have high wages first, before the men in charge of industry will consider the installation of machinery.

In spite of the fact that wages in our factory have more than doubled in the past fifteen years, our manufacturing costs are actually lower now than they were at the beginning of that period. High wages, forcibly thrust upon us by the war, and always opposed by those in charge of our business, have lowered our manufacturing costs, by making us apply machinery and power to tasks formerly done by hand.

Some time ago, in thinking over this unexpected and unforeseen result of wage increases, the idea occurred to me "What if our wages should again be doubled?" I have been extremely interested in this idea and have reviewed, in careful detail, all the manufacturing operations in our plant, and I am quite certain that if our wage rates should double in a few years' time our costs would be lower than they are now.

N. I. STONE, LABOR MANAGER, HICKEY-FREEMAN COMPANY,
ROCHESTER, N. Y.¹:

The worker should share in the benefits resulting from the introduction of improved machinery and increased efficiency. Whether this share should take the form of higher wages, shorter hours, or a share in the general profits, or in the specific savings resulting from the improvements, is a subject so large as to require separate treatment.

¹ From *Annals of American Academy of Political and Social Science*, Sept. 1919, p. 26.

**FRANK TRACY CARLTON, PROFESSOR OF ECONOMICS IN
DE PAUW UNIVERSITY¹:**

Preceding the nineteenth century and the use of natural power and machinery, leisure and comfort were considered to be the birthright of only a few. Hard and almost continuous toil on the part of the multitude was necessary to eke out an existence. With the enormous increase in the productive capacity of the world has come the possibility of a shorter working day and of a rising standard of living for the mass of toilers. Modern unionism has for its direct aim the betterment of working conditions; and such betterment has been made possible through the technical advances consummated during recent generations.

The maximum amount which an employer can afford to pay an employee is the equivalent of the increased productivity of the plant because of the employee's efforts. But the productivity of the employee depends not merely upon his skill and efficiency but also upon the manner in which his labor is directed and correlated with that of others.

The existing industrial order must prove its right to continued life by efficiency in the production of the necessities and comforts of life for the great drab mass of working human beings instead of the mere piling up of profits.

J. NOBLE STOCKETT, JR., ECONOMIST, UNIVERSITY OF CHICAGO²:

By increased productive efficiency is meant solely participation in revenue gains according to specific contribution to increased output.

In conclusion, then, a permanent wage advance may be based upon the principle of increased productive efficiency, not because of the existence of a definite measurable relation between labor and the increased output arising from the introduction of more efficient machinery, but because it is socially expedient to better the conditions of labor, when such betterment may be effected with the least friction between

¹ From "History and Problems of Organized Labor," D. C. Heath & Co., 1920, pp. 4, 5, 11.

² "The Arbitral Determination of Railway Wages," 1918; pp. 136-57.

employers and employees, and with least chance of passing on the wage advance to the public by increasing the prices of commodities.

JUSTICE LOUIS D. BRANDEIS¹:

The greater productivity of labor must be not only attainable, but attainable under conditions consistent with the conservation of health, the enjoyment of work, and the development of the individual. The facts in this regard have not been adequately established. In the task of ascertaining whether proposed conditions of work do conform to these requirements, the laborer should take part. He is indeed a necessary witness. Likewise in the task of determining whether in the distribution of the gain in productivity, justice is being done to the worker, the participation of representatives of labor is indispensable for the inquiry which involves essentially the exercise of judgment.

WILLIAM HESKETH LEVER, LORD LEVERHULME,
BRITISH MANUFACTURER²:

Therefore, we can learn another lesson from this, that the payment of high wages, provided we can produce articles that will be within the reach of the consumer, is one of the foundation stones of prosperity, in any community of men and women.

WILLIAM H. JOHNSTON, PRESIDENT, INTERNATIONAL
ASSOCIATION OF MACHINISTS³:

Principle (2), according to our unions, constructive functions as well as protective ones in the operation of industry, means the enlargement of the scope of collective bargaining, extending its jurisdiction as it were. Where we now enjoy recognition and have agreements with management, our task is simply to negotiate wage rates, working rules, and prevent

¹ *Industrial Management*, February, 1918, in an article entitled "Efficiency by Consent," p. 108.

² From a lecture delivered before the Industrial Reconstruction Council, May 19, 1919.

³ Report of President William H. Johnston to 17th Convention of the International Association of Machinists, *Machinists' Monthly Journal*, October, 1924, p. 467-71.

injustice to our members. This is our protective function. If, however, we want to lay claim to the argument, as the theory of industrial democracy stipulates, that industry can afford better wages and working conditions when its workers share in the management of it, then we must be prepared to assume definite responsibility for better industrial performance. We must do this by means of our union organizations working in cooperation with management. Thus do we play a constructive, as well as a protective part in industrial government.

Principle (3), agreement between unions and management to cooperate for public service, is the economic justification for enlarging the jurisdiction of our unions in industry. If as a result of cooperation railroads are not going to run better than they were before, then the workers' argument for more democracy in industry comes to naught.

Principle (4), sharing the gains of cooperation, is the economic justification for our part in the cooperative program. Even should industry be run better from the public or management's point of view as a result of cooperation, the workers' interest in cooperation would not long endure, if they themselves did not get tangible benefits out of it. These benefits must take the form, first, of steadier and more employment; second, better employment; third, greater yearly income, and fourth, better wage rates.

WILLIAM GREEN, PRESIDENT, AMERICAN FEDERATION OF LABOR¹:

Labor is interested in the successful management of industry, because it reasons that, with the introduction of economy processes in the development of efficiency and increased production, the cost of manufacturing and production can be reduced without lowering the standard of the workers or reducing wages. Labor firmly believes that if the cost of production of commodities must be lowered it should be accomplished through the promotion of efficiency in workmanship and management, the elimination of waste and the introduc-

¹ American Federation of Labor Pamphlet, "Unions Reduce Industrial Waste," by William Green.

tion of economy processes. This belief is contrary to the old accepted rule of reasoning which held that a lowering of the cost of production could only be brought about through a reduction in wages.

High wages can command efficiency in service. In turn, the efficiency so secured is reflected in the volume of productivity and, in many instances, in the character and quality of the manufactured article.

AMERICAN FEDERATION OF LABOR CONVENTION, REPORT OF
COMMITTEE ON RESOLUTIONS, ATLANTIC CITY, 1925:

We hold that the best interests of wage-earners as well as the whole social group are served in increasing production in quality as well as quantity, and by high wage standards, which assure sustained purchasing power to the workers and, therefore, higher national standards for the environment in which they live and the means to enjoy cultured opportunities. We declare that wage reductions produce industrial and social unrest, and that low wages are not conducive to low production costs.

We urge upon wage-earners everywhere: that we oppose all wage reductions and that we urge upon management the elimination of wastes in production in order that selling prices may be lower and wages higher. To this end we recommend cooperation in study of waste in production which the essay of the Federated American Engineering Societies covering important industries has shown to be 50 per cent. attributable to management and only 25 per cent. attributable to labor, with 25 per cent. attributable to other sources, principally managements in industries producing commodities for any single industry under consideration.

Social inequality, industrial instability and injustice must increase unless the workers' real wages, the purchasing power of their wages, coupled with a continuing reduction in the number of hours making up the working day, are progressed in proportion to man's increasing power of production.

. . . Unquestionably the welfare of any people as a whole

is directly related to the productivity of that people. The difficulty is encountered when it is attempted to apportion returns on the basis of individual productivity.

However, progress that has been made in some cases in the development of the science of industrial management shows it is possible to look forward along this line with some hope of results that will afford justice to the workers and to society at the same time.

"LABOR'S MODERN WAGE POLICY"

In 1927 President William Green, of the Federation of Labor, issued an analysis and an elaboration of the declaration of the Atlantic City Convention of 1925 relative to wages and productivity. This interpretative statement developed the "modern wage policy" of the Federation and held forth the "social wage" as the goal toward which the organized labor was striving. The new conception as thus put forward laid fundamental emphasis upon the necessity of labor receiving its proper share in the output of industry and inaugurated a movement to enable the various unions to realize this object. It is fraught with such significance relative to the future determination of wages that it is reproduced in full below:

One of the chief tasks of organized labor has always been to secure higher wages for workers. The struggle for higher wages now enters its third phase.

In the earliest period organized labor struggled for *higher money wages*. Instead of \$10 per week it tried to secure \$11 per week, and the next year perhaps \$12.

A second period in the wage policy began as organized labor realized that the amount of money is no adequate measure for deciding whether a wage is high or low, and that it is necessary to relate money wages to prices. Then organized labor struggled for *higher real wages*—that is, wages that would buy more.

Very obvious changes in prices induced organized labor to realize the necessity for calculating in real wages. Very obvious changes in productivity of labor to-day induce organized labor again to widen its wage policy.

Higher money wages from an economic point of view do not improve the situation of the worker if prices increase more than money wages.

Higher real wages from a social point of view do not improve the situation of the worker if productivity increases more than real wages.

For, higher productivity without corresponding increase of real wages means that the additional product has to be bought by others than the wage earner. This means that the social position of the wage earner in relation to other consumers becomes worse, because his standard of living will not advance proportionately with those of other groups.

Deteriorating social position—that is, declining purchasing power of the mass of the wage-earners in relation to the national product—brings about industrial instability which will develop into industrial crisis.

The American Federation of Labor is the first organization of Labor in the world to realize the importance of the factor productivity in economic society. It no longer strives merely for higher real wages; it strives for *higher social wages*, for wages which increase as measured by prices and *productivity*.

This modern wage policy lifts the movement to an absolutely new level. For higher real wages meant only: betterment of the economic position—while higher social wages mean: betterment of the economic and *social* position of the worker. The modern wage policy guarantees an active but stable development of industrial society.¹

President Green's declaration as to "social wages" was later more elaborately explained by a series of articles in *The American Federationist* by members of the staff of the Research Department of the American Federation of

¹ "Organized Labor's Modern Wage Policy," Research Series No. 1. American Federation of Labor, Washington, 1927.

Labor, from which the following definition has been taken:¹

Real wages and family budgets do not give the full picture of the wage-earner's economic and social position. Let us assume that from one year to another real wages of the manufacturing wage-earner increase by 10 per cent. That means he can buy in the second year 10 per cent. more commodities than in the first year. Let us assume that at the same time production increases by 20 per cent. This means that 20 per cent. more commodities are offered on the market. If the wage-earner's real wages have increased only by 10 per cent. he can not share the full amount of the more production of 20 per cent. It is true he can buy 10 per cent. more commodities than he could buy the year before, but he has helped to produce 20 per cent. more commodities than all the commodities produced the year before. His share in the more production is one-half, the other half of his share in the opportunities which this more production offers either goes to other consumers in addition to their own increased share or is not used at all, which means that a certain part of the national product has to remain unsold, that stocks increase and that industrial prosperity is menaced. The social position of the wage-earner, his share in growing opportunities which increasing production offers, his purchasing power measured by national production then has declined. It is in order to measure the social position of the worker, his share in growing opportunities, his purchasing power in relation to the national product, that we calculate social wages, *i. e.*, money wages related to prices and production.

These striking declarations and the demand for an equitable participation in the output of industry soon became the fundamental plank in the Federation's wage platform. The constituent unions of the Federation took it up as a practical method of measuring standards in the vari-

¹ Article entitled "Wages in Manufacturing Industries, 1899 to 1927," by Jurgen Kuczynski and Marguerite Sennicid—*American Federationist*, July, 1928, p. 830.

ous industries. Explanatory studies and suggested methods of practical application were also prepared and distributed by the national Federation office.¹ As the result of this educational work, the organized labor movement has irrevocably espoused the productivity theory of wage-fixing as the basis of future policy and action.

THE PRACTICAL EVOLUTION OF THE THEORY

So far as the history of the development of the "productive efficiency" theory as to wages is concerned, the remarkable feature of the movement was, as has already been shown, that the idea has been repeatedly put forward by labor organizations, both before and immediately after the war, as the justification for wage claims, or as the ground for a more equitable distribution of the output of industry.² Their efforts, however, had been more or less futile. Students and writers on economics had always, of course, clearly developed the relation between rates of wages, labor costs and the productivity of labor, but even they had been most interested in showing that labor could hope to secure more only by producing more. Their productivity theories had not gone further in a practical way than preachments against expecting wage advances without increasing output.

Altho the principle had been used in a case in 1910, the first comprehensive presentation of the "productive efficiency" theory was put forward by the Brotherhood of Locomotive Firemen in a wage arbitration with Eastern railroads in New York City in 1913. The effort was so successful in the way of securing advances in rates of pay, that the same argument was made the basis of their claims by both Locomotive Firemen and Engineers in 1914-1915

¹ "Wages and Labor's Share," by Jurgen Kuczynski and Marguerite Steinfeld—Research Series, No. 2; also "Wages and Labor's Share in the Value Added by Manufacture," Research Series No. 4. American Federation of Labor, Washington, 1927.

² See pp. 32-40, 69-70.

in an arbitration with the railroads located West of the Mississippi River. The extent and scope of the analysis and arguments presented in this and subsequent cases has already been shown in detail in the preceding discussion.¹

From this time forward, the "so-called productive efficiency argument" became a part of practically all railway wage proceedings. During the depression of 1920-1921, when railroad labor controversies reached a post-war climax, the "productive efficiency" argument was further elaborated to account for the financial condition of the railroads at that time. It was claimed by the economist of the transportation employees that the physical and operating deficiencies of the railroads had arisen from the improper diversion of past revenue gains, and the proper policy to adopt for the rehabilitation of the industry was not to attempt to reduce wages or labor costs by wage-cuts, but for the railroad fiscal agents to arrange extensive credits so that their physical inadequacies could be remedied and lower operating costs assured. The representatives of all classes of railroad employees supported this view as to the existing plight of the transportation industry in proceedings before the United States Railroad Labor Board in Chicago, in April, 1921, as follows:²

The results of these methods of financial control, so far as the financial status and physical condition of the transportation industry prior to the war is concerned, together with the relation of the employees to the final situation which developed, may be briefly summarized as follows.

1. The increased returns resulting from the efforts of operating and mechanical officials, and of railway employees in general, were absorbed by unwarranted security issues and

¹ See pp. 32-40.

² The U. S. R. R. Labor Board, Docket No. 353. Statement of W. Jett Lauck on Behalf of the Organizations Represented in Groups 2 and 3, pp. 351 et seq.

distributed as bonuses to the underwriting syndicates or to the holders of securities.

2. Railroad debts as a rule were not paid. Old obligations were refunded into new issues, and fixed charges accumulated and increased.

3. Proper reserves for depreciation of property and equipment were not set aside from current earnings.

4. As the costs of materials and supplies advanced, the net income of the railroads declined.

You are familiar with that situation. Prior to the war, with these requirements as to fixed charges and as to the payment of securities which had been issued in an unwarranted way, with the costs of operation and materials and supplies advancing, the net income of the railroads constantly declined.

5. As the result of this situation, the margin of safety of railway net income over fixed charges was so reduced that railroad securities could not be sold, and railway credit was impaired. The attempt was made to have freight rates advanced, but the increases were not sufficient to offset the tendencies which had been developing for a number of years.

6. The final outcome of the financial management of the railroads prior to the war came in 1917, when the entire industry collapsed because of the unusual pressure placed upon it. Operating and mechanical officials, because of the absorption of earnings arising from financial mismanagement, had been forced to defer much-needed improvements on account of a lack of funds or credit, and had been compelled to permit the physical deterioration of the equipment and properties of the railway companies. As a consequence, the transportation industry was unable to withstand the unusual strain which our entrance into the war imposed upon it.

7. Altho the employees were debarred from a fair participation in earnings, labor costs of operation steadily declined up to 1914. Despite the physical exploitation of the railroad properties by those in financial control, labor and other costs were kept at a low level by the efforts of operating and me-

chanical officials and by reason of the fact that rates of pay of employees were inadequate, working standards were bad, and hours on duty excessive.

We do not think there is any need of attempting to prove what would be conceded, that the labor costs of operation measured in ton miles or traffic units prior to the war, say, from 1900 to 1917 or 1890 to 1917, due to the development of operating efficiency in train loading and the carrying of more ton miles per each unit of tractive power, that there was a steady, remarkable decline in the labor costs of operation per unit of traffic handled, extending up to 1910, after 1910 probably a loss in the decrease or an increase over 1910, but, as a whole, for the pre-war period a steady decline in the labor costs of operation as compared with the increasing costs resulting from the financial mismanagement on the other side and the hampering of the operating efficiency of the railroads from a physical standpoint.

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From the foregoing presentation of data, we believe the following conclusions may now be drawn:

1. Railroad management, due to an improper financial control, has been productively inefficient, and the existing high operating costs of the railroads are directly traceable to this financial control and resultant inadequacies of management.
2. Railroad employees have constantly grown in productive efficiency.
3. If management had been as efficient as labor, labor and other costs of operation would be very much below their present levels.
4. Those in financial control of the railroads are now attempting to take advantage of a temporary depression to reduce rates of pay of railway employees or to deflate railroad labor, and thus add to their future gains and conceal their present inadequacies.

By way of explanation, at this time, we might say that in speaking of the inadequacies of management, we do not wish to be construed as charging the operating and mechanical

officials of the railroads as being inefficient or wasteful. As a whole, we consider that the operating and mechanical officials have an extraordinary and unimpeachable record. They have been the victims of improper or misguided financial mismanagement. Had the financial directors of the transportation industry been as efficient, as honest and as unselfishly devoted to their duties as the operating and mechanical officials of the railways, the transportation industry in this country at the present time would be without parallel for service and efficiency, would be tremendously profitable and there would be no railroad financial or labor problems. The shortcomings of railway management at the present time are the result of the inherited as well as the existing evils of the concentration of the financial control and management of the transportation industry.

The general conclusion of the railway labor organizations in 1921, therefore, was that altho the productive efficiency of employees had constantly increased, the operating efficiency of the transportation industry had been seriously impaired by permitting physical inadequacies in roadway, equipment, and other facilities to develop. As a consequence, it was asserted that these inadequacies should be corrected and wages permitted to remain as they were.

In succeeding railway wage adjustments and arbitrations extending to the present time the productive efficiency principle has been given a prominent place by railroad employees in negotiating with management and in presenting their cases to arbitration boards. Street railway employees also laid stress upon this point in submitting their case to the Federal Electric Railways Commission in 1919. The principle has also been constantly advanced in individual street railway arbitrations in various cities.¹ It also played a prominent part in 1920 in the presentation of the requests

¹ Proceedings of the Federal Electric Railways Commission, Washington, 1919.

of the mine workers to the United States Bituminous and Anthracite Coal Commissions. In numerous other cases, in both basic and secondary industries, labor has also used the productive efficiency argument as the justification for higher rates of compensation. In addition to specific declarations, official recognition has recently been given to this theory of wage determination by the American Federation of Labor by publishing each month in *The Federationist* a series of statistical tables showing the extent of labor's participation in the output of the basic industries.

SPECIFIC PRECEDENTS ESTABLISHED

The results secured from the advocacy of this theory before arbitration boards and other agencies by organized labor have primarily arisen in a general way by reference to the principle involved and not through any specific or formal acceptance of the theory. Since 1923, obviously, the great gains have come from the general adoption of the fundamental theory by the industrial world in considering the relation between high wages, labor costs and purchasing power of consumers.

AMALGAMATED CLOTHING WORKERS PIONEERS IN DEVELOPING PRODUCTIVE EFFICIENCY

The Amalgamated Clothing Workers of America, so far as the organized labor movement is concerned, has been the pioneer in cooperating with management for increased efficiency and productivity. Through mutual agreement between the union and management, actual productive standards as related to rates of pay have been established in many clothing factories. In recent years, the organization has been assuming a constantly larger share of the functions of management, and the savings that have been effected by this procedure have accrued to the benefit

of union members in better standards of work and higher incomes. It has also been the policy of the Amalgamated to develop among its officers a large number skilled in the technical and business problems of the clothing industry, who apply this knowledge to specific problems in plants in their territories. In a number of cases, due to their suggestions and activities, methods have been revised and processes changed, with the result that costs of production were reduced and wages increased. On three occasions, firms which were threatened with forced liquidation have been given financial and other assistance by the union. At least two of these companies would have been compelled to discontinue business had it not been for the assistance of the Amalgamated. Together they now give employment to 4,000 workers. In general, it may be said that it has been the steady and successful policy of this enlightened labor organization to cooperate with management to realize increased productivity of and higher rates of pay for its members, and this policy has been practically applied as far as possible in various working agreements and arrangements.

THE "B. & O. PLAN"

In a more specific way, one of the noteworthy achievements by organized labor is to be found in the definite agreement for union-management cooperation adopted by the Federated Shop Crafts and the Baltimore & Ohio Railroad in 1922, popularly known as "The B. & O. Plan." It is based on an agreement that employees shall participate in the gains arising from their cooperation with management. Since it was developed on the Baltimore & Ohio Railroad, the same plan has also been put into effect on three other railway systems—the Chesapeake and Ohio, the Chicago and Northwestern, and the Canadian National

Railways. Great progress has already been made under this arrangement, but there has not as yet been sufficient time or opportunity to work out a permanent method for the participation of employees in actual revenue gains, the chief benefits thus far being regularization in employment and improvements in working conditions.

**MITTEN MANAGEMENT AND ITS AGREEMENT WITH
ORGANIZED LABOR**

The most comprehensive and successful application of the theory of productive efficiency is to be found in the system of cooperation between employees and management on the Philadelphia Rapid Transit Company under what is known as the Mitten Plan. This plan has had a practical, evolutionary development since its inauguration in 1911. Under its provisions employees were at first guaranteed a certain agreed-upon participation in gross operating revenues. Later this method of sharing productive gains was changed to an arrangement by which employees received each year 10 per cent. of the revenue gains arising from increased economies and efficiencies. In 1926, a further change was made by which both employees and management receive an equal share, which for the employees is in addition to their usual compensation, in the gross revenues of the Company. Employees have for a number of years used their participation in increased productive gains in purchasing stock of the Company, and at the present time the controlling interest is held and voted by employees collectively through their own trustees.

For many years, Mitten Management operated its street railway properties in Philadelphia and Buffalo on a non-union basis. There was no discrimination against members of labor unions, but there were no agreements with labor organizations, excepting one of several years' duration

in Buffalo. In the early part of 1928, however, an agreement was negotiated with the Amalgamated Association of Street and Electric Railway Employees of America. This arrangement was to apply at first to new properties taken over by Mitten Management, but after sufficient experience had been had to demonstrate the cooperative efficiency of the Amalgamated, the Philadelphia and Buffalo properties might be unionized. The real test was to be the productive efficiency of the union. Moreover, the union was to participate equally with management in the productive gains arising from cooperation. The salient features of this very significant undertaking are given below, as taken from the agreement itself:

Mitten Management reiterates its desire to deal with organized labor whenever and wherever any union organization will undertake to cooperate for increased economic efficiency. . . .

Mahon and associates, speaking for the Amalgamated Association of Street and Electric Railway Employees of America, being also desirous of cooperating in economic accomplishment and of aiding their membership to a 50-50 participation in the rewards rightfully paid to men and management, in addition to the present wages paid, have now come to an understanding with Mitten Management, Inc. . . .

So far as Philadelphia and Buffalo are concerned, conditions there are to remain as at present in so far as organization activities are concerned, it being desirable that the situation on these properties shall remain as at present in order that the standard of economic excellence of these companies now being operated by Mitten Management be the standard by which union performance in cooperating with Mitten Management on other properties shall be measured. When cooperation between the Amalgamated and Mitten Management has developed to a point where the results are equal to those obtained on these properties, the matter of

union-management agreements on these properties may be discussed and be made the basis of further agreement. . . .

In addition to the usual results of collective consideration, it is the further object of this arrangement to secure for all interested parties the advantages of collective effort and accomplishment. To the owners this will mean a fair return on their property; to the public an adequate and efficient system of transportation; and to employees, in addition to wages sufficient for the necessities of life, comfort and savings, an opportunity to participate in increased earnings made possible by their increased effort and productive efficiencies. Mitten Management and Amalgamated Association are agreed that the same 50-50 participation shall be effective between "management and union" as now exists between "management and men," and the sense of this agreement is that both shall supply the same degree of cooperation and both similarly shall participate in the results secured therefrom.

The considerations leading to the agreement and the important objects had in mind by both parties are clearly set forth by W. D. Mahon, President of the Amalgamated Association of Street and Electric Railway Employees, in an article which appeared in *The American Federationist* for June, 1928, some of the most important passages of which are quoted below:¹

The Mitten Company has properties now organized with their employees on a cooperative basis. The Amalgamated Association has many unions throughout the United States and Canada that have their working contracts with the various street railway companies. We therefore appreciated each other's position and decided to move with caution and care, not disturbing at the present time either of our present organizations. We are planning for the future. The Mitten Management is acquiring and taking over street railway

¹ Article entitled "An Agreement for Cooperation," by W. D. Mahon, in *American Federationist*, June, 1928; pp. 665-666.

properties. On some of them we have unions. On others there may be no unions. These newly acquired properties, if we have organizations on them, will be brought at once under the cooperative plan. If they are unorganized we will organize them and bring them under the cooperative plan.

The first thing we will do in bringing these properties under the cooperative agreement will be to establish a wage sufficient for the necessities of life, comfort and saving. Then we will establish the profit-sharing on the 50-50 basis. The agreement entered into provides for arbitration in case of disputes over any of the questions which can not be mutually agreed upon. In that respect this agreement is based upon the laws of the Amalgamated Association and carries the same arbitration provisions as all of our contracts with the various companies with which we now deal.

In working out this agreement for cooperation we have carefully surveyed the industrial situation that now prevails. Both sides fully appreciate that there is something radically wrong with our present basis of dealing, and fully believe, if our modern civilization is to continue and advance, our economic life must advance equally with civilization, or down will go civilization to destruction. Capital, with its autocracy, must be curbed. Labor, with its curbed and chained power, must be freed; and our belief is that the way to bring about the proper labor and economic condition is to harness, through cooperative organization, labor and capital into a united team of industrial democracy, and through cooperation, each having its own organization, standing squarely upon its rights, with the provisions of arbitration, make them work even, each pulling its share of the burden and receiving its full share of the products produced, keeping in mind the public and their respective relations to the same in such a manner as to always keep in sight the fact that true success depends upon equal justice and the rights of all classes concerned.

We appreciate that this is a big undertaking. It is a radical change. It will have its critics and opponents. We do not

expect to bring the millennium within a day. But we do sincerely feel that our position is a step in the right direction, an effort at laying the foundation for the establishment of cooperation that ultimately will bring economic justice and fair play, not alone to the workers but to humanity itself.

This agreement constitutes one of the most significant precedents in the modern labor movement. It frankly recognizes the productive efficiency theory of wage determination and makes it the basis of economical accomplishment through the joint efforts of management and of organized labor. In addition to accepting the principle it also provides practical methods for the distribution of revenue gains. Experience under its provisions will undoubtedly have a profound effect upon wage relations in the organized labor movement.

PRACTICAL EFFECTS IN BASIC INDUSTRIES

The complete acceptance of the productive efficiency theory during the past five years by the business and industrial world has been attended by undreamed-of results. There has been a remarkable expansion in industrial output, which has been accomplished by fewer wage-earners and by a lowering of labor and other costs of production. Output per employee and per man hour, as well as rates of pay, have greatly increased. Alongside of this unusual performance there has also been a steady advance in the general margin of profit. These unprecedented results were forcibly summarized by the United States Department of Commerce in 1926 as follows:¹

One of the most important facts in regard to American industry is its ever increasing efficiency. During the first quarter of the present century the number of wage-earners in our factories increased about 88 per cent., while their

¹ "Commerce Yearbook, 1926," Vol. I.—United States; United States Department of Commerce; pp. XIV-XV.

quantitative output increased by 178 per cent. As a result, production per wage earner in 1925 was 48 per cent. greater than in 1899. Even in the short period from 1919 to 1925 the output per wage-earner in our factories increased about 40 per cent. as a consequence of the greater efficiency of the wage-earners themselves, improved management, more scientific methods and waste elimination, and greater use of machinery and other forms of capital as an aid to human effort. The advances in educational standards and in scientific research are the fundamental causes of this progress in industry.

In the years since the war there has been a considerable increase in the total agricultural production of the United States and an even greater gain in the average output per worker. In 1925, the most recent year for which complete data are available, the quantitative output of agricultural products was 8 per cent. larger than in 1919, while the output per agricultural worker showed an increase of 18 per cent.

A more extended analysis of the causes and results of our new industrial policy was also made in a comprehensive but cogent way by Secretary Hoover in the course of a public address in New York City in March, 1926. On that occasion, he said in part:¹

Our work people have increased in education and skill. Above all, they are largely free from the economic fallacy that restriction of individual effort increases the number of jobs. Our national unions have long since declared against such theories. We are reaping the benefits of some 600 industrial research laboratories, mostly established in the last ten years. They are ceaselessly searching for invention and for every economy in the use of materials and method. . . .

These are the reasons why we are able to sell goods of high quality, produced under the highest real wages in the world, in competition with goods produced under lower

¹ Quoted from "Industry's Coming of Age," by Rexford Guy Tugwell; Harcourt, Brace & Co., New York, 1927; pp. 10-11.

standards of living. These methods are not secret. They are open to the world. But they are rooted not alone in technology, which can be adopted by all intelligent people; they are rooted in social conceptions which penetrate far deeper and which not only promise greatly for the future in our standards of living at home, but, of more pertinent interest on this occasion, provide the basic assurance of our continuing growth in foreign trade, both exports and imports. These are the fundamental forces which promise for us our share of the world's increasing demands even of competitive goods—if we keep them in motion.

In this connection extended investigations and analyses have been made by both the Department of Commerce and the Bureau of Labor Statistics of the Department of Labor. The following table, which epitomizes the development of productivity from the year 1919 to 1925, both for industry as a whole as well as by individual workers, was prepared by the Department of Commerce:

INDEX OF INCREASED PRODUCTIVITY IN MANUFACTURING INDUSTRIES, 1925 (1919 = 100)				
	Physical Volume of Production	Number of Persons	Primary Horsepower	Production per Person
Vehicles for land transportation	283.3	108.3	182.5	220.0
Rubber	158.3	79.7	152.8	199.3
Metals and metal products other than iron and steel...	132.4	81.2	114.0	163.1
Stone, clay and glass.....	179.1	115.1	151.5	155.6
Tobacco manufactures	124.4	79.9	97.0	155.7
Chemicals and allied products.	140.6	91.8	147.1	153.2
Food and kindred products...	116.4	81.3	115.8	143.2
Paper and printing.....	152.8	108.8	131.1	140.4
Iron and steel and products...	131.5	95.6	114.1	137.6
Lumber	113.6	94.1	86.9	120.7
Textiles and products.....	119.3	104.5	126.6	114.2
Leather, and its remanufactures	93.4	90.6	106.9	103.1
Ship and boat building.....	7.0	13.5	54.8	51.9
All industries	128.6	91.4	121.8	140.7

In the investigations made by the Bureau of Labor Statistics, allowance has been made for the shortened hours during recent years as well as for the decline in the number of workers. On the basis of 1914 as 100, the following advances in the output of individual workers, by leading industries, are shown for the period 1914-1925:

Industry	Per Cent Increase in Individual Output
Iron and Steel Industry:	
As a Whole.....	59
Blast Furnaces	54 (to 1923)
Steel Works and Rolling Mills.....	59
Boots and Shoes.....	6
Leather Tanning	26
Slaughtering and Meat Packing.....	27
Petroleum Refining	83
Paper and Wood Pulp.....	34
Cement Manufacturing	61
Automobiles	172
Rubber Tires	211
Flour Milling	36
Cane Sugar Refining.....	28

During the same period, the productivity of all steam railroad employees increased 40 per cent. per man-hour, and of train and engine crews alone 34 per cent. As measured by the average daily tonnage per man employed, the bituminous coal miner produced 25 per cent. more in 1925 than he did in 1915.¹

In terms of the increase of horse-power, and of output per wage-earner in manufacturing, the National Industrial Conference Board has prepared the following striking comparison, by years, for the period 1899-1925:

¹ For studies of increased productive efficiency of industry and of labor, see the following: "Commerce Yearbook, 1926," pp. 1-26; "Handbook of Labor Statistics," U. S. Bureau Labor Statistics, 1924-1926, pp. 528-558; "American Labor Year Book, 1928," pp. 39-46; "Industry's Coming of Age," by Rexford Guy Tugwell, Harcourt, Brace & Co., New York, 1927, pp. 1-28; Bulletins No. 7 and No. 20—National Industrial Conference Board, Inc., New York.

Cen- sus Year	Horsepower Per Wage- Earner	Product Per Wage-Earner		Horsepower Per Wage- Earner	Product Per Wage-Earner	
		Actual	1914		Actual	1914
		Dollars	Dollars		Dollars	Dollars
1899	2.11	\$2,420	\$2,992	66.6	69.9	86.4
1904	2.43	2,714	3,214	76.7	78.4	92.9
1909	2.80	3,146	3,470	88.3	90.9	100.3
1914	3.17	3,461	3,461	100.0	100.0	100.0
1919	3.24	6,868	3,395	102.2	198.4	98.1
1921	6,260	3,489	180.9	100.8
1923	3.77	6,872	4,250	118.9	198.6	122.8
1925	4.27	7,480	4,681	134.7	216.1	135.2

The following table includes practically the same years (1898-1926), but also introduces a comparison of three periods. It is abridged from a compilation made by Mr. Woodlief Thomas, of the Research and Statistical Division of the Federal Reserve Board.¹ The striking reduction in the number of industrial workers and the increase in output per worker during the period 1920-1926 are evident from a glance at the comparisons:

**AVERAGE INCREASE IN PRODUCTION OF MAJOR
BRANCHES OF INDUSTRY, BY PERIODS,
1898-1926**

Manufactures indexes are computed from data for 1899, 1909, 1919, and 1925. Other data are means of three years—with a few exceptions.

Period and Branch	Number of workers (thousands)		Index for end of period (Beginning=100)		
	Beginning of period	End of period	Workers	Out- put	Output per Worker
1898-1900 to 1908-1910	17,570	21,685	123½	148	120
1908-1910 to 1918-1920	21,685	25,235	116	133	115
1918-1920 to 1924-1926	25,055	23,380	93	120	129
1898-1900 to 1924-1926	17,570	23,510	134	239	178

The foregoing figures are symptomatic of industry in general. There had been increases in industrial output, of course, per employee and per man-hour, accompanied by decline in labor costs, but at a rate much less than that

¹ *American Economic Review*, Proceedings, Fortieth Annual Meeting, December, 1927, p. 124.

which has distinctly characterized the post-war period. The stupendous industrial effort put forth during the World War taught the great value of cooperation, coordination, and mass effort. The enlightened constructive policy which was finally adopted after the breakdown in 1920-1921, and its two-year wake of depression—a program which conceded an indeterminate advance in wages, provided productivity was increased and costs reduced—has practically produced an American industrial revolution of epoch-marking significance. Its results have attracted world-wide comment and study. The leading industrial nations have sent special commissions to the United States to study the secrets of American accomplishment.¹ Undoubtedly the policies which were inaugurated here in 1923 will in time revolutionize industrial methods and performance throughout the world.

COMPARISON OF USE OF POWER AND RELATIVE EMPLOYEE PRODUCTIVITY IN GREAT BRITAIN AND THE UNITED STATES

The importance of the use of power and mass production in the United States as compared with Great Britain was very forcibly brought to light in a study recently made by the National Industrial Conference Board.² The Board showed the following summary of the facts developed:

... The amount of horse-power and the value added by manufacturing per wage-earner for each of the eight industries compared in the two countries are given in the following table, data for Great Britain referring to the year 1924, those for the United States to the year 1925:

¹ See footnote, p. 3.

² National Industrial Conference Board, New York, Press Release for August 6, 1928.

Industry		Horse-power per wage-earner	Value added per wage-earner
Steel Works and Rolling Mills	{ Gt. Brt.	9.15	\$ 975
	{ U. S.	12.85	3,059
Machinery	{ Gt. Brt.	2.60	997
	{ U. S.	3.62	3,325
Motor Vehicle	{ Gt. Brt.	1.13	1,206
	{ U. S.	2.75	4,096
Electrical Machinery	{ Gt. Brt.	1.28	1,198
	{ U. S.	2.46	3,765
Ship Building	{ Gt. Brt.	2.70	783
	{ U. S.	6.04	2,208
Cotton Goods	{ Gt. Brt.	3.14	725
	{ U. S.	5.02	1,431
Woolen and Worsted Goods	{ Gt. Brt.	1.97	874
	{ U. S.	3.28	2,164
Boots and Shoes.....	{ Gt. Brt.	.48	846
	{ U. S.	.67	2,144

In another connection the Conference Board also shows that there has been practically very little increase in mechanization of industry and labor productivity in Great Britain for the 17 years ending 1924.¹ While the returns for the British 1924 Census have not been completed, an analysis of eight leading industries showed that, on the basis of 1913 prices, the output per worker in 1907 was £316 or approximately \$1,540 as against £357 or \$1,740 in 1924, an increase of only \$200 or 13 per cent. per worker. During practically the same period, the output per worker for the leading industries of the United States advanced 35 per cent., or, as the Board states: "Eight selected major manufacturing industries in the United States which use an average of 1½ as much horsepower per wage-earner employed as do the same industries in Great Britain, turn out, largely as a result of this greater use of power, from 2½ to 3 times as much production per wage-earner employed. This greater productiv-

¹ "Wage Earners, Horse Power, and Product," Conference Board Bulletin No. 20, August 15, 1928.

ity per worker accounts largely for the higher wage levels and living standards prevailing in the United States. . . .

THE PRESENT SITUATION AS TO WAGE FIXATION

Several noteworthy conclusions are apparent at the present time in the United States so far as the theory of productive efficiency as the basis of wage determination is concerned. Some of these are confined to the present situation and others are pregnant with significance as to the future.

In the first place, industry has irrevocably committed itself in a practical and concrete way to the attitude and policy that wages may increase indefinitely so long as labor costs are not increased or profits reduced. Constant wage advances in recent years have been made on the basis of this theory. This has been done in the way of general policy without specific reference to the performance of definite groups or occupations and without relating the increases granted to any principle or method of determining what the real share of labor in productive gains should be. This technical and difficult problem, both from the standpoint of industrial management and from that of social statesmanship, remains for future determination.

From the standpoint of organized labor, in the second place, altho the productive efficiency theory was originally put forward by its representatives, the real advance has come, as has already been stated, as the result of the change in the general attitude of industrial leadership, which has coupled up the increased productive efficiency theory with that of higher wages as the basis of increased purchasing power and prosperity. Labor has quickly taken advantage of this situation. It has not as yet, however, gone into details. Obviously, it must in time raise the specific issue of an adequate wage for those in the lowest

occupational groups, and secure, both for the lower and higher groups of wage-earners, an agreement from employers as to a practical, technical method for determining specifically what the respective shares of each and all groups shall be in the productive gains in industry. In this connection, the American Federation of Labor has already established a new basic principle, which it has termed "the social wage," namely, that it is not sufficient for labor alone to have a share in increased productivity, but such a share should be proportionate to other classes in order that the economic and social advancement of wage-earners may be relatively the same as other groups.

Organized labor and consumers will also in due time undoubtedly take up practically the relation of the methods of security flotations and corporation finance to productive gains, and raise the question as to the participation of investment bankers and the owners of corporate securities. These questions are ultimately fundamental and will require time and constructive thought and effort. For the immediate future, the pressing problem will undoubtedly be the working out of the shares of occupational groups in a practical and just way. These and other important questions may be also more comprehensively weighed in a subsequent chapter, after the next and final development of post-war wage theory has been considered, namely, the relation between wages, purchasing power, and industrial prosperity.

CHAPTER IX

INCREASED CONSUMPTION AND PROSPERITY ACCEPTED AS AN OUTGROWTH OF LOWER COSTS AND HIGHER WAGES

Leaders of industry, by accepting and applying the principle of increased productive efficiency as the underlying factor for determining wages, found a way by which, even in the face of the depression that continued after the breakdown in 1921, rates of pay of industrial workers might be maintained or increased without the impairment of profits or returns to capital. Fundamentally, this new policy did not have its origin in any humanitarian considerations, but arose from the realization that if prosperity was to be revived there must be a corresponding expansion in domestic consumption.

Europe was impoverished, and, urgent as were her needs, she could not buy our goods except through the proceeds of loans or credits extended by the United States. In the period 1921-1922, the bases for giving either public or private credit abroad were very limited. The payment of war debts to this country had not been arranged. Almost all the leading foreign nations were still on a depreciated paper basis; budgets had not been balanced, and private industry had not been rehabilitated since the war. As a consequence, the possibilities of European purchasing power were very limited. It was, therefore, evident that American prosperity must be stimulated and maintained, for a considerable time, at least, on the basis of its own resources. From this situation came the practical working procedure that advances in wages would make possible

general increases in consumption and general purchasing power. This expansion in the demand for commodities, it was assumed, would in turn also make possible further wage advances and prosperity, for the reason that the widening demand for and consumption of manufactured products would enable greater economies to be realized through mass production.

Since the year 1923, therefore, American industry has proceeded more and more upon these assumptions. Wage-cuts as a means of heading off depressions have been discarded as a worn-out fallacy. Increases in wages have been urged as a substitute.

PURCHASING POWER OR CONSUMPTION URGED AS THE DOMINANT FACTOR IN PROGRESS

So far as wage rates are concerned, the result of the adoption of this new view of progress has been indeed surprising. The consuming power of the people has increased by leaps and bounds. Production has not only been guided at a comparatively even pace with advances in consumption, but has also been made to yield an increasing quantity of commodities at a lower level of prices. Standards of living of industrial employees throughout the country have risen to heights never before attained.

What had been accomplished in this direction prior to 1923, and never realized, has been cited as an earnest of the still greater achievements possible. It has repeatedly been pointed out on all sides that there has been a great growth in our power to consume, due to greater productivity; that the increased use of what were formerly regarded as luxuries has not been an extravagance or any retrenchment upon savings, but "the product of better organized effort" and a condition of continued prosperity. By way of illustration the Secretary of Labor, Mr. James J. Davis, has

put forward the claim that high wages and increased purchasing power of wage-earners constitute the basis of our prosperity, and, in reality, are "profit and prosperity insurance." In a recent article he said:¹

It is not enough, in other words, merely to reduce costs. If that were sufficient, China, with its 900 millions, would be the world's greatest consumer. The truth is that the advance of civilization throughout the history of the world has been controlled to an equal or greater extent by the rise of wage levels, and our discovery of the importance of high wages in maintaining markets has had more to do with the making and the maintenance of our prosperity than any other single element. Any one who cares to look into the records of business will find that this discovery is a complete and revolutionary reversal of the old theory, persisting for thousands of years, that high profits come from low wages. We are not wholly rid of this theory yet, and, altho it is declared to be abandoned, it is this which is responsible for the idea that business may be made better by curtailment.

When you come right down to it, therefore, the fundamental reason why certain of our large industries are now and have been for some years unable to sell their entire production is because too many workers are unable to buy. . . . For approximately two and a half times as much wages, in other words, he becomes ten times as good a customer for the textile industry, and so much better proportionately for the furniture and carpet makers, for the food dealer and the real estate man and everybody else with things or services to sell. I know that this sounds like a mathematical impossibility at first thought, but it is simple enough when we remember that every cent of the lower wages must go to the absolute necessities of life, and new clothing is not a necessity until food has been provided for. The worker whose pay is \$900 a year is getting a bare existence, and the percentage of profit to those from whom he buys is necessarily low because he must buy

¹ Article in *The Executive*, entitled "High Wages Is Profit Insurance."

as cheaply as he can. The higher he gets in earning power above the line of mere existence, the more he can afford to put into purchases returning a fair margin of profit to the seller.

In other words, the employer who keeps wages low hurts his own industry and all others. . . .

In view of these facts it seems to me rather futile to be talking of overproduction in the United States. It seems also that we are only going half way when employers devote all their attention to the problems of reducing costs, as a means of increasing distribution. If an equal amount of brains and energy were assigned to the task of bringing up the wage levels in certain industries where they are now below the saving line, I believe those lines of industry now having the most trouble would be hard put to it to supply the demand; instead of proposing, in effect, that we abandon or destroy shoe and textile factories, their problem would be to meet the demand with existing equipment. . . .

In my view, what we call the problem of overproduction is no such "problem" at all. What appears to be the economic problem of overproduction is really the psychological problem of underconsumption, which is far less to be feared. In the long run, I believe, consumption will always catch up with production.

And our demands only increase as the standards of living rise. We have more prosperity here than any other country because our people need and demand more. But millions of them have yet to get beyond the existence line, and when we get them beyond that stage we shall not have to worry for the present over the problem of overproduction. Eventually that may be a grave problem, but it is not yet. When that time comes I expect to see employers within an industry banded together to maintain wages as the first step toward the insurance of continued prosperity, provided always that as we develop and improve this home market, we also protect it and keep it to ourselves with wise and proper tariff laws.

Secretary Davis has further advocated the raising of the wages of unskilled workers as well as all other classes of wage-earners as a means of increasing purchasing power and prosperity. In his Annual Report for the fiscal year 1927, he said:¹

As I have repeatedly pointed out, our home market means the purchasing power of the workingman, and his purchasing power means the relation of his wages to production and price. Our relatively small exports, when measured in percentage of the whole of production, must emphasize to any thinking man the fact that in home market, not in exports, lies the safety of American industry and American business. The way to enlarge the home market is to enlarge the purchasing power of the vast majority of persons who constitute that market; that is to say, the workers.

I have pointed to the fact that so long as the worker is paid in proportion to his greater productiveness, no fear need be felt for the high-speed automatic machinery that is constantly being introduced into industry. It is everlastingly to the credit of the American worker that he has made the most willing use of this machinery, in full confidence that he will receive, in wages, his due share of this greater machine production. I must also credit the American employer, who, in general, has seen good business in paying good wages, and has willingly paid them, in full confidence that he can count on maximum output from his employees. It is this mutual willingness of the worker to produce and of the employer to pay for production that accounts in large measure for our present prosperity. It has crowded our home market with thousands of ready consumers and buyers; it has stocked that market with infinite variety of good for improving their ties of life of living. . . .
The wage fallacy is the worst of all. A dullard must get a bare living by killing the purchasing power of the greatest from whom he buys.

¹ Secretary of Labor, 1927, Part II—Comments and

² Article in *The Executive's Estate*, pp. 137-144.

buyer, the worker, in the market at home, which provides us with all but a fraction of our national wealth and prosperity.

No matter how large the population, we know that no low-wage country is prosperous, and we also have it proved in figures and facts that no low-wage industry in the United States is prosperous to-day. No low-wage section of the country to-day is as prosperous as are the sections where higher wages prevail. The employer, therefore, who reduces wages, whether from a selfish motive or because he thinks it good business, is not a good business man and is hurting himself. He may for a time succeed in paying a wage below the cost of living, but he is only throwing on the community at large the expense of paying, in the form of unpaid grocery and clothing bills, the wages which he himself should pay. To be very frank, he is stealing from the public. This applies to any industry as a whole, as it does to any individual employer. The time has passed when any industry or any employer who seeks to break down wage scales will be looked upon by the community as shrewd or clever in business. Such employer is not clever in business, but a parasite on the community, and public opinion will eventually force him to pay a decent wage or get out of business. . . .

With his good wages the worker has, as I say, contributed a tremendous new buying power to the American market. This not only enlarges business for the entire country, it not only keeps the mills busy and their workers employed fully and at good wages; it brings the worker himself new and larger enjoyments in life. To mention only one such enjoyment, the automobile, once a luxury for the well-to-do, is now in the hands of thousands upon thousands of the workers, and the time may come when not a worker in the land will be without one. A thousand similar enjoyments are now within the reach of all, because machinery and mass production have cheapened their cost. . . .

My only concern is that we shall study to see this greater wealth as evenly distributed as it should be. . . .

We must guard against the general economic loss we shall

suffer if labor-saving machinery is to load us down with chronic increases in the unproductive and unemployed. We all lose something the moment a single worker loses an opportunity for employment and ceases to produce wealth. We must not curtail our market in that way either.

The National Industrial Conference Board has raised the question as to whether the proper use of savings in extending our capital equipment may be more of benefit to consumers than direct wage payments, but it also concedes that high wages are an important factor in sustaining the buying power of the community. In one of its recent publications, the following statement was made on this point:¹

... If, however, the employer belongs to the school of economic thought which holds that mounting wages, by enlarging domestic markets, are the surest insurance against business depression, he may distribute any portion of the increased profits in the form of higher wages, but it is difficult to establish any moral obligation to do so. Without doubt, high wages are an important factor in sustaining consumer buying power, but it is still an unsettled question whether the proper use of business and private savings in extending our capital equipment may not be a more important factor in the consumer market than direct wage payments.

The building boom, and the unprecedented sales of automobiles and other articles formerly considered luxuries, during the three years 1924-1926, Mr. Carl Snyder, Statistician for the Federal Reserve Bank of New York, attributed to the advance in wages and purchasing power of wage-earners during the same period.

In an adverse criticism of "The Road to Plenty" by Foster and Catchings, Mr. Samuel Untermyer declared in February, 1928, that the only possibility of continued pros-

¹ *Washington Herald*, February 14, 1928; p. 2.

perity lay in higher wages and purchasing power of labor, or, stated in general terms, on a more equitable¹ distribution of wealth produced. His statement, in part, was as follows:

In my opinion, the ratio between production and consumption cannot be balanced, corrected or materially improved either by the creation of further credits or by regulating the flow of Government expenditures. The first cannot affect the ultimate purchasing power or permanently increase either production or consumption. Credits are already ample. The banks are now overflowing with money, altho far too much of it, in this section of the country, is being used in stock speculation. Any manufacturer in fair standing with surplus stocks of merchandise can borrow.

So far as concerns the ultimate effect of regulating Government expenditures, it would be about as important as a fly on an elephant.

The only ways that occur to me of increasing production, and relatively increasing consumption, so as to assure steady employment, are by either adding to our exports or by resorting to other means of increasing the purchasing power of our own people.

The chances of relief from the first alternative are growing dimmer day by day as the European nations are reviving from the paralysis of the war and are becoming keener competitors. We cannot hope to compete in the world's markets with pauper labor of Europe. The most we can do is to build a "Chinese Wall" against flooding our markets with their products.

Our most promising avenue of relief will, I think, be found in the other alternative if it can be brought about. There must be a wider distribution of wealth. The vast fortunes and incomes therefrom in the hands of a relatively few individuals are not on the whole employed in manufacturing industries, nor is an adequate proportion of these fortunes and

¹ *New York Evening Post*, February 11, 1928.

their incomes so employed. The extent of investments of late years in Government, State and municipal bonds, and the billions of dollars poured into foreign industries and securities, give emphasis to this fact. These people have no occasion for risking their money in industrial enterprises.

The growth of partnership and cooperative arrangements between capital and labor that would result in dividing the gains from the wealth created by them between capital and labor seems to me the only just or plausible solution; if there be, in truth, any solution whatever beyond a mere compromise resulting in the improvement of present conditions but not entirely removing the evil.

I have always felt, and it cannot, in my judgment, be gainsaid, that labor is reaping a mere fraction of the rewards of the wealth it produces. To the extent to which those rewards are more equitably distributed will the purchasing power of the masses be increased, and with that increase will come added demands for labor brought about by increased consumption to meet those demands. It is the workman with a family, on a small income, through whom money circulates and consumption grows.

One of the most interesting analyses and appraisals of the new order in business and industry was written by Mr. G. C. Selden in the early part of 1928, for *The Magazine of Wall Street*. Several interesting quotations from it may be submitted as exemplifying the attitude of the most conservative financial groups of the country toward the theory of high wages as the foundation of permanent prosperity:¹

It has always, until very recently, been considered a sort of axiom of industry that the employer would—philanthropy apart—endeavor to hire at the lowest wages which would command and retain the services of the kind of men he required. Low wages, it has been assumed, would, other things

¹ *Magazine of Wall Street*, February 11, 1928.

being equal, result in higher profits to him because of reduced expenses.

Since the war, however, a new theory has been more and more often advanced, which may be briefly stated as follows: If wages are reduced, the purchasing power of wage-earners is reduced with them. Therefore, considering the industry of the country as a whole, lower wages mean smaller sales, higher wages mean larger sales. In order to find a market for their products, industrial managers must maintain a wage-scale which will permit wage-earners in general to buy those products. . . . As a very intelligent lady of my acquaintance remarks, the joke seems to be on the capitalist. After supposing for a century or more that his profits were being cut down by the increasing demands of his workmen, who by trade unions, "soldiering," and other devilish devices compelled him to pay them more and more compared to the work done, the capitalist has now discovered that the workmen were right after all, and that the road to bigger profits lies through higher wages.

If this be true, it would indeed seem that the millennium is at hand. Quite naturally, the workmen want a high wage-scale. It now appears that the employer wants the same thing. What could be more sweetly harmonious? . . . Will the present new era, in which the capitalist lion and the wage-earning lamb are to lie down together under the spreading branches of the high-wage tree, likewise prove to be the old era after all? Will the slogan "high wages and big consumption" prove permanent, or is it one of those business shibboleths which run from mouth to mouth until their career is cut short by the merciless logic of events? . . . We have before us certain patent and incontrovertible facts: First, wages in general are higher than ever before, not only in cash but in purchasing power, have been higher for half a dozen years, and, aside from minor reactions, appear to be still on a slow up-grade. Second, the total volume of production in the United States is far greater than ever before. Third, prices

of goods to the consumer have not risen as much as wages have risen. And fourth, general prosperity during the last three years has been greater and more widely diffused than at any previous period in our history. . . . The result is that the purchasing power of the average wage—the “real wage,” as it is called—has increased about one-third since 1914.

Before that date the wage-earner was not getting his share of the increase in production—he was right about that. Now he is getting a much larger share than he formerly received. Why the change? There are many reasons. One is found in our new policy of restricting immigration, which has checked the inflow of new and for the most part ignorant workers; another is the higher average mechanical intelligence of wage-earners, which makes them more valuable; another is the greater accumulation of capital available for industrial purposes, with which is closely connected our greatly improved methods of handling credit; and one of the important reasons, undoubtedly, is the general feeling among employers that a relatively high wage-scale pays. . . . Irregular employment means thousands of temporarily nonproductive consumers. Likewise, it means nonproductive machinery, factories, capital, railway cars and locomotives. It means that thousands of persons are no longer turning their work into circulating dollars, that wealth is being dissipated instead of being increased.

Stability and regularity of industry mean more to the efficiency of production and therefore more to the rapid accumulation of wealth than any other one thing. And it is in this direction that the greatest strides have been made in the last half dozen years. Toward this the Federal Reserve Bank system has contributed much by supplying credit when needed and keeping the money market on an even keel. Better management and more cooperation among employers, especially in various kinds of trade associations, have contributed much. A broader-minded attitude on the part of members of trade unions, and better leadership in the unions, have contributed much.

But higher wages have contributed most of all. They have forestalled strikes, reduced the labor turnover, encouraged employees to more effective work, stimulated loyalty and interest in the business, with the general result of far greater continuity, stability, and therefore, efficiency in industry than ever before. People have been able to buy more because the steady flow of the dollar-values of production has not been interfered with.

So we see that a high wage-scale really does increase the purchasing power not only of employees but of everybody else, because it tends to keep them steadily at work. They produce more, therefore they can buy more and have more. And it is difficult to set any limit to the creative power of the human mind.

This matter of the steady flow from hand to hand of the dollar-values created by labor has far-reaching effects. It not only prevents the wasteful idleness of men, machines and money, but it permits a tremendous speeding up of all industry, so that each dollar of money and each dollar-value of goods, by moving along faster, can do a great deal more work. If the railroads at one time have very little to haul and at another are flooded with traffic, they become congested, needed materials are held up, and industry is thus hampered. But if their business is evenly distributed they can handle it promptly.

If the merchant cannot get goods promptly, whether because of railroad congestion or because of irregular supplies at the factories, he must carry a large stock to make sure of supplying his customers. One of the most helpful factors in the present situation is that not only merchants but people in all lines of business and even consumers are to buy "from hand to mouth," as we say. Goods are kept moving, as well as dollars.

Stagnation, congestion, delay are the great enemies of prosperity, because they mean idleness—workers are no longer creating dollar-values of consumable goods, and if they don't create them, they don't have them.

As I see it, therefore, high wages do increase the purchasing power of employees quite definitely, not through the direct return of the additional money paid out, but through stabilizing, steadying and speeding up the manufacture and exchange of goods; through maintaining an even and regular flow of production, distribution and consumption, and in large part obviating idleness, congestion and delay. And the well-maintained average prosperity of the last three years has been chiefly due, first to the regular employment of workers; second, to the general speeding up of all industry which this regular employment has made possible; and third, to abundance of easy credit, which in turn has been in considerable part the result of this regular employment and general speeding up. . . . In general, the answer is that it can go on, not without some moderate reactions and irregularity from time to time, but without serious depressions. Abundance of housing, low interest rates, high prices for securities and big loans on them, liberal expenditures for luxuries, are the perfectly natural results of increased production. We are catching more fish with the new fish-hook. We have more because we are creating more. . . . If we were to get fighting over the division of our profits; if employers were to start unjustly cutting wages, or if employees generally or in large numbers were to strike for higher wages than industry could afford to pay them; or if dissatisfied producers in any industry were to upset the applecart by obtaining political control in their own interest, we could have a depression, certainly, proportional in severity to the extent of the disturbance. But at present none of these hypothetical difficulties are in sight.

About the same time as the foregoing was written, Samuel M. Vauclain, President of the Baldwin Locomotive Works, Philadelphia, publicly declared that the highest possible wages should be paid in all branches of industry in

order to maintain and increase the prosperity of the country.¹

The continuance of good times for the employed and of general business prosperity [he stated] depends largely upon maintaining throughout this land the highest possible wage rate that can be paid to those who labor for a livelihood. It matters not what the occupation may be, the common laborer, the mechanic, the bank clerk, the professional subordinate of all classes should be more seriously considered by those who are their employers.

We should rise above paying only such wages as the supply and demand requires us to do; we should pay a living wage to all, and then with well-paid assistance hustle to continue in business.

The wage-earners constitute the great majority of our population. These people are the spenders of the nation, and upon their ability to spend freely the general business of our country depends. Manufactured products of all kinds must be furnished them as well as the necessary staples of life. It is the wage of these people that makes good times or bad, dependent on what they are earning over and above the actual necessities of life.

The farmer and the tradesman look to them as a market for their products, and if the wage-earner is short of funds all trade suffers and general business suffers severely.

The standard of life among the masses has not advanced greatly since the World War, and it must not move backward.

One of our leading merchants and publicists, Edward A. Filene, of Boston, has taken, so far as the international aspect of the matter is concerned, an attitude opposed to Mr. Untermyer. While recognizing the policy of mass production and high wages as the foundation of American prosperity, he contends also that its stability is in large measure dependent upon increasing the buying power of

¹ "Speeding Up For Prosperity," by Samuel M. Vauclain, President, Baldwin Locomotive Works, Philadelphia; *Nation's Business*, May, 1928.

foreign markets so that they may be able to absorb our surplus output. He very strikingly stated this point of view in the *American Federationist*, as follows:¹

There is no such thing as a saturation point in the public's consumption of goods. Increase the country's payroll and the supposed "saturation point" will disappear. There is, on the other hand, very decidedly such a thing as expanding markets. Just as our home town industries gradually sold to state-wide and nation-wide markets, and then to foreign markets, so have modern mass production and mass distribution stimulated mass consumption—of Ford cars, Yale locks, typewriters, cotton goods, shoes, cigarets, etc.—not only in the United States, but throughout the farthest areas of civilized life.

Now, where do we come in? What do we get out of this wonderful growth of mass production and mass distribution, that is spreading over the country and over the world?

I am a shopkeeper. You are a possible customer. I realize that to get your trade I must have good goods at right prices and that you must have steady employment at right wages. Such good business is based on common sense, fair-mindedness, and the economic trinity which has built up our national prosperity and high standard of living, viz.: Mass production and mass distribution at high wage scales, and low profit-taking per article that will insure the third element, mass consumption.

But to get back to you and me: I must pay salaries that will enable my employees to buy freely the products of your work, so that you will have a good margin of surplus earnings to spend freely in my shop. We all profit by the larger volume of business done, both in production and distribution, and we have higher living standards as a result.

In a word, we take in each other's washing. But all the wash isn't in the same basket. Approximately one-third of

¹ "Prosperous Neighbors Swell the Nation's Pay Roll," by Edward A. Filene, President, Wm. Filene's Sons Co., Boston, Mass. *American Federationist*, 1928, pp. 161-163.

the products of your work has to be sold abroad before you get the improved, steady wages which are based on mass production, mass distribution and mass consumption, and before I get the mass selling which permits low prices and small unit profits on, however, the large number of articles which allow you to keep up the high American standard of living.

Before the war we Americans consumed practically everything we produced. But now, as a result of the World War demand and to keep up the mass production and mass distribution on which depends our high standard of living, we have a producing capacity of more than 20 per cent. more goods than we consume.

Unless we sell abroad in greater quantities, our home markets will be glutted with goods, with inevitable stoppage of production, reduction in wages and profits, and consequent still further reduction of consumption. . . .

How, then, can we get foreign countries to be increased customers of American products?

First, I should say, by continuing to prove still more convincingly that the American method—as Europe calls our science of mass production and mass distribution—is the best known method of raising and holding a high standard of living.

Secondly, by backing up the efforts of our representatives in Congress and officers and delegates of trade unions in securing increased good-will between nations. In this connection the International Labor Office, at Geneva, with which American labor is affiliated, is working with the International Management Institute, also at Geneva, to interchange data on mechanical improvements and waste-saving methods developed in America and Europe, to bring more work and higher pay and profits for us all.

Thirdly, by wise and discriminating spending, which will make for increased demand and so through the cycle of mass consumption, mass production and mass distribution, make for larger markets at home and abroad for the increasing products of our own work.

Fourthly, by intelligent aiding of every sound enterprise and every forward step in mass production and mass distribution, so that good-management and good labor relations may result in high wages, low prices and equitable profits—objects which can surely be realized—through improved large-scale production, which also insures the ability to export the inevitable surpluses profitably to the other countries of the world, instead of creating supercompetition at home with its certain bad results to labor and capital.

The American Federation of Labor, as pointed out in the preceding chapter, has fully accepted the challenge of increased production as the basis for wage advances and to this has added the claim that the well-being of trade and industry depends upon constantly adding to the purchasing power of the wage-service. President William Green has given expression to this point of view as follows:¹

Isn't it the plainest of common sense? Increase his efficiency and his earnings and you increase his consumption. The wants of the laboring man are never gratified. He always wants more of the goods of life, because the laboring man's purchasing power is never at a high level as is that of the well-to-do. Pay him more and he will buy more, for purchasing power is always regulated by earning power.

I am for the five-day week, which we have made a Federation policy, because it will give labor still more of the good things of life and increase prosperity generally. Nevertheless, I firmly believe that labor must produce more, to merit this advance. This is a position further in advance than any position we have ever taken before in organized labor. The best interests of the wage-earners, as well as the whole social group, are served by increasing production in quantity and quality, and by high wage standards, which sustain the country's buying power. We oppose wage reductions in principle; but, on the other hand, we are keen about increased production and the elimination of waste and friction.

¹ *The New Age*, 1928, article by George Mansfield, entitled "Green: A Study of the Man Himself and His Peculiar Seat of Power."

In another connection, President Green further elaborated his point of view in a public statement, from which the following quotation is taken:

The steadily increasing output of industries makes necessary a parallel increase in purchasing power, for unless the increased output finds buyers our greater efficiency defeats itself by contributing to business depression.

Industries are organized to supply the needs not of the wealthy few but of the millions who work for wages. It is not enough, therefore, for business to have increased profits. Wage earners must have larger incomes. The doctrine of high wages which organized labor has been teaching for decades has now found acceptance with economists and progressive business men. In the degree in which it has found application it is one of the big factors in the present business stability.

The American Federationist, the official organ of the American Federation of Labor, has also editorially sanctioned the new industrial view as to the interrelation of high wages, consumption, and prosperity. In its issue of January, 1928, the following editorial set forth the official attitude of the organized labor movement:

Economic literature is beginning to find a place for the proposition with which organized labor first startled the business world in the face of a serious panic. We will not accept wage reductions, the trade unions declared, for wage reductions will not only harm us, but will make business conditions worse. Wage reductions mean smaller consumption. Thus out of Labor's necessities originated an economic problem to which economists are now giving sanction.

To keep wages advancing proportionately to increases in productivity, is essential to stabilization of business prosperity, to the best interests of employers as well as the workers.

Opponents of trade unions have tried to prove that unions

were only self-seeking agencies, promoting their own interests at the expense of any other element that might interpose objection. These persons have tried to make a case against wage increases as a selfish end, detrimental to the rest of society. The new economic literature which interprets the influence of consumption as a factor in the business cycle, is helping to reveal the constructive economic consequences of organized labor's high wage standard.

The Executive Council of the Federation of Labor also strengthened President Green's statements by a formal declaration in 1926, as follows:¹

American methods of production and efficiency are the subject of study by employers, technicians and wage-earners of many countries. The American labor movement has been foremost in recognizing the interdependence of the interest of all concerned with production and in declaring that increased productivity is essential to permanent increases in the standards of living. On the other hand, American labor has pointed out that workers must have wage increases if there is to be sale for the increased output of industries and agriculture. . . . The results of organized labor's activities benefit the whole of the general public. High wages and shorter working hours are recognized as national assets. The public generally is coming to understand that with the great tendency of mass production continuing in the future to the same degree as has been experienced in the past there must be created of necessity an ever enlarging buying power or else our productive processes will spell their own ruination and prove a public calamity. The wage-earners and their dependents constitute a large proportion of that consuming public; it is therefore essential that the income of the wage-earners must of necessity increase.

The "new thought" as to productiveness, prosperity, and consumption has already become a commonplace of bank-

¹ Report of the Executive Council to the 46th Annual Convention, Detroit, Michigan, October 4, 1926; p. 27.

ing. The largest bank of the country—the National City Bank of New York—in its financial review for May, 1927, makes the following comment as to the growth of business and wealth since the close of the war:

Inasmuch as the amount which the individual can spend on necessities such as food and clothing is fairly limited, the excess has flowed out and created the demand for better housing, for automobiles, radios and the like, that has gone to sustain the business boom. It has also made possible a larger attendance at schools and colleges. Shortages created by the war may be made up and the stimulation of business derived from them dissipated, but the impetus received from an improving state of general well-being goes on so long as each individual recognizes, and in his dealings with others is guided by, the principle that prosperity is dependent upon an even exchange of goods and services and that it is the wealth which one produces that enables him to buy the products of others.

This dominant financial institution, as can be readily seen, in its analysis of the post-war business situation, completely eliminates the shortage caused by the war as only a temporary cause of prosperity, and gives its sanction to the theory that the force of an increasing volume of consumption and well-being is the real foundation of industrial expansion after the unusual but temporary demands arising from the war-shortage had been satisfied.

One of the most interesting and comprehensive as well as one of the most analytical and sound discussions of the new order of thought and action which has characterized American business and industrial undertakings since the year 1923 is to be found in a series of articles written by Mr. Gareth Garrett for *The Saturday Evening Post* at the close of 1927 and the beginning of 1928. The following liberal quotation is reproduced from one of these articles as

illustrating the striking change in the attitude of industry toward the wage-earner and the consumer, if indeed, the two may be differentiated:¹

In European industry, labor is a commodity, governed in price by a law of supply and demand. The industrialist prefers an overstocked labor market and speaks complacently of a labor reserve, meaning by that a supply in excess of the demand, so that labor will be docile and wages will stay down. Simply, he is a buyer of labor, and his first rule of profit is to cheapen what he buys.

That language was once current in this country. The low-wage fallacy went with the pattern of industrialism as we received it from the Old World. It was not so long ago that American industry solidly opposed any law to restrict immigration, saying it could not do without cheap European labor to perform the manual task. It was so cheap that industry could afford to waste it, and did waste it in a callous manner. But the view has profoundly changed. . . .

In the automobile industry, it had been demonstrated that by method, power and automatons the productive power of a man could be increased in a prodigious manner, with a result divisible in three directions. The wage-earner got more wages, the public got cheaper motor cars and the profits were fabulous. The automobile industry offered only the most striking example. The same principle was working in many other places. Wages rising, costs falling, profits increasing. What the war did was to cause a wholesale reformation of industrial practise, under a new type of mentality, thus bringing to pass all at once a change that had been bound in any case to take place in a few years under stress of competition. . . .

There was for a long time no way of regarding wages but as the price of labor. To think of wages as payment for work performed, roughly measured by the quantity of output

¹ "The American Book of Wonder," by Garett Garrett; *The Saturday Evening Post*, Philadelphia, January 7, 1928. See also "The American Omen," by Garett Garrett. E. P. Dutton and Co., New York, 1928.

—even that was a big step. There was one more to take. Now more and more wages are regarded as labor's proportional share in the total product of wealth. It is not enough that wages shall be high. It is necessary that they shall be proportional, for if they are not, if the output of wealth increases faster than wages, then no matter how high wages may be, the relative buying power of labor will fall. This is the view which comprehends the wage-earner primarily as a consumer, in which capacity he is indispensable to prosperity.

The great error of industry had been to see the wage-earner only as a producer. Not until it began to see him as a consumer was it possible for a new philosophy of division to be imagined.

The equally great error of the wage-earner had been to see himself only as a consumer, and it was not until he began to see himself also as a producer that it was possible for any philosophy of progressive division to act. There was nothing for it to act upon.

These two revolutions of thought have definitely occurred, and there is, for that reason, now the basis of a common language between capital and labor. . . .

The classic economic dogma of antagonism is breaking down. We are privileged to witness that catastrophe, being the authors of it. Wages and profits are not opposed. Both derive from production. There is properly no conflict between producer and consumer. How could there be? Producer and consumer are the same person. Prosperity is from increasing the sum of social wealth for purposes of proportional division, and all is supported by another's part. One pursuing private gain in a ruthless manner as an exclusive end is a wild piper playing his own tune in a symphony band. He is not of our time and way of life. . . .

A proportional wage for labor, a proportional wage for capital, and from the profits that are over, a distribution of benefits to the property, to the workers and to the public—that is management's idea of division.

In this American philosophy you may find economic chivalry by looking for it. If you do, it is implicit there. The conscious view is still pragmatic. Any other is obscured in a curious way. *Long before, this state of society had been imagined, in which the desire for private gain as the paramount economic motive should yield to the idea of social function; but nobody had ever imagined it would really pay.*

THE ESSENCE OF THE NEW INDUSTRIAL ORDER

Corroborative citations as to the attitude of mind and principles of action of American trade, industry, and finance might be greatly multiplied. No such basis of proof, however, is necessary. The new order has become a commonplace. Industry itself has even passed the point of being conscious of the revolutionary changes in thought and procedure which have occurred during the past five years. The old order of thinking and action has practically been forgotten.

The employer now has come to see the wage-earner as a consumer as well as a producer. The workers themselves and their leaders have had the vision of their real significance as producers, and of the relation of their possibilities in economic and social well-being to their productivity.

Financiers, captains of industry and the leaders of organized labor have accepted the fact that their mutual interests lie in increasing industrial output, reducing costs, and stimulating consumption and profits by better service and lower prices. The net result has been that the employer, realizing that the continuing profitableness of industry is dependent upon an expansion in purchasing power, has willingly accepted and declared that there may be indeterminate wage-increases as long as costs are not increased and the proper margin of profit is maintained. Organized labor has also given its adherence to this point

of view and pledged itself to cooperation in bringing about the desired end as long as it receives its reward in a proper proportion of, or proportional participation in, the increased industrial output. Proceeding cooperatively under this new understanding between capital, management, and labor, industry has abandoned its old wage attitude and fundamental processes of economic thinking.

CHAPTER X

THE REAL SIGNIFICANCE OF THE NEW INDUSTRIAL REVOLUTION, AND THE CONDITIONS OF FUTURE PROGRESS

It is not possible to weigh soundly the new theories and principles of wage determination, the evolution of which since the war has now been outlined, without understanding the deeper industrial movements which have been at work during this period. When these have been brought to the surface and examined, some definite appraisal may be made of the present situation and of the underlying tendencies for the future.

The changes which have occurred have been so sudden, in point of time, and are so radically different from past industrial methods and policies of procedure, that we seem to be in the beginnings of a revolution of epoch-marking significance, the ultimate aspects of which it seems exceedingly difficult at first blush to estimate at this early stage of its development. When we have divested ourselves, however, of old standards of measurements, and have discarded pre-war assumptions and conceptions, our present industrial situation and the points to which we are advancing become more clearly apparent.

CAUSES OF INCREASED INDUSTRIAL EFFICIENCY

The astounding gains in the productive efficiency of American industry since the war have already been set forth.¹ The radical change in the constructive thought of business and industry, after the crisis of 1920-1921, has

¹ See Chapter VIII, pp. 191-197.

also been described with special emphasis on the changes in the attitude of industrial leaders toward new principles and theories as to adjusting wages.¹ At the risk of repetition, it may be recalled, however, that the two most revolutionary changes in industrial thinking along these lines consisted of the assumptions: (1) that rates of pay of industrial workers might be indefinitely advanced provided labor and other costs of production were not increased or profit margins reduced to the danger point, and (2), that high wages were an essential part of a program which had for its object the establishment and maintenance of industrial prosperity.

Some discussion has also been necessary as to other causes of our remarkable gains in industrial efficiency, but this has been very limited. On this point, Dr. E. Dana Durand, Professor Paul H. Douglas, and Professor R. G. Tugwell have made exceedingly valuable contributions, and have pointed out the fundamental and secondary causes which have been at work.² The whole movement has also been most soundly and effectively summarized by Mr. Woodlief Thomas of the Division of Research and Statistics of the Federal Reserve Board, in a paper submitted at the meeting of the American Economic Association in Washington in December, 1927. In this connection he said:³

Our vast and diversified natural resources have played an important rôle in this nation's industrial development. It

¹ See Chapter V.

² See E. Dana Durand, "Commerce Year Book, 1926," pp. 13-24; Fifteenth Annual Report of the Secretary of Commerce, 1927, pp. XXVII-XXXIV; Rexford Guy Tugwell, "Industry's Coming of Age," Harcourt, Brace & Co., New York, 1927; and Paul H. Douglas, "Proceedings of the American Academy of Political Science in the City of New York," XII (July, 1927), "The Modern Technique of Mass Production and Its Relation to Wages."

³ Woodlief Thomas, "The Economic Significance of the Increased Efficiency of American Industry," *The American Economic Review*, Vol. XVIII, No. 1—Supplement (March, 1928), pp. 122-138; Pub. by the American Economic Association.

may be said, however, with some force, that altho these elements may account for the long-time growth of industry, they do not entirely explain the *recent* rapid increase in output per worker. It is, nevertheless, true that these natural features are basic elements in this increase; they have provided a convenient source not only of raw materials to which machinery has been applied with fruitful results, but as well of the raw materials out of which the machines themselves have been made and the fuel with which to run them. In other words, our vast natural resources have been the basis of our abundant supply of capital in the form of productive equipment, which in turn has aided in bringing about the rapid mechanization of industry. At the same time other physical and political features—large population, the diversity of regional demands, and the absence of inter-regional trade restrictions, such as tariffs—have furnished a domestic market exceeding in magnitude and diversification that of any other industrial nation. The magnitude of the market, the abundance of capital, and the education of American consumers by persistent advertising to accept standardized articles have encouraged the development of mass production, which in turn has permitted a reduction in unit costs.

The growth of large corporations, the resort to mass production, and the movement toward integration of industrial operations in process in this country during recent years are too familiar to require evidence. . . .

Large-scale production is especially economical where large quantities of the same products can be produced. The magnitude of our domestic market and the willing acceptance of standardized articles make feasible such repetitive processes.

Large-scale production is dependent upon the machine process, and the increasing use of machinery and power and labor-saving devices has accompanied the growth in size of productive units. . . .

Power has been substituted for labor not only through machines of production but also in the form of automatic conveying and loading devices. In this connection contributions

to progress have also been made by those changes in productive operations introduced by so-called scientific management—the installation of more efficient processes, routing of materials and products, elimination of waste, avoidance or lessening of fatigue on the part of the workers, and other devices and methods too detailed and too numerous to mention. In all of these developments American industry has excelled.

Another set of factors, not without importance, in bringing about increased productivity of American industry relates to the wider general education of the population, to advances in scientific research, and to the broader dissemination of information. . . . The organization of research by universities, by privately endowed institutions, and by private enterprise has contributed much toward industrial progress. Within the post-war period the increased collection and use of business statistics and the more thorough analysis of business trends have furthered the advance of industry toward a more intelligent control of forces determining its progress. . . .

Many of these elements in our industrial progress, however, are not forces which have only recently become effective. We have had natural resources, internal free trade, and a fairly wide domestic market during most of our industrial history; we had them, certainly, in the period from 1909 to 1921, when productivity per person in manufacturing failed to gain. The phenomenal increase in manufacturing efficiency has apparently come since 1921. It is worth while to consider the forces that have caused this recent sudden spurt. . . .

Then the war considerably disturbed industrial technique and delayed progress for a period, but at the same time new technological processes and methods were learned as a result of war experiences, and what is perhaps of equal value, the importance of cooperation and of having adequate and accurate knowledge of developments was impressed upon the business community. The leaders of industry were also the leaders of that vast cooperative organization by which the war was carried on, and in that experience they learned that

much could be gained by joint effort toward an end. In a number of cases old theories regarding the beneficent influence of free competition were found wanting. . . . During the war, furthermore, plant capacities were increased considerably, in most cases with modern equipment. As a result, complaints are still heard of the excess capacity of industry—overcapitalization in a physical sense, altho perhaps not in a financial sense, because much of the cost of installation was charged off during and immediately after the war. The cumulative effect of these factors—and of others such as the increased literacy of the population, expansion in available information, prohibition, and curtailed immigration during the war—was further delayed by the industrial depression of 1921. During this depression, however, plants were reorganized, excess capitalization reduced, inventories diminished, inefficient workmen discharged, and costs of operation lowered.

Thus was inaugurated the recent pronounced movement toward increasing productivity, and the cumulative force of all of the factors working toward that end became at once effective. Immigration restrictions and prohibition, which became operative about that time, may also have been factors.

Abundance of investment funds at reasonable rates was also an important contributing element. This made it easy to purchase machinery, to expand plants, where necessary to substitute new and more economical equipment for obsolete or obsolescent equipment, and to experiment with new processes and products. I venture the assertion that one of the most important factors in the growth of American industry, particularly in the past five years, but also in earlier periods, has been the boldness exhibited by the American business man in scrapping old equipment and methods and trying new ones, and the ease with which he has been able to obtain funds to finance these operations. . . .

One of the striking features of the economic situation in this country during recent years has been the high level at

which industrial profits have been maintained during a period of falling prices for nonagricultural products and of fixed or advancing wage rates. Dr. David Friday, in discussing this situation, has pointed out that since 1923 industrial profits have increased from 5.6 billion dollars in 1923 to 6 billion in 1925, 6.6 billion in 1926, and about 6 billion in 1927, while the index of prices of nonagricultural commodities in the Bureau of Labor Statistics index declined from a yearly average of 158 in 1925 and 154 in 1926, and to a low point for the post-war period of 144 in the summer of 1927. In the meantime average wages earned per worker have increased. *It appears that during the past five years, corporations, by means of increased productivity and the exercise of other economies, have been able to increase output, reduce prices, maintain wages, and expand profits.*

The fundamental cause of the new order in industry was undoubtedly, as pointed out by Mr. Thomas, the experience gained by industrial leaders during the war period. The acceleration of industry by combination, mass production and cooperative effort, together with the development of new methods, technological processes, and means of control of conditions and output, had afforded a background of experience, which industrial management realized could be most effectually used under normal conditions. The abundance of capital seeking investment at reasonable rates in the post-war period also made it possible to put wartime experience into practise. The change in attitude toward rates of pay of industrial workers and prices to consumers, or the post-war phenomenon of falling prices, higher wages and increasing profits, also was born of the experience that rates of wages and price levels were subordinate to the greater problem of reducing production costs through greater capital investment and higher managerial ability.

THE TWENTIETH CENTURY INDUSTRIAL REVOLUTION

The results which were thus obtained became the marvel of our own people and of the civilized world. It was quickly apparent that America was in the midst of a new industrial revolution, which in its effect and influence bade fair to rival the epoch-marking changes in England in the eighteenth century, when the use of power, and the factory process of manufacturing, were first inaugurated. Doubts soon developed, however, as to the general soundness of the situation attained. The need for careful deliberation, and for the working out of a permanent, constructive program, also soon became apparent. Professor Tugwell effectively stated these points in 1927 as follows:¹

What ought particularly to be emphasized in all this is that, altho we have made progress with a fair degree of rapidity ever since 1899, the acceleration since 1914 is almost of the nature of a new phenomenon. With all these data at our command, to say nothing of the evidence of observation open to anyone familiar with manufacturing and commerce, does it seem an exaggeration to say that we are in the midst of a new industrial revolution? One distrusts the word "revolution." It connotes overturn and re-beginning. What is happening is really not this. We are merely bringing to bear in industry a combination of common sense, inherited processes and invention, and heightened human effort, such as never existed in any other time. It is of the utmost moment that all intelligent persons should concern themselves not only with the encouragement and furthering of this already clearly appearing trend, but should assist in controlling its direction and results in the interest of human welfare.

In what we gather from the data at hand we are justified in feeling that almost unprecedented progress is being made. There is good reason for optimism. But it would be a mistake to leave the statement of the situation at this. One who

¹ Ante cited, p. 225.

studies the course of increased productivity, besides being impressed by a general increase, has also to acknowledge that apparently there are regressive forces at work which occasionally get the upper hand and interrupt the general movement. In 1921 and 1924, to name the most recent examples, we not only failed to make any general gains, but we fell back seriously. Such a period of recession always sets us back a year or two and provides an interlude in which even the best efforts are wasted. This leads to the general conclusion that, altho the increase in per-man-hour productivity forms a solid basis in technology for advance, this need not necessarily always be registered in general gains in physical output, taking industry as a whole. . . .

Not only this, but also, if we study selective figures of physical output, we discover certain soft spots even in what generally are the best industrial years. Of late years one of these has been agriculture, which, ever since the war, has, in the midst of prosperity, remained sunk in a trough of depression. Others during this same period have been coal-mining and the textile trades generally. This suggests that there cannot be as great general advances as there might otherwise be, so long as some areas persistently lag behind. . . .

On the whole, tho the main fact of progress stands out, there are not grounds for too great social optimism. Plenty remains to be done in a number of directions before our progress can be consolidated into a permanent new level of productivity insured by sound organization not only of local technique but of general arrangements for coordination and mutual assistance in troubled times.

Mr. Woodlief Thomas, in his very comprehensive and permanently valuable address before the American Economic Association, already quoted from, also reached a similar but a more optimistic conclusion. He ended his remarks as follows:¹

On the whole we have profited by the increasing produc-

¹ Ante cited, p. 225.

tivity of our industry, but prosperity should not prevent us from recognizing that each step in the march of progress brings us face to face with new problems whose solution will require all the knowledge we can muster and all the wisdom we possess.

As to the soundness of these conclusions there can be no doubt. Altho the recent period of new industrial thinking and leadership has been marked by remarkable productive gains, it has also brought into play new forces which must be intelligently dealt with, and has been accompanied by a train of major and minor problems which must be solved. The new industrial revolution is, as a matter of fact, in the full flush of its early development. It has, as might be expected, already produced problems and conditions some of which are of fundamental importance in their bearing upon the future. They must, of course, have our best thought and action if the real advantages of the new industrial order are to be attained.

PROBLEMS AND CONDITIONS WHICH HAVE BEEN DEVELOPED

The more pressing and vital questions which have appeared as an outgrowth of the new era of industrial efficiency require immediate and serious consideration. Other more general and relatively less acute problems and results also are beginning to be clearly discernible. The general situation in which industry now finds itself may be briefly recapitulated as follows:

1. Is too much of the increased purchasing power and leisure, which have come from increased productivity, devoted to "buying and using automobiles, radios, movies, silk stockings, cosmetics, bootleg liquor, and sensational journalism, and not enough upon adequate

homes, wholesome food, healthful outings and recreation, and good drama and literature"?

2. Is there any menace in the fact that the increased output per worker has made possible shorter hours of work, more leisure, the possibility of longer education, a more diversified life, a decline in the drudgery of household work, and the inauguration of the five-day-week movement?
3. Can production be so forecast that it will be possible to adjust output to demand and thus prevent serious maladjustments and losses?
4. Will it be possible to secure foreign markets for the surplus production of our farms, mills, and factories?
5. Has the demand for manufactured commodities been overstimulated by advertising, constant changes in styles, and instalment methods of selling?
6. Will artistic values be forgotten, and craftsmanship disappear, in the constant striving toward increased standardization of commodities?
7. Will sufficient leisure and income be secured by industrial workers to offset the drudgery and monotony of mechanized industries?
8. What is to be done about excess employees developed by the production of more commodities and services with constantly declining labor forces? Can new industries be developed to absorb those displaced in the older industries?
9. What has been and what can be done about the excess of agricultural workers who are being displaced by the more extended use of farm machinery? These surplus workers formerly sought employment in manufacturing and mining communities, but if the expansion in these industrial centers can now be accomplished with even fewer wage-earners, will not

- the flow of excess farm workers to the cities add to the seriousness of the unemployment problem?
10. Will prices continue to decline as a result of lower labor and other costs of production? If so, can our industries maintain a proper margin of profits?
 11. Have salesmanship, marketing, advertising and distribution costs as a whole so advanced as to absorb in large measure the increased profits from the gains in the productive efficiency of industry?
 12. By what practical methods are the wage-earners and consumers to be assured of a proper participation in the gains arising from increased productive efficiency in manufacturing, mining, and agriculture?

Some of the problems which have thus been raised require no serious study. The question of a proper use of increased leisure and income by industrial workers is as old as industry itself. It has been raised as a warning against all past movements for decreasing hours of work or radical advances in incomes. It may be profitably passed by. Experience has demonstrated that humanity will use gains in leisure in an advantageous way, altho it may be guilty of lack of wisdom and serious derelictions at the outset. Our entire advance in education, culture, physical well-being, and democracy has been largely the result of gains in leisure, or emancipation from the service of time and effort to the purely physical needs of subsistence. No better demonstration of a wise use of leisure and income can be found than the remarkable growth in attendance at schools and colleges during recent years, the constantly growing participation in wholesome sports and recreation, and a corresponding gain during the same years in savings deposits and home-ownership. As to craftsmanship and artistic values, gains in purchasing power and leisure actually stimulate their cultivation.

Drudgery and monotony of basic work are impelling forces toward the development of desires for the products of individual craftsmanship and of the artist. The development of supplementary industries and other undertakings and services as an outgrowth of excess employees from basic industries points to the soundness of this conclusion.

THE VITAL PROBLEMS

Among all the social and economic problems of increased productive efficiency, the most menacing and pressing up to the present time are: (1) the coordination of production and consumption, (2) the development of supplementary industries to absorb the workers displaced by other industries, (3) the maintenance of profits in production by reducing selling costs, and, (4) the gradual evolving of practical policies under which there may be an equitable division of the gains of increased industrial efficiency. The coordination of production and consumption in individual industries has as a rule been satisfactorily worked out. The real need in this connection is the establishment of inter-industry coordination.

THE UNEMPLOYMENT MENACE

Early in the year 1928, it became evident that full and regular employment for industrial workers was the most vital problem which had developed from the new era of industrial efficiency and unprecedented prosperity. The earnings of the large industrial corporations were at the most prosperous peace-time level in their history. Employees who were working were receiving higher wage rates and larger earnings than ever before. Prices were falling and real wages were advancing. There had been some decline in the volume of industrial production during

the year 1927, but this did not represent any serious retardation in industrial activity. In the early part of 1928, however, several States, including New York, reported larger numbers of unemployed wage-earners than had occurred since the depression of 1921. Conditions grew worse as the year advanced, and by March a crisis had developed. Moreover, it soon became apparent that this unemployment situation was unique and unprecedented, and so far as causes were concerned could not be related to any similar conditions in the past.

When the underlying factors were brought together and analyzed, it was found that during the past four years industrial output had, as a rule, greatly increased, while the number of men employed had steadily declined. More goods, in other words, because of increased output per worker, had been turned out with fewer employees.¹

During the year 1927, the factories and mills of the United States produced 70 per cent. more than they had in 1914, and this remarkable achievement was accomplished with an addition of only 15 per cent. to the operating forces during this period. In 1927, as compared with 1924, 7 per cent. more commodities were turned out with a slightly smaller number of industrial workers. As both manufacturing and agriculture expanded, the increasing use of machines made necessary a relatively less number of workers.

It soon was apparent that this unusual unemployment situation was the result of mass production and the unprecedented mechanization of industry during recent years. As the constant invention and installation of labor-saving machines had proceeded, fewer men were required. In

¹ "March of the Machine Makes Idle Hands," by Evans Clark; *New York Times*, February 26, 1928.

order to keep previous forces fully employed, a tremendous increase in the demand for commodities and services was necessary. If this expansion in demand did not go forward in accordance with the elimination of industrial workers, new and supplementary industries and services must needs be developed to absorb the workers displaced in the older industries. Otherwise any decline in production would be quickly followed by an unemployment crisis. If, also, there was no growing demand from the establishment or expansion of newer industries and services, the crisis would quickly become more acute. A relatively small retardation in industrial demand, such as occurred during the winter of 1927-1928, which was in no way comparable with the drastic curtailment of output in the years 1920-1921, almost immediately found expression in a serious unemployment problem. This condition of affairs was all the more remarkable for the reason that those who retained their work enjoyed larger money and real wages and shorter hours than had ever before obtained in industry.

DISPLACEMENTS AND UNEMPLOYMENT

The most authoritative sources estimated that from the year 1923 up to the middle of 1927, all workers displaced by the new technique in industry were rapidly absorbed into other lines of employment.¹ There was some difference in the estimates of the number of wage-earners which were thus displaced, but the calculation made by Mr. E. S. Gregg, Statistician of the Western Electric Company, of more than 1,000,000 men having been dropped from agri-

¹ See statement of Labor Bureau, Inc.; also article by E. S. Gregg, Chief Statistician of Western Electric Company, Inc., in *Nation's Business*, April, 1928, "What Puts Men Out of Work"; also article by Professor Sumner H. Slichter, *New Republic*, Feb. 8, 1928, "The Price of Industrial Progress"; and by Professor Irving Fisher, in *Magazine of Wall Street* for April 7, 1928, "Full Employment: Prosperity's Problem."

culture, factories, and steam railroads by improved mechanical processes during the years 1923-25, may be taken as ultra-conservative. About 600,000 of these, he calculated, came from the mills and factories, 100,000 from the steam transportation system, and 350,000 from agriculture. The number of factory and mill workers displaced was probably larger, as Mr. Gregg, to be conservative, took only one-half of the estimated decline in employment in manufacturing shown by the index figures for this period of the Federal Reserve Board and the Bureau of Labor Statistics.

The depression in agriculture and the exodus to the cities accounted for probably two or three times the number, as estimated by Mr. Gregg, who were displaced by agricultural machinery and who sought work in mines and manufacturing establishments. To all classes of displaced employees must also be added two other new and large groups seeking work: (1), an average of about 250,000 each year from foreign immigration, and (2), between 1,000,000 and 2,000,000 applicants from the native population who would normally each year reach the employable age, due allowance, of course, being made for those who would be eliminated from industrial employment through disability or death.

Of even greater interest were Mr. Gregg's estimates of the new industries and services which absorbed the workers thus displaced, together with the new additions to the labor supply brought about by immigration and by the normal increase of those of employable age. He frankly confessed that these calculations, which are reproduced on following page, were to some extent guesses, and that others might differ, but they might be accepted as indicating the significant industrial trends that had been in progress.

**INCREASES IN NUMBERS EMPLOYED,
JULY 1, 1923, to JULY 1, 1927**

Building (exclusive of roads, subways, etc.).....	1,000,000
Automobile, truck and bus operation and maintenance..	500,000
Road and subway construction.....	100,000
Trade (chain stores and miscellaneous).....	100,000
Public service, including school teachers (assumed to increase at same rate as population).....	100,000
Operation and maintenance of apartments, hotels and restaurants	100,000
Telephone operation	50,000
Operation and maintenance of office buildings.....	50,000
Electric light and power.....	50,000
Sports, moving picture production and exhibition, etc....	50,000
Oil production	50,000
Total	2,150,000

As a result of these and similar calculations, it was concluded that there had been no real unemployment problem up to the last half of 1927. What had occurred from 1923 to 1927 were shifts from some industries which, because of improved machinery and processes, required fewer workers to turn out an even larger product, to other industries or classes of services which had been developed or had undergone an unusually large expansion during these years. This absorption of displaced workers was also assisted by the decline in the number gainfully employed as compared with the total population. The tendencies in this direction which had been observable since 1910, such as less employment and longer school training for children and a decline in the number of wage-earning wives and mothers, was further stimulated by the better standards of living or, in other words, by the advance in earnings of husbands and fathers after the 1921 depression.

Beginning with the second half of 1927 and continuing through the first quarter of 1928, there was an entire change in conditions. Decreased manufacturing activity and a general decline in industrial output produced, as has

already been pointed out, a high degree of unemployment in terms of numbers followed for a time by very acute conditions in many industrial and urban centers. Numerical estimates of unemployment at this time ranged all the way up to the United States Department of Labor's absurd figures of 1,874,050, which (if there should have been added the 2,000,000 each year who reach working age, together with an annual influx of 250,000 immigrants) would have given a total of 8,000,000 unemployed at the beginning of 1928, as contrasted with the estimate of 4,000,000 submitted by the Labor Bureau, Inc., of New York City.

This latter calculation allowed for and deducted the estimated number of displaced workers during the five years, 1923-1927, and may be considered as good an estimate as could have been made during the winter of 1927-1928.

With the opening of spring, industrial activity again began to expand, and serious unemployment gradually disappeared. This temporary and restricted condition in 1927-1928, however, clearly showed, as a result of the new industrial revolution, that, should there be any considerable slackening of industrial output, or should industry as a whole reach a point of stabilization where its constant acceleration and expansion, as characterized by the new order of mass production, would cease, the inevitable result would be an unemployment situation which would cause unprecedented distress and suffering.

CHAPTER XI

CONSTRUCTIVE REMEDIES NEEDED

The need of constructive measures, not only to prevent a catastrophe of unemployment, but to deal with it effectively should it occur, thus became clearly apparent. Detached students as well as those directly connected with industry and the organized labor movement had gradually become keenly alive to the problem. Secretary Davis, in addressing the Machine Engineers' Beneficial Association in the early part of 1928, stated:

Growing lines of job-seekers created by ingenious labor-saving machinery must be considered along with the marvels of efficiency and comfort this mechanical progress has brought about.

Some of our joy over the great inventive genius of our masters has been turning to grief as we witness yearly the growing lines of job-seekers, trained men, middle-aged men of experience, who have been forced from their trades and vocation by labor-saving machinery.

It seems that this phase of industrial proficiency bids fair to exact too heavy a toll in the years to come, unless we get busy and invent new industries for the fellow whom the machine shunts aside.

About the same time, President Green, of the American Federation of Labor, in addressing the students of the University of Michigan, said:

In the survey made of this situation we are impressed by the fact that, while we could not interfere with industrial progress and scientific advancement, we will be confronted with the problem of displacement in a most acute form.

When these new industries reach the point of saturation a very serious problem of continual displacement of men through the use of improved machinery must be constructively met and settled.

In commenting on an article by Professor Sumner H. Slichter of Cornell University, in which he declared that increasing unemployment would be the price of our outstanding industrial progress unless remedial measures were inaugurated, *The New Republic* stated editorially in its issue of February 8, 1928:

Mr. Slichter believes, and so do we, that a good deal of the unemployment now in evidence is due, not to the cyclical alteration of boom and depression, but to changing methods and increasing productivity in industry, whereby more goods can be turned out by fewer men. Classical economics teaches that such advances in productivity help the workers themselves (in the long run) by increasing the general stock of goods *per capita*. On this basis economists and employers have lectured labor for its occasional opposition to improved machinery and better devices, and have welcomed labor's new favorable attitude to increased efficiency. But how long will this welcome conversion endure if (in the short run, which may continue for years) the better living standards of others are purchased at the cost of deplorable privation on the part of millions thrown out of work? A far-seeing industrial leadership would in its own interest give concentrated attention to this problem. When more goods are produced by fewer men, what will suffice to give employment to the men dispensed with?

It had thus been realized on all sides—by executives and by the great multitude of workers directly affected, as well as by students, social workers, economists, and publicists—that in the rapid development of the new order of industrial efficiency, tremendous forces for good had been established, but unless these forces were kept going at

full speed ahead, if production was not accurately coordinated with consumption, or if supplementary industries were not developed to absorb the workers displaced by increased mechanization or by temporary or permanent retardation of the older undertakings, the price of the new industrial benefits would be recurring periods of unemployment and suffering for great numbers of wage-earners. Along with this development might also go a decline in margins of profits for the industries which were adversely affected by a contraction in the demand for their output.

Certain palliative measures for the relief of temporary unemployment conditions were obvious and had been advocated for many years. The really serious problem, however, developed by the new industrial revolution required measures and methods to be devised for removing permanently the overhanging menace of widespread unemployment, with all its attendant human suffering and social and industrial losses.

CONSTRUCTIVE MEASURES PROPOSED

In the face of such deplorable unemployment conditions as prevailed in the winter of 1927-1928, the immediate proposals for relief naturally centered around the possibility of developing new sources of work for those affected. The inauguration of new public works and projects of all kinds was advocated. As a more permanent policy it was also urged that the local, state, and national governments should appropriate and hold in reserve plans of and funds for public works to be released when industrial conditions became subnormal and private employment slack. Industry itself, it was also pointed out, should, as far as possible, accumulate reserves and withhold projects for new buildings and other improvements to be used at a time of similar

conditions. Such a constructive program, it was shown, would tend to stabilize and make more uniform the demand for labor, and would ameliorate the sufferings of temporary crises arising from maladjustments between industrial production and consumption.

From the standpoint of a permanent removal of the unemployment evil, three plans of procedure, outside of the internal control of industry, have also in the meantime been put forward: (1) to develop markets abroad which would supplement domestic demand by absorbing the surplus output of American industry; (2) to increase domestic demand for industrial products by developing a higher degree of domestic purchasing power through advancing the rates of pay of industrial workers, or, in other words, giving to them a larger share in the productive gains of industry; and (3) the establishment under the auspices of the Federal Government of a Board that would collect and disseminate all forms of information relative to the stabilization of business and industry, with the understanding that the Board itself, on the basis of these data, would make recommendations as to policy with the object of preventing dislocations in production and distribution.¹

This latter proposal is a splendid one, and, if properly restricted as to form and jurisdiction, is thoroughly practical. Some such agency is inevitable in order that information may be collected and disseminated for the benefit of industry and also as a basis of study by disinterested public representatives charged with formulating policies for the proper coordination of industrial activities. Leading representatives of industry itself, as will be shown

¹ In a theoretically sound but practically impossible form, at present, such a budgetary board has been advocated in "The Road to Plenty," by William T. Foster and Waddill Catchings; publications of Pollak Foundation, Boston, 1928; also in an article in the *Century Magazine*, July, 1928, by the same authors, entitled "Progress and Plenty."

later, have already indicated the urgent need of a governmental agency of this description.¹

As to the other two proposals, only one seemed practical so far as the immediate future was concerned. In the light of the fact that all commercial and industrial countries were endeavoring to retain their own markets by excluding the products of other nations by greater and greater tariff barriers and other arbitrary measures, it has seemed impossible to develop in an important way foreign markets for the surplus American commodities. This would be feasible only by granting equivalent concessions in our markets through reducing the height of our own tariff walls, and the net gain to the United States, therefore, it has been asserted, would practically amount to nothing.

The trend of current business and finance clearly shows, on the other hand, that the tariff issue will soon be a matter of serious domestic controversy. The investment bankers who have been and still are making large public and private loans abroad keenly realize that the payment of interest and the repayment of principal are ultimately dependent on the ability of foreign countries to send goods to the United States. To the average industrialist, the policy of a reduction in customs duties in order to stimulate an inflow of commodities from abroad, of course, spells disaster and a retardation in the process of American industrial development. It is quite apparent, however, that within a short time the attitude of the investment bankers may prevail, excessive duties may be modified, and many American industries may be required to adjust their operations to conform more nearly with world conditions. Such a consummation is, however, quite dependent on the protective policies of other countries. A more liberal régime, both

¹ See pp. 252-263.

here and abroad, so far as tariff policies are concerned, while its inauguration might be accompanied with temporary dislocations and losses, would in the long run tend to stabilize more completely the new industrial order, with great permanent gains not only to industry itself but also to the great body of wage-earners and consumers.

But any constructive policy as to industrial stability and employment, for the time being at least, must be confined solely to domestic measures. The realization of this condition of affairs has caused main reliance for industrial stabilization to be placed upon the development of increased purchasing power among the great body of industrial workers. By a constant advance in domestic wages and incomes, it has been sought—and is constantly declared to be practically possible—to absorb the output of our established industries and services, and to take care of the wage-earners displaced by the adoption of improved methods and machines. Industrial and financial leaders, as well as the representatives of organized labor, as has already been shown, have completely committed themselves to this policy. By way of further illustration, President Green, of the Federation of Labor, in addressing the students of the University of Michigan in 1928, cogently expressed this view as follows:

The nation cannot destroy the purchasing power through the creation of an army of unemployed and expect to maintain increased commodity production. The buying power of the people must be placed at a high level through an economic condition which provides steady employment and high wages. This is the only way through which a balance between production and consuming power can be maintained.

The other extremes in leadership in industrial policy have no less strongly advocated the same policy. Mr.

Lewis E. Piersons, former president of the United States Chamber of Commerce, also declared¹ in May, 1928:

As production increased, it became apparent that consumption must keep pace with production and that, unless the consuming public had the funds with which to purchase, mass production could not long continue.

It was not a long step from this to the realization that a general diffusion of high wages and earnings was a necessary corollary of our industrial philosophy.

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The voice of organized labor has already been lifted in an appeal for cooperation. In any move to eliminate unemployment or to maintain present standards of living, we can confidently count upon the support of those who are first to feel the effect of unbalanced prosperity and the first to benefit by the wider diffusion of the fruits of increasing production.

Bankers, students of economics, publicists, and government officials have all, as has been shown, unreservedly accepted and advocated this constructive policy as the basis of maintaining industrial prosperity and for offsetting the menace of industrial retardation and unemployment. While this method of procedure is undoubtedly sound, it is also clear that it cannot be successfully carried out unless it is accompanied by general methods of cooperation, the fundamental object of which shall be the constant adjustment of production to consumption. As the former head of the United States Chamber of Commerce has truly said, "Nothing could induce us to abandon voluntarily our trinity of high production, high earnings and high consumption, yet unless we can work out more scientific

¹ Address at the Annual Meeting of the Chamber of Commerce of the United States, Washington, May 10, 1928, by Mr. Lewis E. Piersons.

methods of cooperation and team play, we can never hope to secure the full benefits to which this productive policy entitles us."

UNEMPLOYMENT INSURANCE IMMEDIATELY NECESSARY

Altho the theory of increased production, higher wages and purchasing power, and greater consumption is basically sound, and is generally accepted, it is also equally true and fundamental that this procedure will inevitably be attended with recurrent overexpansion, maladjustments, losses, and unemployment, unless a comprehensive plan of industrial cooperation and coordination is developed. Other factors are also involved in this constructive procedure, and its discussion may at this point be deferred with the obvious comment that any general scheme of industrial coordination and stabilization must necessarily be slow in developing in an effective way, and pending this time, or, in other words, during the period of trial, experience, and evolution of such a program, immediate measures must be taken to protect wage-earners against the evils of unemployment. Otherwise, they innocently become the residual sufferers of and sacrifices to industrial progress.

Aside, therefore, from the palliative measures of public policy which have already been mentioned, the only practical, concrete method of dealing with unemployment, pending a greater degree of industrial stabilization, is the acceptance and application of satisfactory systems of unemployment insurance. Long experience abroad has demonstrated the soundness of such a procedure, and it should be generally adopted in American industries. Not only would human sufferings from unemployment be thus mitigated, but the business losses from temporary industrial dislocations, as well as the likelihood of their recurrence,

would be lessened, and a better opportunity afforded for ultimate coordination and stabilization.

"PROFITLESS PROSPERITY"

In addition to the unemployment problem, another menace of the new industrial revolution, which affects both capital and management as productive factors, has been the tendency through mass production and competitive selling to reduce the margins of profit. The concentration of industrial management upon greater output and lower costs has in many cases gone so far, and attention has been so focused upon these points, that the element of profit has been neglected. This tendency has developed in many branches of industry, the output of which has expanded in a remarkable way, to a point where there has been little if any profit, relatively speaking, and has led to the satirical comment that our industrial revolution is rapidly approaching a stage of "profitless prosperity." The declaration has also been frequently made that labor, because of the decline in prices and advances in real wages, has been enjoying an unprecedented status of well-being, while much-vaunted American management has brought about an era of unparalleled industrial expansion, but at the same time has reduced the margins of invested capital to such a low point as to arouse apprehension as to the future.¹

This situation, which began to attract serious attention in the spring of 1928, was very briefly but effectively expressed by the Guaranty Trust Company of New York in its monthly review for May of that year:²

¹ "American Prosperity: Its Causes and Consequences," by Paul M. Mazur; The Viking Press, New York, 1928; also articles by the same author in the *American Review of Reviews* for May and June, 1928, entitled respectively "Mass Production—Has It Committed Suicide?" and "After Mass Production—What?"

² *The Guaranty Survey*, May 28, 1928, Vol. VIII, No. 2, pp. 5-6.

In recent years, however, industrial wages [it stated] have been higher, both absolutely and relatively to the cost of living, than ever before. In other words, a larger share of the national income has been received by wage-earners and has been translated to demand for consumers' goods. It is concluded that this wider distribution of income has maintained the balance between output and consumption of producers' and consumers' goods, and has thus prevented the development of the unsound conditions that ordinarily tend to transform prosperity into depression. . . .

But these large, and in some cases positively excessive, plant capacities are at the same time an important element in increasing overhead costs. In the effort to meet these costs, producers attempt to maintain their sales volumes by every practicable means, even at a heavy sacrifice of profit margins. Earnings are further restricted by the enormous expenditures for advertising and selling involved in such a campaign. Thus, what is saved in unit costs of production is frequently offset by the higher costs of distribution. This situation is present, in a greater or less degree, in a surprisingly large number of American industries, and is probably the chief cause of the condition of "profitless prosperity" of which increasingly frequent complaints have been heard in the last few months.

Mr. Paul M. Mazur, who has published the most comprehensive and exhaustive study of the situation and its implications, points out the "essential interdependence and mutual antagonism" that prevail in the new industrial revolution between mass production and distribution. He briefly states the dangerous stage which has been reached, as follows:

High-pressure distribution was made to create large sales volume. It was and is the agency that harvested more and more sales for the insatiable appetite of its creator—mass production. High-pressure distribution produces sales volume; mass production requires that sales volume.

Unfortunately, however, it is in the manner in which distribution gathers sales volume that the factors of antagonism lie. Distribution in the search for volume employs all the devices at its command—and those devices are exhaustive either in themselves or in their effect upon production.

In developing sales volume, distribution has amplified and intensified its advertising and selling appeal. Such methods are expensive; and the resulting charges are part of the present high cost of selling. The installment plan has been an important factor in selling automobiles and other high unit cost articles. While the result in terms of volume has been gratifying, in terms of distribution, there have been significant additions to the cost of creating volume. To the degree, obviously, that the unit sales cost increases, the economy of mass production is offset. . . .

Since, however, the forces of production and distribution can never have *complete* compatibility, the solution of the problem lies in a reasonable *compromise* between the two. And it is this compromise between the needs of production and the requirements of high-pressure distribution which will mark the new era of American business.

The problem of the next era in industry, he concludes, will consist in the proper adjustment of the new forces of production and distribution. As stated in his own words:

The future holds the development of a new science—the study of the most effective balance between production and distribution. Undoubtedly, industry will be compelled to add to the two great agencies of sales and production a third organization mechanism—a *department of merchandising*. In this unit there will be prejudice toward neither sales nor production, but an interest in both. Here will be balanced the needs and desires of both the selling and the manufacturing ends of industry for the best interest of the net profits of the business as a whole.

AGENCIES FOR INDUSTRIAL COORDINATION ADVOCATED

This new coordinating agency for rational business development will be supplemented, Mr. Mazur also predicts, by other fundamental tendencies, such as further consolidations in production and distribution for the purpose of securing additional economies, especially in marketing, and for developing a greater recognition or degree of control over consumers' demand, thus securing the maximum of stabilization in mass production and distribution.

All other authoritative commentators agree with the conclusion of Mr. Mazur. One of the most noteworthy and stimulating contributions along constructive lines has been made by Mr. Benjamin A. Javits, of New York, who has also prepared a report on the subject for the consideration of the American Bar Association, so far as legislative action may be helpful. He recommended that industry in its movement toward further consolidation be released from the Sherman, Clayton, and other "anti-trust" laws, and that at the same time the personnel of the Federal Trade Commission be changed so as to be more representative of business and its powers extended so that it might guarantee that production and distribution should be conducted on the basis of reasonable profits and prices. Fundamentally, he held, however, that sound future policies must be worked out by industry itself, through an inter-industry coordination agency analogous in function to the War Industries Board of the World War, which he designated as an "Institute of Industrial Coordination." Under such a procedure for cooperation and coordination it would be possible in time, he asserted, to abolish poverty and unemployment, and also—by extending the movement internationally—to construct the only sound basis of world

peace. Some of his most pertinent statements in this connection are as follows:¹

Unemployment is unnecessary. Poverty is unnecessary. War is unnecessary. I do not mean by this that any individual can find work if he wants to: for poverty, like war, is a social problem. What I mean is that America now possesses enough industrial knowledge to abolish poverty, unemployment and war, if that knowledge were only organized. We have ample industrial technique in America to achieve almost anything we can imagine. All we need now is industrial statesmanship to apply that technique to these great human aims. . . .

No amendment to the Sherman Law, and no other national legislation, can insure prosperity. We must look to industry and to business to do that. If our business men discover what the fundamental laws of business are, and conduct American business strictly according to those laws, conditions will be as good as they can possibly be for everybody. But those laws can not be made. They must be discovered. . . .

Industry has no voice. It is not yet integrated. It is like a big shop with a hundred departments each running on its own schedule and depending upon rumors that leak out here and there as to what all the other departments may need. . . .

What is wanted is coordinated effort. What is wanted is some means of discovering the needs of the whole shop and of registering that discovery. . . .

But the problem is industrial and must be solved industrially if it is to be solved at all. Industry must first become articulate. The industrial problem seems to me to be beyond solution until industry evolves some agency through which industry may speak.

Our Chambers of Commerce and our trade associations have done much. But they are only a beginning. What we

¹ See interview of Mr. Benjamin A. Javits by Chas. W. Wood, in *Forbes Magazine* for July 1, 1928, entitled "Abolish Unemployment and Stabilize Prosperity"; also article in July 15 issue of same, entitled "Is Industrial Coordination the Next Step?"

need now is an American Institute of Industrial Coordination—a sort of Institute of Institutes—not to make laws governing industry but to discover what the law of industry is and to guide industry according to that law. . . .

I do not pretend to know how industrial coordination can be brought about. That, too, is something for industry to find out. I am simply proposing an Institute for Industrial Coordination. Let the industries of America *get together and see what they can do*.

If they do get together, with something of the same spirit in which they got together in 1918, I am sure that they can find a way to abolish unemployment. And they can find a way—so I am advised, at least, by many industrial experts—to make American industry many times more efficient than it is even to-day, to double wages, to make the work-day still shorter, to reduce crime and to usher in an era of all-around prosperity and peace. . . .

The principle of service is a universal principle. We have discovered that principle in America: and in so far as we have been able to apply it, we have discovered that it pays. But we have not been able to apply it *inter-industrially* as yet, because we *have not yet evolved any inter-industrial expression*. If we once do that upon a national scale, it is but a question of time when we shall do it internationally. That will mean world peace: and from my point of view, it is about the only hope there is for permanent world peace.

The constructive suggestions advanced by Mr. Javits, as well as his proposed "Institute of Industrial Coordination," created widespread interest among industrialists, financiers, and students, the majority of whom were favorable to his main ideas and principles. Mr. Edward A. Filene, President of William Filene's Sons Company, of Boston, and one of the far-sighted business leaders of the country, commented on Mr. Javits' proposal as follows:¹

¹ *Forbes Magazine* for August 1, 1928, p. 14.

Mr. Javits' proposal for an Institute of Industrial Coordination seems to me to be a step in the right direction.

Bad times and unemployment are largely preventable. They are natural results of the incredible waste that still exists in production and distribution, which in turn is due to faulty economic and business thinking.

Prosperity comes when the masses have adequate buying power. A country may have great wealth—that is to say capital—and still fail to be prosperous if large numbers are without sufficient buying power to be able to buy enough to keep all employed. . . .

As a result of the increased production per man it has been possible to increase their wages and salaries and also to reduce the selling prices of what they make to such a degree that the masses could buy these products freely. This process was helped by the fact that in order to supply these successful industries with needed materials, machinery, equipment and parts, still greater numbers of people were employed at wages that were higher than before.

But now serious unemployment has developed. Various explanations for this unemployment are offered—mostly wrong ones. It is often said that unemployment is caused by the new scientific mass production and mass distribution. The truth seems to be, that to an important degree, it is due to the fact that there is not enough mass production and mass distribution. . . .

Employment for everyone is coming because it is clear that scientific mass production can not live unless the masses can buy freely the goods so produced. It is obvious that the masses must be fully employed in order that any industry shall flourish permanently.

This necessary organization may well take the general shape of an Institute of Industrial Coordination, altho it may be necessary to change the details more or less. I believe that nothing would so definitely and so rapidly stabilize a real general prosperity for our country as the immediate adoption and

effective carrying out of Mr. Javits' main ideas as given in his article. . . .

One of the most hopeful signs that permanent prosperity is going to come in our generation is that serious, practical men of standing, like Javits and Foster and Catchings, are proclaiming the practical possibility of conquering unemployment and achieving regular permanent prosperity, and that they are getting support for their proposals from our leading periodicals and economic and business organizations.

Mr. Mathew Woll, Vice-President, American Federation of Labor, also fully approved Mr. Javits' suggestions, with the assumption that organized labor would be represented on any agency for coordination. His comment in part was as follows:¹

I can do little more than state my hearty approval of the type of institute proposed, as well as Mr. Javits' underlying philosophy.

Laws governing industry must be found and not made. Principles that get results in production must release creative power along constructive channels. Legislation, in practically all cases, is the result of compromise between political groups.

I think Mr. Javits is quite right in believing that we do not need to legislate a new social order in order to have stabilized prosperity and employment for all. We need to create an industrial organization in which all those who make a functional contribution to production have a regular opportunity to discuss the results of their work with all other groups that are performing functional service. . . .

Coordination of each industry must be a genuine organization with authority to represent the workers that comes from an organization by and of the wage-earners. A national Institute for Industrial Coordination should, of course, provide representation for the trade-union movement. For such an organization to function there must be freedom for industrial

¹ *Ibid.*, p. 34.

development along most constructive lines. The Anti-Trust Law would, of course, have to be repealed.

Mr. Rush C. Butler, a national authority on interstate commerce law, and Chairman of the Commerce Committee of the American Bar Association, approved the proposed plan in principle. He wrote, in part, as follows:¹

Mr. Javits' article shows him to be an economist as well as a lawyer. The Sherman Law is economic legislation. There can be no remedy for existing Sherman Law evils until Congress realizes this fact. . . .

The contact of business with government should be through a friendly agency, such as the railroads enjoy through the Interstate Commerce Commission, the agriculturists and packers through the Secretary of Agriculture, the banks through the Federal Reserve Board, and the shipping interests through the Shipping Board.

Mr. Daniel Willard, President of the Baltimore and Ohio Railroad, gave his sanction in principle, but thought the coordination policy for industry should be permitted to develop in a deliberate and orderly way, without sudden, ill-considered action either by industry or by the government. He said:²

I approve in principle of all Mr. Javits said concerning the desirability of cooperation. Whether his one definite suggestion about enlargement of the Federal Trade Board marks the first definite step to be taken or not, I am not sure. As a matter of fact the railroads have probably been doing a great deal more in the way of cooperation since the war than is generally recognized or understood. . . .

What Mr. Javits said concerning the operation of the War Board during the war is quite true, but it required the incentive of a great war in order that it might be true. If a sufficiently strong incentive could be recognized or developed in peace times, I have no doubt that cooperation such as was

¹ *Forbes Magazine*, July 16, 1928—p. 24.

brought about under war conditions might at least be approached.

I am inclined to think that most men who have thought about the matter would accept the ideal pointed out by Mr. Javits as something desirable of accomplishment, but its accomplishment will perhaps be disappointingly slow unless some serious economic or industrial condition should arise making drastic and immediate action necessary, and I assume we would all prefer to see the change brought about in a more orderly and well-considered way.

Professor Irving Fisher expressed his agreement with Mr. Javits' ideas, but stated that it would be very difficult to work out the proper governmental machinery of supervision. His comment, in part, was as follows:

It is undoubtedly true, as pointed out by Mr. Javits, that the Sherman Anti-Trust Law, with its amendments, does limit the freedom of industrial enterprise and, by preventing or limiting combination, does prevent the complete realization of economies due to large-scale production.

I am in agreement with Mr. Javits' plea for a revision of the Federal Anti-Trust laws. Such revision should permit American business men to perfect the organization of their industries so as to produce more economically and to sell their products at lower prices. This does not mean wiping the statute books clean of legislation to control combinations and protect consumers. Quite the contrary. It means simply to change the purpose and intent of legislation by doing away with the needless handicaps, which now hang like clogs upon the wheels of industry, and to concentrate attention upon the supervision and control of bigger and more economical business organizations, so as to prevent exploitation of consumers by these powerful organizations. . . .

While, in principle, I agree with Mr. Javits in his contention for removing restrictions upon business combinations with a corresponding increase in the supervision of corporate activities and accounting, I realize the very great

difficulty of carrying out such a program. The great difficulty is in creating and maintaining an impartial and effective government agency to exercise the necessary control to prevent intolerable abuses by huge business combinations. . . .

I heartily endorse Mr. Javits' suggestion that industry should create its own organization to deal with industrial problems instead of depending entirely or chiefly upon government action. Certain it is, that business as a whole must be better coordinated than it has been in times past if we are to secure real prosperity, which can be attained only through a reasonable coordination and uniformity in our industrial development and expansion.

Only by such coordinated efforts to prevent over-expansion of investment and production in some lines to the detriment of all kinds of business enterprise can we prevent violent price upheavals accompanied by business depressions, crises and unemployment. The government should do everything possible to help smooth out the price and employment curves, but business itself must assume the principal burden in bringing about a better business organization, which will ensure stable prices, expanding production, full-time employment, and true prosperity for the whole country.

President George M. Verity, of the American Rolling Mill Company, stated his entire sympathy for the new proposals, and the real need of working out a practical plan, but doubted somewhat whether industry had reached the point where it would realize its needs and cooperate on a national basis. He said:

I have read Mr. Javits' article with a great deal of interest. I agree with his main argument fully; in fact, I feel he has stated the situation definitely and clearly.

That, however, leaves us just where we began and where we always land; what are we going to do about it? . . .

I feel that each and all of our outstanding basic industries must first reach a point where they see the need of it and are willing "to think and act in terms of the general good." Until

they do, a really coordinated effort could not get sufficient support.

There would, of course, be no reason why the matter should not be agitated all up and down the line and by the Chamber of Commerce. It will, in fact, take much of agitation and discussion to start such a far-reaching movement.

Mr. Javits' whole argument can be boiled down into the statement that "we need a very high order of industrial leadership which can and will bring about a truly coordinated effort." With that I agree fully. The problems now confronting us, after the past twenty-five years of marvelous development, can be solved in no other way.

There is undoubtedly a new spirit in America, which is leading us to feel that the interests of an entire community are greater than those of any unit or group of units in the community; that the best interests of the nation are greater than those of any factor or group of factors in the nation.

I really feel that we have gone so far that we are beginning to see that whatever is in the best interest of world economics, of world peace and prosperity, is going to be at least very largely in the best interest of America, as well as that of every other unit in the great family of the nations of the world.

Stuart Chase, of the Labor Bureau, Incorporated, of New York City, declared that production and distribution could be ended only by some such constructive action as that suggested by Mr. Javits. His comment was as follows:

The proposal of Mr. Javits for an Institute of Industrial Coordination is in line with the whole trend of intelligent modern thought, and if such an Institute can be established under the proper, impartial and scientific auspices, it would do more, in my opinion, than any other one thing to abolish the wastes and injustices and to fulfil the promise of American economic life.

I profoundly doubt if we will ever have assured prosperity, a full utilization of our amazing machine technique and the

end of the tragedy of unemployment, until such an Institute is set up and its findings intelligently acted upon.

Dr. Jeremiah W. Jenks, altho sympathetic with many of the statements and analyses of Mr. Javits, considered his plan for an Institute of Industrial Coordination as an "utterly impractical" one within any reasonable period of time. It was also opposed by Amos L. Beaty, former President of the Texas Company; by William O'Neil, President of the General Tire and Rubber Company, and by Magnus W. Alexander, President of the National Industrial Conference Board. President C. E. Mitchell, of the National City Bank of New York City, stated that he considered the "present is in the right direction" and was "disposed to avoid agitation and await developments."¹

From the general discussion of the proposals of Mr. Javits, it is clear, however, that the business world, altho it differs, as might be expected, in the machinery to be used and in the degree to which action should be taken, is convinced that future progress is contingent upon the repeal of the anti-trust laws, the creation of agencies of regulation of unrestricted competition and production and the establishment of effective coordination of industrial programs and performance. Already a Special Advisory Committee, under the chairmanship of Mr. Manny Straus of New York City has been created to bring together industrial executives in the effort to have them solve the problem of industrial coordination through common counsel and concerted action.²

Even before the publication of the principles and proposals of Mr. Javits, the same trend in the development of industrial statesmanship was already coming into notice.

¹ The foregoing comments as well as other pertinent discussions are taken from the issues of *Forbes Magazine* from July 15 to Sept. 15, 1928.

² *Ibid.*, Sept. 1, 1928.

Reference has already been made to the splendid proposal of Messrs. Foster and Catchings for a Federal Board for collecting data and formulating policies.¹ The former President of the Chamber of Commerce of the United States, Mr. Lewis E. Piersons, also, in an address delivered at the annual meeting at Washington in May, 1928, declared that business could not expect to secure the full benefits of the newly created industrial order until the same degree of cooperation which had prevailed in certain branches of industry was extended to industry as a whole, and a general, coordinated basis of procedure gradually adopted. His significant remarks in this connection were as follows:²

We know that we are headed in the right direction. Yet all of us, I think, are conscious that this new alignment of the forces of industry creates new problems and imposes new responsibilities which must be met and solved by those who have been called to business leadership.

Modern management stands as the representative of three separate and distinct interests. It represents Capital, which supplies the plant. It represents Labor, whose progress depends upon the competency and the vision of those in management. It represents the Public, which uses the product, and which must rely upon industrial leadership for the maintenance of national prosperity.

We have all been satisfied to cooperate on affairs of immediate need. We have proved our ability to work together for the things which directly and presently affect the tides of trade. We have been able to secure common action on matters which pressed for immediate decision.

Yet before we can hope to exhaust the benefits of our new economic policy we must project our cooperation to still another level. We must find a way to cooperate on prob-

¹ See p. 244.

² Ante cited, p. 247.

lems before they arise. We must team-play for the future. . . .

The more we consider the growing productiveness of the United States, the more we reflect upon the problems that have arisen in our industries—and on our farms as well—the more definitely we become convinced that our difficulties come, not so much from the growth of our productive capacity as from our failure to provide proper team-play among the forces of production. . . .

Just as we substituted electricity for steam in our march toward mass production, it should be possible to substitute a scientific system of cooperation, a far-sighted balancing of production and consumption, for the elementary team-play which we have found so serviceable in the past. . . .

Above all, we must have a widespread understanding of the fact that to meet the problems of this newer day we must pass on from team-work within single groups or single industries to that broader cooperation where every group and every industry will consciously relate its expansion and development to the growth, the stabilization and the prosperity of the nation as a whole. . . .

There is no thought that, in so fundamental a matter, the eventual solution can be found in any one organization, or that any small group of men can achieve a result which requires the approval and support of industry as a whole. Before we can arrive nationally at this newer, brighter goal, we must have the intelligent sympathy and assistance of every unit in the industrial machine. . . .

No one who understands the true spirit of American industry can doubt that we shall be able to evolve this higher form of cooperation once the practical method of achieving it shall have been found.

The business world, which has found by experience that the promotion of general prosperity is the highest form of self-interest, will not hesitate to give its aid to any movement which aims at the common good.

After the unparalleled industrial expansion and prosperity of the past five years, the leaders of American industry have thus come into a knowledge of the forces which have been created, the dangers which threaten, and the procedure which must be followed in the future in order to secure the greatest benefits of the new industrial order. Already the excessive costs of high-pressure salesmanship and distribution have been recognized and measures adopted to reduce the unduly high ratio of selling costs to the expenses of production. One of the phenomenal outgrowths of this movement has been the development of systems of chain stores to enable the mass distribution of many classes of commodities at a low selling cost for each unit handled. Analogous to the elimination of competitive expenditures by the formation of large producing units to make possible mass production at low costs, there is now in process a system of mass distribution which has for its object the saving of the losses from independent, competing stores and other agencies. It frequently provides for the direct retail distribution of commodities through stores and selling agencies maintained by the producing corporations. Costs and wastes of distribution are being gradually eliminated and marketing of commodities in an economical way is being reduced to a science. The ultimate object sought is a compromise or working adjustment between the forces of mass production and distribution which will yield the maximum advantages of the new economic regime.¹

A PRACTICAL CONSTRUCTIVE PROCEDURE

Various concrete policies and methods for adjusting production and consumption and thus preventing the losses and unemployment of overproduction, had already been

¹ Article by Evans Clark entitled "Big Business Now Sweeps Retail Trade," *New York Times*, Sunday, July 8, 1928.

generally adopted prior to the recent widespread effort to reduce the costs of distribution. Inventories of all kinds of accumulated stocks of raw materials and commodities for sale were kept at a minimum, and buying only for current needs had been made possible by improved systems of transportation. Associations of producers in different industries had also constantly gathered and disseminated among their numbers information relative to producing and marketing conditions. By these methods the lag between production and consumption had been lessened, and through cooperation within certain industries the relation between production and consumption had been to a greater or less degree satisfactorily readjusted.

As industry advanced, however, the need of solving the larger problems constantly became more apparent. Disorganized or overexpanded industries, such as bituminous coal mining and textile manufacturing, constituted weak spots, which affected adversely the whole industrial structure and all its processes. The realization also of maximum economies, both in production and in distribution, were checked by archaic anti-trust laws. Furthermore, it became apparent that there was not sufficient centralized control or information relative to the development of new industries or the expansion of old ones. Overproduction, maladjustment, or retardation has, therefore, constantly menaced the new industrial organization, and has frequently developed in certain branches, thus preventing the realization of the widespread benefits which should have been accomplished.

The recognition of this condition of affairs has led to the demand that production and distribution should be released from the restrictions of anti-trust legislation and thus enabled to consolidate and secure the freedom of action and the economies which are manifestly essential.

For the protection of the public and of industry itself, it is, of course, conceded that measures of regulation should be established which would restrict profits and prices to a fair and reasonable basis.

SEPARATE COMMISSIONS IN BASIC INDUSTRIES NECESSARY

In this connection, it has been suggested that the Federal Trade Commission's membership and powers should be expanded, and, as thus changed, it should be established as a regulatory body. The objection to such a proposal, however, is the impracticality of one commission being able to investigate and pass upon matters affecting not only all the basic but also the secondary industries of the country. Promptness of action, which is so essential to stability and progress, would be practically impossible. This has been demonstrated by our experience with the Tariff Commission under the flexible provisions of the Tariff Act of 1922. The investigation of costs of production or operation have required such long periods of time to complete and use as a basis of judgment for decisions as to be of little practical value. Also in the case of the regulation of the railroads by the Interstate Commerce Commission, considerable periods of time are essential to pass upon requested changes in freight and passenger rates, the soundness of new security issues, or proposed plans of consolidation and reorganization of railroad properties. If, as has been proposed, a reconstituted Federal Trade Commission would be expected to pass upon similar questions arising in all branches of manufacturing and mining, prompt and intelligent action would be impossible.

The only practical basis of procedure is to create in each basic industry a commission for the regulation of prices, profits, and other relevant matters. An illustration of this procedure has already been afforded by pending

legislation in Congress in the so-called Watson Bill, which has for its object the stabilization of the bituminous coal-mining industry. Coal-mining companies and corporations are released from the provisions of the anti-trust laws, but a Commission is created, and all corporations and consolidations must submit to the jurisdiction of the Commission as a condition to beginning operations. The Commission is authorized not only to pass upon the reasonableness of prices and profits, but also upon the financial structure of corporate consolidations and the question of whether new mining operations shall be permitted. The recognition of the generally-accepted standards and safeguards to labor are also made a condition of conducting operations under jurisdiction of the Commission.

This constructive measure for the coal industry affords a model for establishing similar regulatory commissions in each basic industry with the object of facilitating consolidation and thus realizing maximum economies and efficiency, but at the same time maintaining reasonable prices and profits, and protecting the industry against unsound expansion and overproduction. In addition to regulating production and distribution, it is also of fundamental importance that such industrial commissions should be authorized to pass upon all new security issues in the various industries, and upon financial plans for consolidations and reorganizations. Such authority would prevent investment bankers, financiers, and others from exacting excessive underwriting fees and commissions, and from capitalizing productive gains which should properly be distributed in the form of lower prices or higher wages. It would also free industry from the control of such bankers and financiers as may be more interested in dividend returns and in conventional methods of corporation finance than in real productive achievements. The Interstate Com-

merce Commission was in 1920 given this regulatory power over railroad finance, and the constructive benefits of this grant to the railroads and to the public during the past eight years can scarcely be overestimated.

ADVISORY "INSTITUTE" AND BOARD OF COORDINATION

The broad policies of *inter-industry* cooperation and coordination should be worked out by industry itself. There is no doubt that this can be done. A purely governmental board of coordination with administrative powers would be idealistically desirable but at the present time unsound and impracticable.¹ It is undoubtedly true, however, that the voluntary cooperative action of industry would be greatly facilitated by the creation of a formal board of coordination, under governmental sanction, with *recommendatory powers to industry and to the Congress, but without any direct supervisory or regulatory authority*. The personnel of such a board should be selected by and should be representative of the basic industries, but its members should be appointed by the President and all salaries and expenses paid by the Government. Its functions should consist in collecting, publishing, and disseminating industrial data, and in studying and recommending constructive policies to industry. In conjunction with the board itself there should be created an advisory council or conference of wide industrial representation, to which the board could make recommendations of required legislation for approval and submission to the Congress.

Creating such a board of coordination by the voluntary action of industry, and clothing it with an official character as representative of industry by governmental sanction, would enable industry at once to establish an agency

¹ See "The Road to Plenty," by Foster and Catchings; Houghton Mifflin Co., 1928.

possessed of all the informational sources of both industry and the Government. Thus the board could begin at once, not only the assembling and publishing of facts essential to sound industrial procedure, but also the developing of the policies of cooperation and coordination in the new industrial order which are so essential to the realization of the maximum benefits to all concerned. Industry would thus have at its command a coordinating agency under governmental sanction and cooperation but without undue governmental interference. To secure the best results its membership should, as in the case of the former War Industries Board, include representatives of organized labor and also independent and disinterested economists.

CHAPTER XII

LABOR AND THE NEW INDUSTRIAL REVOLUTION

A proper constructive policy of industrial cooperation and coordination, obviously, is also of supreme importance to wage-earners. It involves not only the continuance of existing theories and procedures as to wage determination, but also the development of concrete methods for the practical application of existing theories. Before taking up the considerations, however, which should affect labor in cooperating toward the realization of sound industrial statesmanship, one striking aspect of the existing situation should not be overlooked.

It is apparent that in the extraordinary industrial developments of the past five years, the changes which have occurred in theories of wage-determination have been even more revolutionary than those which have had to do with the physical equipment, technique, and administration of industry itself. The stones which were rejected in pre-war days have become an essential part of the very foundations of the new industrial order. Wage theories which were not even regarded as suitable for consideration, and which were execrated as destructive by the industrial leadership of the pre-war period, have been unreservedly accepted and applied in the new order of industrial progress inaugurated in the year 1923. Theories and principles of wage fixation which formerly prevailed have been discarded for other theories and standards which, when formerly advocated, were rejected, often arbitrarily, by the pre-war captains of industry as "obviously unsafe," "unsound," or "visionary" and impossible of acceptance.

EXECRATED PRE-WAR WAGE THEORIES HAVE BECOME POST-WAR REALITIES

The free play of the forces of supply and demand, for instance, in fixing rates of pay of industrial workers, was formerly looked upon as an expression of the so-called immutable laws of economics which it would be almost sacrilegious to attack. Conditions which all too frequently resulted from the interplay of these forces were in many cases, it is true, thought to be deplorable, but such conditions were condoned or accepted with resignation on the ground that they were the outgrowth of "inexorable" economic laws. It would be as futile, it was assumed, to play with the forces of supply and demand as it would be to attempt to mitigate the operation of the law of gravitation. Within a few years, however, this more-than-a-century-old theory has been cast aside. It has been recognized that the human element in production should not be purchased on the same basis as raw materials or capital equipment. Whatever the condition of the labor supply might be, it has also been agreed that the minimum wage paid should be sufficient to maintain the industrial worker and his family in health and modest comfort.

This has been a concession to society and to humanity. Industries which may have adhered to the old standards are now condemned as parasitic, and in a constantly growing number of States they are restrained by minimum wage legislation. Moreover, as time has passed, industry itself has become convinced that to adhere relentlessly to the forces of supply and demand in fixing wage rates has been unprofitable and an unwise policy from a purely selfish standpoint.

The principle of basing wages upon the productive efficiency of labor also passed through a similar experience. Before the war, when this theory was first brought for-

ward in a practical way by the locomotive engineers and firemen in their arbitrations, it was derided by railway management as a visionary, academic theory, incapable of practical application. Later, the claim that wage-earners should participate in earnings according to their contribution to output, was strenuously opposed on moral and economic grounds based on the argument that lower costs and productive gains had their origin in managerial ability and in new capital commitments—the installation of new machinery and equipment and the adoption of improved processes and methods. The recognition of such a theory, it was claimed, would remove the incentive for new capital investment and thus prevent industrial progress and expansion.

Not until after the inauguration of the new post-war policy of reviving and maintaining general prosperity through mass production and distribution, and through the stimulation of consuming power by wage increases, was there any general acceptance of the theory that industrial workers should participate in lower costs and productive gains. Some of the ultra-conservative associations of manufacturers even then conceded this participation not as a moral or economic right, but only on the selfish policy that if wage-earners received more compensation they would consume more commodities and services, and thus help to expand demand for commodities—the basic essential of stabilized prosperity. The more liberal industrial leadership, however, has unreservedly accepted as a fundamental of enlightened industrial statesmanship the right of wage-earners to share in output according to their contribution thereto. It has become an accepted, fundamental tenet of the new industrial régime.

Likewise, the opposition to an adequate basic wage has ceased. The old claim that to grant labor a "living wage"

was impracticable, as the national income would not be sufficient to absorb the cost, has been thrown into the discard. The theory of the new industrial era is that wage-increases add to industrial demand and income. Under the new constructive policy, moreover, wage-increases may be indefinite in amount so long as costs are not increased or margins of profit reduced to an unreasonable level. Furthermore, the sanction of the productivity theory as the basis of compensation of labor, capital, and management, automatically carried with it the acceptance of the "living wage" theory—the subject of so much heated controversy and opposition in the immediate post-war reconstruction period.

It is also a striking phase of the present situation that not only wage theories but other policies which were so strenuously opposed by the leaders of finance and industry as a proper basis for business revival after the breakdown of 1920-1922, have now become the fundamentals of the new order. In this connection it will be recalled that, in the unsettled and controversial period of 1921-1922, the majority of financiers and industrialists declared, without reservation, that wage-cuts were an essential preliminary to the return of even normal conditions of production. On the other hand, the representatives of organized labor as well as some of the more far-seeing leaders in industry and economic thinking took the position that wage rates should be at least undisturbed in order to maintain domestic purchasing power, and that production costs should be lowered and industry revived by seeking the cooperation of labor, the adoption of scientific methods, the elimination of waste, and by the investment of new capital in equipment and structures. The short-sighted point of view for a time prevailed and demonstrated its own unsoundness. It was soon superseded, however, as has been shown, by the

more successful policy. As a matter of historical comparison and economic evolution, therefore, one of the most interesting outgrowths of the new industrial revolution has been the reports to directors and stockholders by the chief executives of our leading corporations, which have ascribed the recent unprecedented achievements in trade and industry to the same constructive policies upon which the majority of industrial and financial leaders heaped unreserved maledictions prior to the year 1923. In the zeal for and pride in the marvels of the new industrial day, however, the former anathemas directed against labor leaders, economists, and a minority of far-sighted financiers, industrialists, and publicists, have fortunately been forgotten.

LABOR'S STATUS IN THE NEW INDUSTRIAL ERA

Several years ago President Coolidge in a public address declared: "One of the outstanding features of the present day is that American wage-earners are living better than at any other time in our history. . . . Real wages, as determined by the things that money wages will buy, are higher to-day than ever before in our history. . . . All this has been accomplished in spite of a general shortening of the hours of labor in the industries."¹ As time has passed since this statement was made, officials, students of economics and publicists have further stressed this situation and congratulated the country on the unprecedented status of industrial workers. Representatives from the leading industrial nations of the world have also visited our industries to learn the magic secrets of our prosperity, which has showed generous profits to capital, in the face of higher wages to labor and lower prices to consumers.² In the latter part of 1926, Mr. Carl Snyder, Statistician of the

¹ Delivered September 7, 1924.

² See footnote, p. 3.

New York Federal Reserve Bank, aptly described the extraordinary conditions which then prevailed, as follows:¹

But the gain to the worker has, of course, been immense—the relative “spread” between the wage level and the average “cost of living” having been in the last three years probably greater than at any time in the last half-century. The difference between these three years and the years immediately preceding the War is not less than 20 or 25 per cent. This must mean, for the 30-odd million wage-workers of the country, a difference in extra spending power of not less than 6 or 8 billions annually; which, in the writer’s mind, goes far to explain the prolonged building boom and huge sales of automobiles and other things formerly classed as luxuries.

There is no doubt as to the accuracy of these statements. Large gains have accrued to labor as a whole, both from its added participation in the net revenue gains of industry and from the accompanying decline in prices of articles entering into the consumption of the average wage-earner’s family. As a general proposition, the poor in America since the war have grown richer along with the rich. It has been estimated that the purchasing power of wages in the United States has increased 35 per cent., as compared with the year 1913, or with the period immediately preceding the World War. The studies of the Research Division of the American Federation of Labor also show that in March, 1928, the index of labor’s share in manufacturing production was 10 per cent. greater than in 1922, the year immediately preceding the existing era of unparalleled industrial expansion. During the same period, it also estimated the share of labor in consumption to have advanced 15 per cent. Within the brief history of the new industrial revolution, so to speak, money wages in-

¹“A New Composite Index of Wages in the United States,” by Carl Snyder, *Journal, American Statistical Assn.*, December, 1926.

creased 12 per cent., real wages 18 per cent., and "social wages" as defined by the Federation of Labor, or money wages related to prices and production, 19 per cent.¹

The remarkable improvement in living standards has also been vividly apparent from increases in general income, building and road construction, life insurance, savings deposits, and the assets of building and loan associations per capita, as well as the extraordinary increase in attendance at public schools and colleges, and the almost incredibly wider use of automobiles, radios, telephones, phonographs, and household electrical appliances.

Three especially noteworthy tendencies, however, stand out clearly in considering the unprecedented gains which have accrued to labor: (1), the distribution of these gains has been unequal as between different groups of wage-earners; (2), the workers in certain backward and overexpanded industries, such as bituminous coal mining, certain branches of textile manufacturing, and agriculture, have not participated in the new prosperity; and, (3), the earnings of the greater proportion of industrial workers are still wholly inadequate for the maintenance of proper standards of living.²

As should be normally expected, the larger share of the gains of the recent industrial expansion has accrued to the benefit of the wage-earners who have been organized. This group constitutes, however, only about one-ninth of those gainfully employed. The leading organized groups are the building, metal, printing, barber, and baking trades, teamsters and chauffeurs, street railway conductors and motor-

¹ Article entitled "Wages in Manufacturing Industries," by Jurgen Kuczynski and Marguerite Steinfeld, *American Federationist*, July, 1928; also article in *New York Times Current History* for August, 1928, by Dr. Edward T. Devine, entitled "American Labor's Improved Status since 1914."

² See statements by Prof. Irving Fisher, Yale University, and of the Secretary of Commerce, Herbert Hoover, in the *New York Times* for Nov. 26, 1927, and Dec. 2, 1927, respectively.

men, steam railway engine and train crews and shop crafts, the needle trades, and hard and soft coal miners. By way of illustration: "The Union Scale of Wages," which is compiled by the United States Bureau of Labor Statistics, and which represents almost a million highly organized workers, chiefly in the building, printing, and metal trades, showed an increase of 150 per cent. in rates of pay per hour, and 133 per cent. per full-time week, in 1926, as compared with the year 1914; while at the other extreme, the average weekly earnings of unorganized groups, such as automobile workers, farm laborers, and iron and steel workers, increased during the same period only 98, 73, and 72 per cent., respectively.

The actual earnings of the organized groups have also ranged much higher than those of the great mass of unorganized workers, altho there is also a considerable number of skilled and relatively highly paid workmen who are not members of labor organizations.

As to the adequacy of earnings of wage-earners, even since the time of their participation in the gains of industrial expansion, only the more skilled groups may be said to be earning sufficient to maintain their families on a proper standard of living. The Secretary of Labor, James J. Davis, in addressing the American Federation of Labor Convention at Los Angeles in 1927, in this connection pertinently said:

Even among the millions of workers regularly employed, we all know there are many who do not share in the good wages received by the others. The skilled American worker is paid a higher wage than workers have ever received in history. What we call common labor is paid little higher than the same type of labor in England, and not much higher than common labor is paid in Germany. Wages for common labor in this country are all out of scale.

In his new book on "Social Control," Doctor John O'Grady, Professor of Sociology at the Catholic University of America, says:¹

Excluding the incapable and the handicapped, we find in every city in the United States large numbers of wage-earners whose earnings are not sufficient to maintain themselves and their families in health and decency. The situation is further complicated by the industrial hazards which are ever staring the wage-earner in the face and which threaten to cut off his income. At any time the worker is liable to be incapacitated by illness, and from the very first day of his illness his income is usually cut off. If he is engaged in a seasonal occupation, he will be out of work for certain periods every year. A slackening in the demand for a particular product or a general industrial depression is liable to leave large numbers without positions.

If we are permanently to improve the condition of the poor and to prevent large numbers of wage-earners from passing over into the ranks of the poor, we must strive earnestly for better wage standards and the protection of wage-earners against industrial hazards.

A compilation of the average annual earnings of railway employees for the year 1926 showed the following striking distribution of earnings:

Annual Earnings	Per Cent of Employees
\$2,200 and under \$3,500.....	14.9
1,600 and under 2,200.....	30.0
1,300 and under 1,600.....	20.8
1,000 and under 1,300.....	9.9
Less than \$1,000.....	23.2

Less than one-sixth of all the railway employees, it will be seen at once, were earning enough to maintain accepted standards of living for themselves and their families, while about one-third were earning less than \$1,300 per annum.

¹ Advance statement, National Catholic Welfare Council, Department of Social Action, Washington, August 21, 1928.

The general average of annual, average earnings for all classes of employees was approximately \$1,500.

A study made by the National Industrial Conference Board of about 750,000 employees in all branches of manufacturing disclosed for the year 1927 actual weekly earnings of slightly less than \$27.00 in round figures. If such employees had worked full time for the entire year, their average annual income would have been approximately only \$1,400. The reports of the New York Department of Labor, covering 400,000 wage-earners employed in the factories of the State, indicate for the year 1927 average annual earnings of only \$1,400 to \$1,500.

The United States Bureau of Labor Statistics reported on July 1, 1927, that the average hourly entrance rate of unskilled labor for the country as a whole on construction work, on public utilities, and in representative branches of manufacturing, ranged from 39 to 61 cents per hour, the general average being only 42 cents per hour. It also showed that the average weekly wage of railway track laborers (about 200,000 in number), was only \$17.00. The Bureau of Agricultural Economics of the Department of Agriculture also reported that the average monthly wages of farm laborers in October, 1927, were only \$35.68 with board, and only \$48.77 without board. It may be conservatively estimated in general that all farm laborers, at least one-half of the mine workers, employees in manufacturing and mechanical industries, and clerical workers, and one-third of the manual workers in transportation, trade, and public service, do not earn more than \$25.00 per week or \$1,200 per annum.

The following comparative statement shows the yearly cost in 1926 of minimum budgets for an average family of clerical or industrial workers, according to the standards and inquiries of the best authorities:

LABORERS

Philadelphia—Bureau of Municipal Research.....	\$1,926
Detroit—Visiting Housekeepers' Association.....	2,032
California—State Civil Service Commission.....	2,101

INDUSTRIAL WORKERS

(Presumably Factory Workers)

New York City—Bronx—Nat'l Industrial Conference Board	1,908
New York City—Brooklyn—Nat'l Industrial Conference Board	1,841

CLERICAL WORKERS

New York Bureau of Municipal Research.....	2,173
New York National Industrial Conference Board— Richmond	2,203
Brooklyn	2,084
Washington Government Employee.....	2,011
California—State Civil Service Commission.....	3,067

The budgets upon which the foregoing costs are based, with the exception of the California Civil Service Commission, make no provision for savings, and provide only for the minimum requirements of health and decency. In the light even of these minimum requirements, the annual earnings of the majority of our unskilled laborers and factory workers—which, as shown above, at a maximum range only from \$1,200 to \$1,500—are, to say the least, obviously inadequate. The Reverend John A. Ryan, of the Social Action Department of the National Catholic Welfare Council, forcibly called attention to this condition of affairs in the course of a Labor Day statement for 1928, as follows:

In the United States at the present time we are in danger of yielding to a false sense of industrial security. Strikes have become relatively infrequent; class feeling has apparently diminished; socialism, which troubled us so greatly a few years ago, has all but disappeared. Yet to assume that this is an adequate picture of labor conditions is to deceive ourselves.

Despite the fact that here in the United States the wage-earning class as a whole is better off than any other laboring population has ever been anywhere in the world, our industrial system contains certain grave defects and presents certain very menacing features.

First, as regards wages. No competent authority denies that an annual income of fifteen hundred dollars a year is necessary for the decent support of a husband and wife and three children in any city of America, or that considerably more than that amount is required in our largest cities. Nor does any well informed person deny that a very large proportion, probably a majority, of our male wage-earners receive less than fifteen hundred dollars a year.

Some persons who are aware of these facts belittle their importance with the comforting assumption that these underpaid wage-earners are somehow made of different clay and therefore can readily get along with less than the normal requisites of life. Other complacent persons reflect that a majority of these underpaid males are probably unmarried and probably do not need a family wage.

All such persons need, first of all, to examine the pertinent facts. They ought to inquire whether it is really true that the underpaid workers and their families differ so greatly from their fellows that they can live decent human lives on less than decent wages. Such an inquiry honestly made would produce a disquiet of conscience in any person capable of that feeling. A similar reaction would be experienced by any well-disposed person who considers fully the implications of a situation through which a very large number of adult males are compelled through lack of income to forego marriage and family life indefinitely.

Previously, in November, 1927, Professor Irving Fisher of Yale University had effectively shown that the "poorest" group in the country, or about 65 per cent. of the population of the United States, had not participated equitably in our unprecedented prosperity, and that their incomes

were inadequate as measured by proper living standards.¹ In general, it is indisputable that the greater number of industrial workers are not earning sufficient to provide proper standards of living for themselves and their families. The great mass of unskilled laborers are practically on, or very little above, a bare subsistence level of living.²

A PRACTICAL, CONSTRUCTIVE METHOD OF WAGE FIXATION NECESSARY

The foregoing brief outline of the actual economic condition of the wage-earner clearly shows that a practical and equitable method for wage fixation and for the participation of wage-earners in productive gains should be quickly developed. This is not only necessary from the standpoint of industrial equity, but also essential to the continued onward development of industry itself.

Since the new industrial order was inaugurated in 1923 there has been too great emphasis placed upon wage principles and theories and too little attention given to their actual, practical application. Industrial leadership has accepted in principle the "living wage," the theory that the increased productive efficiency of labor should be rewarded by a participation in net revenue gains, and has unreservedly advocated high wages as an economy, and as the underlying basis of continued industrial achievement because of the dependence of mass production upon increased domestic purchasing power and consumption; but on the other hand, very few industrial leaders have given thought to a concrete method for working out this program. They have either voluntarily made advances in rates of pay, or have responded wholly or in part to demands made upon

¹ Statement in *New York Times*, November 26, 1927.

² "American Labor Dynamics," edited by J. B. S. Hardman; Harcourt, Brace & Co., New York, 1928; Part One, Ch. III, by Lewis Corey, entitled "The New Capitalism."

them by their employees, or have along with their employees submitted requests for wage-increases to official or unofficial boards of arbitration. In many cases, the prevailing and the generally accepted wage theories have been put forward and sanctioned by arbitration boards; but there has been no general movement by industrial management or wage-earners, either separately or by mutual agreement, to work out these new principles and theories in a practical way as a permanent basis of procedure.

Organized labor and wage-earners in general, on the other hand, have, as a rule, contented themselves with the gains which they have received from declining prices, and by wage increases which have been secured through the old, conventional methods of conference, mediation, and arbitration. Without analyzing other adverse conditions which have been present, it seems astounding and almost incredible that organized labor has made no general effort, through the formulation of a concrete plan, to take advantage of virtually the invitation to labor by industrial management to participate in the productive gains of industry on the basis of labor's gains in productive efficiency, as well as to seize upon the constantly reiterated statements of industrial leaders that there would be no limits to rates of pay provided labor and management were successful in economic accomplishment. It would seem to those who have not followed the movement carefully that the unprecedented attitude of industrial management and policy toward wage theories and standards, after the starting of the new constructive program of 1923, should have stimulated organized labor immediately to devise and work out methods for securing the practical application of the new theories which industry had accepted.

As a matter of fact, the American Federation of Labor did at once pledge its adherence to the new attitude of

management and pointed out that it was a recognition of the principles for which organized labor had constantly striven. The Federation also developed the "Social Wage" conception, or a general wage-theory for the benefit of the entire labor movement, and at the same time worked out statistical methods by which individual unions, as well as the labor movement in general, could ascertain whether they were securing a proper degree of participation in the output of industry. No practical general method, however, has thus far been formulated and accepted by the organized labor movement in general, by which labor and management or capital might cooperate in applying the newly accepted theories of wage-determination and the principle of the further participation of labor in the increased productive efficiency of industry.

The principal cause of this seeming omission has been the aggressive movement among large and influential industries since the year 1920-1921 to oppose and check the organized labor movement. Many large employers have also stimulated counter movements for "employee representation" or so-called "company unions." This fight against labor unions, together with other adverse factors with which they have been confronted, has exhausted the resources which might have been developed in a constructive way toward cooperation and productive efficiency. The energies of organized labor, by force of circumstances, have thus been largely spent in maintaining and extending its position.¹ Only recently has it been able to concentrate upon a new, concrete wage plan. Several noteworthy precedents, however, have been established during the past year, which afford the basis of a comprehensive, constructive program.

¹ For a concise analysis of the organized labor movement since the war, see "American Labor Dynamics," ante cited, Part One, Chapter II, by Leo Wolman, entitled "Economic Conditions and Union Policy."

A PROPOSED METHOD OF WAGE ADJUSTMENT

It is apparent that any general plan for the readjustment of wages in industry must begin with the lowest group of industrial workers, and from this starting point work upward in the scale of occupations. This is necessary because the first essential step toward the accomplishment of real cooperation and productive efficiency is to place the lowest grade of workers upon a basis where they can develop both the will and the qualifications for cooperation. It would also be sound policy from a human and social standpoint. Moreover, it would be exceedingly profitable to industry itself thus to work out reasonable advances in rates of pay to a multitude of workers who would actually and potentially become a great reservoir of increased purchasing and consuming power.

After the principles and methods have been laid down upon which to develop within a reasonable time adequate standards of compensation for unskilled and semi-skilled workers, the next step should consist in the readjustment of the existing differentials—above rates of pay for common labor—which have been heretofore established on the grounds of skill, hazard, and responsibility. It would be hardly possible at once to decide upon a policy of maintaining pre-existing differentials for those in the higher groups of labor, after the basic rates for unskilled employees had been radically increased. Drastic changes and dislocations would have to be avoided. All the relevant circumstances surrounding each specific trade or industry would have to be considered. The ultimate goal to be aimed at, however, would be the establishment of basic rates for unskilled and semi-skilled workers adequate for the maintenance of living standards of health, modest comfort, and savings, as shown by sound budgetary studies, and above these minimum rates the fixing of pre-existing

and traditional differentials according to hazard, skill, responsibility, and productive efficiency.

When the practical procedure had thus been worked out for thus establishing rates of pay and relating them to each other, a plan should then be adopted by which these basic wage-standards would be permanently maintained in terms of actual purchasing power. This would require the creation of a statistical division to compile changes in prices or costs of living at regular intervals, according to the usual budgetary standards of weights, it being understood that at reasonable intervals wages would be automatically adjusted according to fluctuations in the costs of living index.

After the general wage-scale had been worked out in this way and provision made for the maintenance of its purchasing power unimpaired, whether cost of living advanced or receded, there should finally be formulated the principles and methods upon the basis of which wage-earners should participate in the productive gains of industry. There are many plans by which practical experience has already demonstrated this may be done. Those which have been found most satisfactory are: (1), the guaranty to wage-earners as a whole in an industry of a certain ratio of the gross revenues of the industry and its distribution to individuals according to relative earning power; or, (2), the guaranty to wage-earners of a certain proportion of net revenues or revenue gains, after capital requirements had been fully met; or, (3), the guaranty to labor of a certain percentage of the gains in economies and efficiencies which had been produced within given periods, usually one year, by cooperation between labor and management.

Either the second or third method enumerated above would probably be the most satisfactory. The first method

is more suitable for an undertaking where an expansion of demand may develop, without reductions in rates or prices, or to the revenue gains to which wage-earners may contribute through cooperation in securing customer goodwill and patronage. It is admirably suited for an equitable sharing of the revenue gains of public utilities, such as street and steam railways, but not so just or practical for manufacturing and mining industries.

To summarize briefly, therefore : a practical basis of procedure would provide :

1. For the establishment of adequate basic or minimum rates of pay for the lowest grades of workers according to accepted budgetary standards showing what the earning requirements of the unskilled worker should be.
2. Provision for the maintenance of pre-existing differentials above these minimum rates according to skill, hazard, responsibility and productive efficiency.
3. The arrangement of indices by which the foregoing wage-scales would be periodically adjusted according to fluctuations in living costs, and,
4. The adoption of an equitable method by which labor's share in the productive gains of industry over and above its regular wage rates could be determined. If the productivity of industry as a whole increases materially, this would, of course, be prima facie evidence for increasing the basic rates of pay so as to allow for permanently higher standards of living.

Such a basis of procedure as the foregoing is of fundamental importance to labor, not primarily because of the gains in economic well-being which it may make quickly possible for individuals and labor as a class, but for the

reason that it is necessary to the permanent welfare of labor; it is vital to the best interests of the workers that they should squarely and practically accept the principle of cooperation on the basis of economic accomplishment, and thus permanently identify their interests with those of industrial progress and efficiency. Ultimately this procedure will result in labor becoming capital and in the complete democratization of industry.

To management and capital such a method of procedure is also of equal importance, because they cannot hope to realize the maximum of industrial efficiency without the wage-earners' cooperation. It is also essential in order to prevent serious retardation of and losses in industry. Otherwise, discontent will develop together with recurrent losses from strikes and lockouts. Labor's cooperation, in other words, is now generally recognized as essential to industrial peace, stability and maximum efficiency.

AN INDUSTRIAL CODE AND COOPERATION

It would be wise industrial leadership, indeed, to extend also an agreed-upon arrangement for cooperation between management and labor, beyond the principles of wage determination, to the other guaranties and safeguards of industrial democracy. The most important of these is the right of labor to organize and bargain collectively through representatives of its own choosing. The denial of this right is, in reality, the greatest cause of industrial unrest and dissatisfaction, and of actual industrial conflict and loss in the country at the present time. There can be no real peace and cooperation in industry until this right is generally guaranteed. The organized labor movement is fundamentally dedicated to its attainment. Agitation, strikes, and huge attendant losses, will continue until it generally prevails. Its recognition is ultimately inevitable.

If the time and energy which are now devoted by labor to securing the acceptance of this elementary principle—and by management to opposing it—were turned toward productive achievement, the results would be incalculable. The spirit of industry would be revolutionized. Suspicion, distrust, and resistance would be supplanted by confidence and the desire and will to cooperate for the realization of maximum efficiency and productivity.

No greater constructive step could be taken by modern industrial management than to accept unreservedly the right of labor to organize and bargain collectively on a union basis, and to develop its constructive policies from a foundation of management-union cooperation, both sides dedicating themselves to the principle of economic accomplishment. This fact has already been clearly proved by the best and most successful industrial leadership of the present day. There can be no doubt that, if to the sound and far-sighted principles of wage determination which industrial management has already subscribed, and which it has widely advocated and partially applied, it would add the principle of union recognition as the basis of cooperation between management and workers, a more complete and enduring groundwork would be thus laid for the realization of those two vitally necessary factors for successful industrial achievement, namely, stabilization and productive efficiency.

As illustrative of a series of principles with the object of guiding industrial relations so as to promote industrial peace and cooperation and stimulate maximum production, a code suggested in connection with pending legislation for stabilizing the bituminous mining industry may be cited. The fundamental principles and safeguards to both employers and employees in this code, it will be noted,

covered wage determination as well as relations between employers and employees. It was as follows:

1. The right of employees to organize and to bargain collectively through chosen representatives is recognized and affirmed. This right shall not be denied, abridged, or interfered with by employers in any manner whatsoever.
2. The right of employers to organize in associations or groups and to bargain collectively through chosen representatives is recognized and affirmed. This right shall not be denied, abridged, or interfered with by the employees in any manner whatsoever.
3. Employers shall not discharge workers for membership in the union, nor for legitimate trade-union activities. No employer shall demand or exact a contract from an employee which undertakes to obligate him to refrain from exercising the right to join a union. Employees who, previous to this agreed-upon code, have entered into individual contracts with employers shall have the right to abrogate these contracts, to affiliate themselves with the union, and to have the union represent them in dealing with employers.
4. Human standards of health, safety, and economic well-being shall be accepted as the constraining considerations in fixing the wages and working conditions of employees.
5. The right of every unskilled or common laborer to earn a wage sufficient not only for the necessities of life, but also to maintain a normal family in health and reasonable comfort, and to afford an opportunity for savings against unemployment, old age, and other contingencies, is recognized and affirmed. Above this basic wage for unskilled workers, dif-

ferentials in rates of pay for other workers shall be established according to skill, experience, hazards of employment and productive efficiency.

6. The right of women to engage in industrial occupations is recognized and affirmed; their rates of pay shall be the same as those of male workers for the same or equivalent service performed; they shall be accorded all the rights and guaranties granted to male workers, and the conditions of their employment shall surround them with every safeguard of their health and strength and guarantee them the full measure of protection which is the debt of society to mothers and to potential mothers.
7. Children under the age of sixteen years shall not be employed.
8. Six days shall be the standard work-week, with one day's rest in seven. The standard work-day shall not exceed eight hours a day.
9. Punitive overtime shall be paid for hours worked each day in excess of the standard work-day.
10. Efficient production in conjunction with adequate wages is essential to successful industry. Arbitrary restriction on output below reasonable standards is harmful to the interests of wage-earners, employers, and the public, and should not be permitted. Industry, efficiency, and initiative, wherever found, should be encouraged and adequately rewarded, while indolence and indifference should be condemned.
11. Consideration of reduction in wages should not be reached until possibility of reduction of costs in all other directions has been exhausted.

The foregoing code of principles for the guidance of industrial relations is comprehensive, and may, altho it

should not, require considerable time for general acceptance. The point of paramount importance, however, to industrial peace and proficiency, is the underlying principle of organization and collective bargaining. Its general application is an essential preliminary to real industrial stability and accomplishment.

UNION-MANAGEMENT PLANS OF COOPERATION ON THE RAILROADS

There have been several noteworthy plans of union-management cooperation which afford the basis, through practical experience, for a general constructive policy along the lines that have been suggested.

So far as the productive efficiency principle is concerned, or a method for employees to participate in the results of their own cooperative efficiency, the Southern Railroad in 1924 entered into an agreement for three years with its unionized engine and train service crews, providing that these classes of employees should receive, in addition to their regular rates of pay, a bonus each year of 1½ to 3 per cent., if the ratio of certain selected items of operating expenses to total operating revenues did not increase. The "test ratio" was based on the operating expenses for the year 1923. When this agreement terminated in 1927 a new arrangement was negotiated with the engineers and firemen alone, based on the same principle, namely, that if these classes of employees would cooperate in reducing operating costs, such as fuel, oil, and other items, applicable to their specific work, they would be given a share of the gains realized. Moreover, as this was worked out on the ratio of the aggregate outlay for specific items in relation to total gross revenues, it was also true that engineers would receive advantages from favorable factors affecting gross revenues, or the other side of the operat-

ing ratio, such as increase in density and volume of traffic, the expansion of the business of the railroad company or higher freight and passenger rates.

THE SHOP CRAFTS AND THE "B. & O. PLAN"

The most important experience in cooperation between labor unions and management, however, so far as railroads are concerned, has arisen from the so-called "B. & O. Plan," which has been in practical operation for about five years. It was first inaugurated in 1923 by an agreement between the Federated Shop Crafts and the management of the Baltimore and Ohio Railroad. Both management and employees pledged themselves to reduce operating costs by economies, new methods and improved mechanical processes, and thus to stabilize employment and to extend the annual period of regular work. Local, division and general joint-committees composed of representatives of management and men were formed to put the arrangement into effect and to carry out its provisions.

This innovation in industrial relations was successful from the beginning. Waste was eliminated, new methods and processes installed, costs reduced and greater stability and duration of employment secured. Its results on the Baltimore and Ohio Railroad were so satisfactory that the same plan was later adopted by the Chesapeake and Ohio, the Chicago and Northwestern, and the Canadian National railroads.

Thus far under this plan the benefits to employees, however, have been restricted to more regular and more extended employment. The arrangement contemplates also that, in addition to regular rates of pay, there should be a pecuniary reward to employees in the form of a share in the net revenue gains arising from increased economies and efficiencies; but, up to the present time, emphasis has been

restricted to two objectives: (1), regularizing employment by adding to the average number of days worked each year, and (2), building up wage rates to an adequate basis. It has been decided that it is more essential to the permanent well-being of employees and of the arrangement itself to concentrate upon raising wages to a proper basis, and upon establishing satisfactory working conditions, including the length of the work-day and work-week, annual vacations with pay, and similar standards, before extending the plan to include a participation in revenue gains over and above the regular wage scale.

This method of procedure is unquestionably based on sound reasoning and the best industrial practise. Co-operative gains should at first find expression in proper standards of work and compensation. Under the conditions of railway operation and regulation, progress in extending a plan of this kind must also be necessarily slower than in private enterprises.

The railroads in certain designated territories usually deal with employees as a unit so far as rates of pay and industrial relations are concerned, the procedure for negotiation, mediation, and arbitration being provided by federal legislation. As a consequence, the "B. & O. Plan" must adjust itself to this situation until it has been accepted by a larger number of railroad systems, in order that it may become the subject of a general determination of policy.

The Transportation Act also provides that revenues in excess of a 6 per cent. return on the property investment of the carrier shall be divided with the Government, and the Interstate Commerce Commission would not for this reason probably look with favor upon a division of net revenue gains between management and employees of certain railroads until some general basis of understanding had been reached. It is, therefore, probable that the

"B. & O. Plan," so far as a direct participation in revenue gains from increased productive efficiency is concerned, will be checked until its basis of acceptance by the railroads is broadened, or until such a policy is approved by the Congress by an amendment to the existing law.

THE HANSEL SUGGESTION

An excellent suggestion, however, along this line has been made by Mr. Charles Hansel, the eminent railroad engineer and consultant. In his opinion, it would be promotive of railroad operating efficiency and of benefit to all concerned in the material progress of this country if Congress changed the Transportation Act so that part of the recapture earnings go to the operating personnel of the carrier from whom the excess earnings are recaptured, as a reward for the increased efficiency of men and management. This proposal should receive the favorable consideration of the Congress, as it would stimulate economic and efficient railway operation, thus benefiting the shipper and the people. It is also in accord with the most successful practical experience in cooperation, such as that under the Mitten Plan in Philadelphia, and is basically conservative, as management and workers would not participate in productive gains until after a fair return had accrued to invested capital. Its adoption would go a long way toward insuring peace in the transportation industry and would be a most stimulating tonic to the morale, and to the spirit of economic accomplishment by railroad workers and management.

THE UNITED MINE WORKERS AND THE ROCKY MOUNTAIN FUEL COMPANY

A recent agreement in part of the coal fields of Colorado marks the beginning of real union-management coopera-

tion in the soft coal industry. A woman, Miss Josephine Roche, is responsible for it. She took charge of the Rocky Mountain Fuel Company in 1927, and inaugurated it in that company. The agreement provides for union recognition, a basic wage, a wage differential for union labor efficiency, and a pledge by both management and the union to cooperate for the realization of the greatest possible output. Its main features are as follows:

1. Establishment of a basic daily wage of \$7.00.
2. Granting of a differential of 23 cents per day over non-union mine rates as a recognition of the greater efficiency of organized labor.
3. Acceptance by the miners of the obligation to cooperate with management in the more efficient operation of the mines.
4. Elimination of all working conditions which impair the efficiency of the mine worker.

In addition to these fundamental principles, the agreement also provides for the establishment of departments of medicine and sanitation in lieu of the old "company doctor" system, and for other improved working conditions.

This is the first formal precedent in the bituminous coal mines for securing increased productive efficiency by cooperation between union and management, and for the guarantee to the mine workers of increased rewards for their productive gains. The principles involved should be accepted in all the soft coal fields for the reason that the stabilization and prosperity of the whole industry is dependent, more than upon anything else, upon the establishment of constructive, economic accomplishment through cooperation between mine-managements and the United Mine Workers of America.

THE AMALGAMATED CLOTHING WORKERS AND THE NASH PLANT

Reference has already been made to the emphasis placed upon efficiency and productivity by the Amalgamated Clothing Workers as a fundamental policy of the organization and the extent to which it has been reflected in agreements with managements as well as in other activities of the union. Especial interest in this connection was aroused by the unionization in 1926 of the A. Nash Company, Inc., of Cincinnati. Until the end of the year 1925, the history of this company had been that of a pure democracy animated by the "Golden Rule." From both an ethical and a democratic standpoint, its experience had been unusual. Management and employees had cooperated to reduce costs and expand the business, basic rates of pay had been steadily increased and employees had also been given generous participation in the productive gains realized.

This remarkable status had been attained when the operations of the company were on a non-union basis. Its history since unionization at the beginning of the year 1926 has, therefore, been watched with intense interest to see what would be its experience after it had been unionized. On this point, it is gratifying to find that under union-management operation during the past two years, the attainments in productive efficiency have been even greater than before unionization. The union has given invaluable assistance in modifying methods of manufacture in order to improve the quality of the output and to enable the Nash Company to hold its place in the face of a growing competition along the lines of the former standards of production. In the Schaeffer factory, which had been previously acquired by the Nash Company, suggestions by union representatives led to lower costs and higher wages. Unionization, in brief, has been strikingly successful. Union-

management cooperation in this establishment affords one of the best object lessons of the possibilities for constructive achievement by the organized labor movement.

THE EPOCH-MAKING SIGNIFICANCE OF THE MITTEN-MAHON AGREEMENT

Other outstanding systems of cooperation between management and employees, which have been developed on a non-union or a partially unionized basis, are identified with the Columbia Conserve Company of Indianapolis, the Dutchess Bleacheries, New York, the Dennison Manufacturing Company, Massachusetts, and the Mitten Plan of the Philadelphia Rapid Transit Company. The latter plan is the most comprehensive and democratic arrangement for industrial stabilization and cooperation which has thus far been worked out. It has had about seventeen years of successful experience behind it, having been first inaugurated in 1911 by guaranteeing to employees a designated share of gross operating revenues for wages, thus assuring higher rates of compensation as the business of the company expanded. From this beginning the present comprehensive plan was gradually and successfully evolved. Its main features may be briefly stated as follows:

1. Independent system of collective bargaining for employees.
2. Establishment of adequate wage standards before returns are made to capital.
3. Maintenance of purchasing power of established wage-scale by having rates automatically adjusted at regular periods according to the fluctuations in living costs.
4. Granting to employees, over and above the regular wage scale, of a share in net revenue gains resulting

from management-employee cooperation, economies, and efficiencies.

Participation in revenue gains was first guaranteed to employees, as has already been stated, according to an agreed-upon ratio of gross operating revenues. This was changed later to a so-called "wage dividend," which represented approximately 10 per cent. of the money results secured from lower costs of operation. The "wage dividend" was accepted by the Pennsylvania Public Service Commission, but later was ordered discontinued by the courts, and, as a result, the existing method was adopted, under which employees share on a 50-50 basis with management in a fee for operating the property. This fee is based on a certain percentage of the gross revenues from operation.

Employees have collectively used their shares of productive gains to purchase common and preferred stock of the company. They now hold more than 30 per cent., or the largest single block of the common stock, and their representatives are active members of the Board of Directors. Practically speaking, the employees collectively control the company.

Recently, the Mitten Plan has received an added significance from the fact that Mitten Management has entered into a formal agreement, on the basis of the principles of the Mitten Plan, with the Amalgamated Association of Street and Electric Railway Employees, the national organization of the street railway employees, and one of the oldest and most conservative unions affiliated with the American Federation of Labor. This agreement, which was arranged by Dr. A. A. Mitten and Mr. O. L. Mahon of the Amalgamated Association, contains the following remarkable provisions, so far as the constructive policy of organized labor is concerned:

1. The union agrees to cooperate with Mitten Management in the operation of properties according to the Mitten Plan as it has been fully developed in Philadelphia.
2. Mitten Management agrees that the results of cooperation shall first accrue to the benefit of employees in the form of proper working conditions and adequate wages, it being expressly stipulated that basic wage standards shall be sufficient to support the employees in health and comfort, and to provide savings against old age, disability, and other contingencies. The purchasing power of basic wage rates, as thus established, shall be maintained by adjusting them at regular intervals to changes in living costs, and,
3. After these conditions have been established, and a fair return to invested capital assured, employees shall have an equal participation with Management in productive gains arising from cooperation. According to the method now in effect in Philadelphia, the managerial operating fee, which is based on a certain percentage of gross revenue, will be divided equally between management and employees, unless some more acceptable method should be adopted by mutual agreement.¹

The significance of this agreement to industry in general has been that a comprehensive, constructive, and practical program is now available to both management and labor, under the terms of which the most enlightened principles of wage determination are accepted with further provision for labor participation in the gains of productive efficiency, and for employee stock-ownership on a collective basis and

¹ For details of this agreement, see pp. 187-191.

the sharing with capital and management in the actual operation and control of industry.

Such a program meets the need which heretofore has been evident. Moreover, it is of epoch-making importance that in this arrangement the union of the employees accepts the "principle of economic accomplishment" as the basis of cooperation, and that management guarantees that the reward to labor shall be coextensive with its achievements. The union has, in other words, adopted as a method of working procedure with management the most comprehensive plan of industrial efficiency, cooperation, and democracy which has thus far been developed. The underlying principles of the agreement, as well as the methods employed in applying them, have had a practical demonstrated success under Mitten Management in Philadelphia since 1911.

Now that this agreement has been made, it probably will and undoubtedly should become the constructive program of the entire organized labor movement. It will be brought before labor conventions and conferences for discussion and adoption. It will be urged upon arbitration boards and other agencies of wage adjustment.

Its principles are based on sound economics. They are also in accord with the constructive declarations which have been issued since the World War by the churches of all denominations. By these and other liberal sources it will without doubt be brought forward as a sound and conservative constructive plan for democratizing industry.

What the Mitten-Mahon agreement may mean may be gathered from a declaration made by Mr. T. E. Mitten before the Congress of American Industry in Philadelphia on September 25, 1926. He stated that if the principles of the plan were adopted on the railroads of the country, the employees, within ten years, would acquire a controlling

interest in railroad stocks and at the same time proper returns would be assured to capital and charges to the public reduced.

A similar situation, he added, could also be brought about in the anthracite coal-mining industry within ten years, and in the bituminous branch of the industry within fifteen years.

Of equal interest, from a standpoint of real democracy, are his ideas relative to the functions and objects of the banking institutions which have been developed as a part of the Mitten Plan. In a recent interview in *The Savings Bank Journal*, he said:¹

The labor bank of the future, to be increasingly useful to the community, should consider labor in the broader sense. By that I mean the combination of brains with brawn, management with men. . . . The success of the Mitten Bank has been due to a judicious mingling of the efforts of trained management and constructive labor, which in turn has been made possible by the confidence engendered by years of working together toward a mutual end.

The forces of labor in this country, aggressively led, could within one generation control the entire financial structure of the country. To the conservative old-line banker such a possibility smacks of socialism. But there is an adequate safety-valve in that labor could never acquire such an influence except by following such a forward-looking policy of cooperation with management that the resultant good to all concerned would banish forever the possibility that the forces of labor would use their power toward destructive ends.

The point of underlying interest and significance in the present connection, however, cannot be over-emphasized. It is that a constructive program, recognizing the accepted

¹ Quoted from *Service Talks*, Mitten Management, Inc., March 27, 1928. Vol. 9, No. 6.

principles as to wage fixation and a concrete method of cooperation on the basis of economic performance, has been formally adopted by organized labor and management and put into effect. The precedent has, therefore, been established for proper cooperation in industry. From this beginning, management and labor may be expected to cooperate so as to attain the maximum of industrial stability and prosperity.¹

COOPERATION BETWEEN UNIONS AND MANAGEMENT NECESSARY

So far as wages are concerned, it may be stated in conclusion that there has been one motivating force in the new industrial revolution—a force which has been of fundamental significance in its bearing upon future policy—namely, the fact that the emphasis laid upon productivity as the basis of success for the new industrial order has inevitably led to the discarding of all old wage theories and standards. It has been freely conceded that wages could be indeterminately advanced so long as productiveness was increased and costs reduced. This attitude has been further strengthened since it became evident that mass production could be profitably accelerated only by corresponding increases in domestic purchasing power. Hence, the economy of higher wages under the condition of increased productive efficiency became firmly accepted and established by industrial and financial leadership.

The old wage theories therefore were forsaken. A new general policy was substituted. The standards and sanctions as to wage theories and standards, up to 1923, were largely a matter of enlightened public opinion and educa-

¹ For a more detailed presentation of all phases of union-management cooperation see article entitled "Cooperation of Trade-Unions With Employers," *Monthly Labor Review*, U. S. Dept. of Labor, October, 1928, pp. 1-23.

tion. Within the limitations of productivity as prescribed by the new industrial revolution, the new wage principles, in contrast, became actual animating forces to industrial leadership. Definite methods for their practical application, however, were not worked out or applied. Neither has there been any aggressive movement in this direction until recently. The Mitten-Mahon Agreement, especially, and to a large degree also the "B. & O. Plan" and similar experiments in other branches of industry, have now afforded concrete object lessons for a general constructive program.

Capital and management have already accepted the new wage theories in principle. They must now join with labor in working them out practically on the basis of the Mitten-Mahon Agreement and other sound results of experience. Industry must proceed in the future upon the concrete application of these new theories and principles; otherwise, it cannot expect to have the cooperation of labor, which is vitally necessary to industrial peace and stability, or to secure the expansion in purchasing power and consumer-demand which is essential to industrial progress.

INDUSTRIAL COORDINATION INEVITABLE

In its more general aspects, the new industrial revolution has been primarily a matter of technique. There has been no general uniform industrial policy or unified action which has been observable either in cause or in effect. This also remains to be developed in a practical way and is an essential condition to future success.

Already the more far-sighted leaders of industry, as has been shown, have realized the importance of immediate action in this respect. They know and have declared that the extraordinary changes in industry in recent years were

made possible through coordination of separate plants and corporations in the principal branches of manufacturing and mining. They realize that the same policies of adjustment of production and consumption, which have been successfully developed by associations in individual industries, must now be applied to industry as a whole. Moreover, it has become evident that industry and trade must be released from the restriction of the anti-trust laws, so that the maximum economies in production and distribution may be made possible.

This freedom to industry—this liberation from the effects of negative or restrictive legislation—is indispensable. It means further, however, that industry will have to submit to an enlightened policy of regulation. Moreover, it is clearly apparent that industry must itself work out and apply the broader policy of inter-industry coordination or the public will inevitably be forced to impose such a policy upon industry. One of the most encouraging features of the present situation is that leading industrialists and financiers have already taken the initiative in formulating and discussing proposals for constructive action.

INDUSTRIAL PROGRESS AND THE PUBLIC WELFARE

The broader and even more fundamental problem of the relation between the future constructive program of industry and a public policy toward business and industry, is indissolubly bound up with the future status and performance of business itself. Fortunately, there is not at present any conflict between government and industry, so far as enlightened and public-spirited leaders of industry are concerned. There has been and will continue to be a certain type of industrial leadership which has sought—especially in connection with excessive and unnecessary tariff rates, public land distribution, shipping, and more recently in the

acquisition of water power and other natural resources—to use political methods for obtaining special favors and privileges from the government. Industry as a whole, or real industrial leadership in America, however, does not countenance such methods. Aside from the obvious lack of patriotism and honor in such an attitude, and the consequent debauching of political life, it knows that such a policy is short-sighted, ultimately unprofitable, and inevitably destructive to the industrial and trade interests involved.

The new industrial era in America has been built primarily upon the rock of service and performance, and not the least amazing of the many marvelous developments of the new industrial revolution has been the discovery by modern industry that equity and service actually pay and are the essentials of permanent industrial achievement. So-called industrialists and financiers who still mouth the hackneyed phrases that “we need more business in government and less government in business” show themselves to be possessed of a superficial attitude which modern industry has discredited and forgotten.

This slogan was formerly used in a cheap political way to glorify business and industry in a selfish, pecuniary sense, and to detract from governmental interference with business in the sense that governmental interference was costly and tabu, even tho it represented the democratic aims and aspirations of the people. The enlightened and far-seeing industrial leaders and financiers of the modern world, however, know and declare that industry is dependent upon a cooperative, stimulating government attitude, and “friendly” assistance, in the best sense of the word “friendly.”

The fundamental principle involved in the proper relation between government and industry obviously is that in-

dustry so far as possible shall be autonomous and shall have the friendly cooperation of the government, but that the government, in the sense of public policy, is superior to industry. Industry must always be subordinated to democratic institutions and ideals; or, expressed reversely, the subordination of democratic institutions and ideals to industry cannot be tolerated in a self-governing republic. Unless we can have proper autonomy of industry and democracy in industry, as well as democratic control of industry, our political institutions, which have been developed with so much bloodshed and suffering, will be futile and ineffective.

No enlightened industrial leader or financier, however, wishes a subordination of government to industry to occur. Entirely aside from consideration of democracy and humanity, the wise observer knows that it would be shortsighted and inevitably destructive of both industry and democracy. It is for this reason that in the modern day, while it is properly claimed that the stimulus of profit in industry should be retained, and that the rights of investors, management and employees should be protected, the conception has rapidly gained ground that industrial promotion, expansion and operation should primarily be a social function and service. Probably the most astounding outgrowth of the extraordinary industrial development through which the country has recently passed, has been the discovery that the profitableness of industrial undertakings really depends upon the extent to which they conform to this new conception of industrial policy.

During the first half-century of our national life, political affairs revolved around abstract questions of government. The constitutional questions as to the relation between the States and the Federal Government, other constitutional interpretations, and the rights of personal and

civil liberty, held the predominant place in American political life. With the advent of modern trade and industrial conditions, however, all this changed. Political issues, instead of centering around the abstractions of political science and constitutional law, became problems of applied economics. Practically all the political questions of the present era are business and industrial questions. The Government has, therefore, been forced to take action toward industry both by legislation and by administration, and has become closely bound up with the determination of principles or policies relative to industry, trade, and finance.

Such action has been helpful in the past, when intelligently formulated and applied, and will be of the greatest assistance to industry in the future. It is for this reason that far-seeing industrial leaders are urging the necessity of securing the friendly cooperation of the Government toward industry to assist in coordinating and stabilizing in a constructive way the forces which have been developed in the new industrial revolution. These leaders in the manufacturing and mining industries have apparently been most favorably impressed with the experience of the transportation industry in its relation to the Government. They obviously feel the need of the same form of helpful and constructive relation with the Government which the railroads have had through the Interstate Commerce Commission, and the banks through the Federal Reserve Board, and their attitude is undoubtedly sound. Such governmental regulation is essential to the proper expansion, coordination, and stabilization of our industrial system, or, in other words, a necessary condition to the permanent prosperity of the country as a whole.