

CAMBRIDGE ECONOMIC HANDBOOKS.—VI.

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WAGES

WAGES

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INTRODUCTION TO THE SERIES

THE Theory of Economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking, which helps its possessor to draw correct conclusions. It is not difficult in the sense in which mathematical and scientific techniques are difficult; but the fact that its modes of expression are much less precise than these, renders decidedly difficult the task of conveying it correctly to the minds of learners.

Before Adam Smith this apparatus of thought scarcely existed. Between his time and this it has been steadily enlarged and improved. Nor is there any branch of knowledge in the formation of which Englishmen can claim a more predominant part. This Series, however, is not directed towards making original contributions to economic science. Its object is to expound its elements in a lucid, accurate, and illuminating way, so that the number of those who can begin to think for themselves may be increased. It is intended to convey to the ordinary reader and to the uninitiated student some conception of the general principles of thought which economists now apply to economic problems. The

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vi INTRODUCTION TO THE SERIES

writers have been more anxious to avoid obscure forms of expression than difficult ideas. Most of the omissions of matter often treated in textbooks are intentional; for as a subject develops, it is important, especially in books meant to be introductory, to discard the marks of the chrysalid stage before thought had wings.

Even on matters of principle there is not yet a complete unanimity of opinion amongst professional students of the subject. Immediately after the war daily economic events were of such a slashing character as to divert attention from theoretical complexities. But to-day, economic science has recovered its wind. Traditional treatments and traditional solutions are being questioned, improved, and revised. In the end this activity of research should clear up controversy. But for the moment controversy and doubt are increased. The writers of this series must apologise to the general reader and to the beginner if many parts of their subject have not yet reached to a degree of certainty and lucidity which would make them easy and straightforward reading.

J. M. KEYNES.

CONTENTS

CHAPTER I

THE WAGE-SYSTEM

	PAGE
§ 1. INTRODUCTORY	1
§ 2. SLAVE, SERF AND ARTISAN	2
§ 3. THE CHARACTERISTICS OF A WAGE-SYSTEM	4
§ 4. ECONOMIC FREEDOM	5
§ 5. GROWTH OF A PROLETARIAT	9
§ 6. DIFFERENT DEGREES OF DEPENDENCE	12
§ 7. WAGES AND NET PRODUCE	15

CHAPTER II

WAGES AND THE STANDARD OF LIFE

§ 1. AGGREGATE WAGES AND WAGES PER HEAD	18
§ 2. WAGES AS A PROPORTION OF GROSS PRODUCE	19
§ 3. MONEY WAGES AND REAL WAGES	21
§ 4. INDEX NUMBERS	26
§ 5. REAL WAGES IN THE NINETEENTH CENTURY	32
§ 6. PRE-WAR AND POST-WAR	34
§ 7. POVERTY	37
§ 8. AN INTERNATIONAL COMPARISON	39

CHAPTER III

THE PAYMENT OF WAGES - *Pages*

	PAGE
§ 1. "THE ECONOMY OF HIGH WAGES"	43
§ 2. INTENSITY OF WORK AND PIECE-RATES	45
§ 3. PREMIUM-BONUS SYSTEMS	48
§ 4. TASK-BONUS SYSTEMS	49
§ 5. THE FIELD OF PAYMENT BY RESULTS	51
§ 6. SUB-CONTRACTING	56
§ 7. WEIGHING AND MEASURING	58
§ 8. TRUCK AND DEDUCTIONS	60
§ 9. PROFIT-SHARING	62
§ 10. HOURS OF WORK	66

; CHAPTER IV ✓

THEORIES OF WAGES

§ 1. CLASSICAL THEORY	70
§ 2. THE SUBSISTENCE THEORY	71
§ 3. FROM RICARDO TO MARX	73
§ 4. THE WAGES-FUND THEORY	76
§ 5. THEORY OF MARGINAL PRODUCTIVITY	81
§ 6. THE DEMAND FOR LABOUR	85
§ 7. THE SUPPLY OF LABOUR	87
§ 8. INVENTIONS AND WAGES	90

CHAPTER V

WAGES AND BARGAINING-POWER

§ 1. THE NEW THEORY AND THE OLD	98
§ 2. THE "SUPPLY-PRICE" OF LABOUR	94
§ 3. THE INFLUENCE OF BARGAINING-POWER	97
§ 4. SPENDING AND SAVING	101
§ 5. HOW FAR CAN RELATIVE WAGES RISE ?	104

CONTENTS

ix

CHAPTER VI

WAGE DIFFERENCES

	PAGE
✓ § 1. DIFFERENCES BETWEEN GRADES	109
✓ § 2. "NON-COMPETING GROUPS"	112
§ 3. DIFFERENCES BETWEEN INDUSTRIES AND DISTRICTS	115
§ 4. "CASUAL" EMPLOYMENT	117
§ 5. THE "SWEATED TRADES"	118
§ 6. MEN AND WOMEN'S WAGES	120
✓ § 7. "EQUAL PAY FOR EQUAL WORK"	125
§ 8. INTERNATIONAL WAGE-DIFFERENCES	128

CHAPTER VII

TRADE UNIONISM AND WAGES

§ 1. THE CHARACTER OF TRADE UNIONS	132
§ 2. THE BEGINNINGS OF TRADE UNIONISM	133
§ 3. THE "OLD UNIONISM"	134
§ 4. THE "NEW UNIONISM"	138
§ 5. TRADE UNIONS AND THE STATE	141
§ 6. REFORMIST v. REVOLUTIONARY TRADE UNIONISM	143
§ 7. WORKERS' CONTROL	145
§ 8. THE MACHINERY OF COLLECTIVE BARGAINING	148
§ 9. CONCILIATION AND ARBITRATION	150

CHAPTER VIII

THE MINIMUM WAGE

§ 1. STATE INTERVENTION	154
§ 2. THE TRADE BOARD SYSTEM	156
§ 3. MINIMUM WAGE PROBLEMS	159
§ 4. STATE ARBITRATION	163
§ 5. THE LIMITS OF REMEDIAL ACTION	164

WAGES

CHAPTER I

THE WAGE-SYSTEM

§ 1. *Introductory.* Economists are frequently taunted with their love of Robinson Crusoe analogies—with their tendency to generalise from some simple economic society to the complicated world of to-day, in disregard for the various institutions which prevail in modern Europe but did not exist on Crusoe's island. On the vanity or wisdom of such a taunt opinions will naturally differ. Some will reverence the importance of the institutions which separate our world from Crusoe's. Others will acclaim the eternal rule of natural factors, independent of the changing institutions which are fashioned by the hand of man in course of history. But whatever our choice of opinions on this general issue, (to the discussion of wage-problems Robinson Crusoe analogies seem to lend little aid.) One may admire it as grandly abstract and comprehensive to say that when Crusoe fetched yams or caught fish he was receiving wages out of the yams he gathered or the fish he brought to land, or to say that the food on which the slave-owner fed his chattels constituted wages, or that Rockefeller or

Rothschild or Lord Melchett or Sir Henri Deterding pay themselves wages for the work they do in managing their affairs. But such analogies can be hardly more than verbal; and a generalisation so wide and uncritical as this tends to conceal differences many times more significant than the similarities on which it lays stress.

Probably a surer way to understand actual wage-problems is to examine the features which distinguish wages as they are paid to-day from other ways in which work in times past was performed and paid for, and to define the character of a wage-system in these terms. To do this, I think, will show that some fundamental distinctions exist and give a unique character to the actual issues with which the modern industrial system is face to face.

§ 2. *Slave, Serf and Artisan.* There are three systems in the past with which the modern wage-system may fruitfully be contrasted and compared.

First of these, there was Slavery, under which the person of the worker was owned by his master and could be bought and sold. The whole time of the slave was at his master's disposal; and the master fed the worker as much as he thought fit to keep him in working efficiency, and made use of the slave's working time either to minister directly to his needs and fancies or for commercial purposes to produce a product. The master's income depended upon the number of slaves and upon the extent to which the product of their work exceeded their subsistence: their subsistence represented his cost or outlay, and what they produced above this his surplus or "net revenue." When the

supply of new slaves was plentiful and slaves as a result were cheap to buy, the master did not need to spend much on keeping them, and he could afford to work them hard and exhaust them early and then replenish his stock by buying slaves anew. When, with the cessation of new conquests or the decline of the slave trade, new slaves became more scarce and more costly, then a slave as a more valuable object required to be more circumspectly cared for: probably the master had then to provide enough for each slave to breed and rear a family as well.

Second, there was Serfdom, which prevailed over most of Europe in the Middle Ages under feudalism, and has existed in slightly different form at other times in various other parts of the world. Here each village was mainly self-sufficing, and trade outside the village-unit was the exception rather than the rule. The serf did not belong in person to a master, but owed certain services by customary right to his lord, and was attached to the lord's estate and could not move from it. Often he was bartered with the estate, as in seventeenth- and eighteenth-century Germany and nineteenth-century Russia estates worth so many "souls" were mortgaged or purchased, and as Edward I in England made a grant of royal mines to his Italian creditors, the Frescobaldi, together with the compulsory labour of the "King's miners." Usually the serf procured his subsistence by working certain strips of land which he held as his own by customary right, in return for the obligation to devote the remainder of his time to cultivating his lord's fields or working in his lord's household. The land held by the serfs and the time that was their own had to suffice to

maintain themselves and their families. The more fertile the land and the more productive the labour the smaller this area of land and this time needed to be, and the larger was the surplus which the lord could command from the surplus labour of his serfs. The value of an estate depended on the size of this surplus, as the capital value of a slave tended to depend (if the slave supply was limited) on the surplus arising from the employment of a slave.

Third, there is the free craftsman or artisan working with his own tools in his own workshop and marketing his own products, or in agriculture the independent peasant farmer working his own holding by the labour of himself and his family. It is a system of which we find examples in nearly all ages, alike in classical times, in the towns of the late Middle Ages and at the present day. Here the worker is, in a sense, his own employer, making and selling his own product, and retaining as profit any surplus or "net revenue" over and above the cost of his own materials and his own subsistence.

§ 3. *The Characteristics of a Wage-System.* If we compare these three systems with one another and with the modern wage-system, it will be clear that an important respect in which they differ is in the differing degree of economic freedom enjoyed by the worker, this in turn depending on the relationship in which he stands to economic property—either owning it, or not owning it, or himself being regarded as property in the possession of a master. Under both slavery and serfdom the freedom of the worker is closely circumscribed by law: under slavery he is entirely subject to a

master, and under serfdom his freedom is strictly narrowed by his obligation to perform specified service for a lord. But under the wage-system the worker is bound by no such legal ties. Before the law he is his own master, free to work or not as he pleases, free to hire himself for wages, or to work as an independent artisan if he prefers. The capitalist who owns a workshop or a factory or a farm, since he can no longer command any compulsory labour, either by traditional right or by purchase, has to hire the disposal of a labourer's time for a day or a week, paying for the hire a market price, and securing his profit out of the difference between the wage he has to pay and the price he gets for the finished product which he sells. Hence, the removal of all legal restrictions on the labourer's freedom is usually found in history as one of the prior conditions for the rise of a wage-system.

§ 4. *Economic Freedom.* Here the classical economists of a hundred years ago were usually content to leave the matter, stressing the freedom of the wage-system as against the compulsory systems which had gone before. This system attained the maximum of freedom that was possible in this deterministic world: it was as free as the system of the independent artisan, while being more efficient. True, the wage-earner bound himself to work certain hours in a factory under the discipline of the employer's overseer, to take orders and obey, whereas the artisan was his own master and worked in his own time and in his own way. But in doing so, the wage-earner consented of his own will by free contract: his will was free to decline the terms of employment if the

proffered wage was not fair recompense for the unpleasantness of what he undertook, and his choice of alternative employment as an independent artisan was as free and open as the alternative choice before the artisan of becoming a wage-earner. Wages were a fair price in a free market for work done, just as was profit an economic price to the employer for the services he performed; and the fact that some chose one means of livelihood and some the other was only a special case of the general division of labour which brought such increase to the wealth of nations.

This classical view, however, is not the whole of the matter, and as it stands is seriously incomplete. It is possible to imagine a system where the majority of persons stood on the border of choice at some stage of their career between working at a wage for a neighbour or setting up as an employer on their own. Something approaching it is probably found in a peasant village or was found in the early mediæval town. But in the actual wage-system of all modern industrial civilisation the actual choice of the labourer has in fact been limited much more narrowly than this. This limitation of choice is no longer a legal limitation as of old: it is an economic limitation, which is equally effective, if smaller in degree, than the legal ones which preceded it. It consists in the fact that the labourer is a member of a propertyless class; and this fact narrows his freedom of choice and confines it to those means of livelihood that do not require the possession of any land or capital—or even in the majority of cases any considerable education or training. In other words, it confines his choice as a rule, save for a few lucky “Dick Whitting-

tons," to hiring out the labour of his hands for a wage. In practically every case in history where a wage-system has appeared there has preceded it the appearance of a class of persons without the means to set up as independent artisans or peasants, or else a considerable narrowing of the range in which craftsmen of small capital themselves could operate at a profit.

At this point, of course, it may be argued that such a narrowing of the choice of opportunities does not of itself constitute a restraint upon the labourer's freedom. Man is never free to do anything he pleases: nature always imposes a ban, and herself circumscribes his choice. Indeed, the philosopher Hegel defined freedom, not as infinity of choice, but as consciousness of necessity. Moreover, alternative opportunities can hardly be measured, and often cannot be compared. The "free and noble savage" had in many ways fewer opportunities than the modern wage-earner, and the free peasant of Manchuria than the Ford-employee of Detroit.

It is undoubtedly true that freedom is not a quantity and cannot be measured. At the same time it seems to be something which can be compared as being greater or less.¹ But such a comparison can only be made when what are being compared can be arranged in a series or order, and this supposes a close resemblance in all other respects than that in which they are being compared. It may not be possible to compare directly a primitive savage with a Detroit worker; but it should be possible to compare a wage-earner with a slave in like circumstances, or with an artisan or a man of property in the

¹ Like Probabilities, as explained in Mr. J. M. Keynes' *Treatise on Probability*, pp. 20-40.

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wage-system on a large scale is found that one seems to be justified in regarding it as a necessary condition of such a system and as one of its defining characteristics. This is not to deny, of course, that the doing of work for a wage may be found in numerous cases even where no such dependent class is found. There might be important cases where many persons found it more attractive to work for another than to work on their own, even while the wage that they earned left a considerable surplus to go as profit to their employer. Such a situation would tend to be the result of the different natural ability and enterprise of different persons to organise and manage production and so to make a business of their own a success. But it is hardly conceivable that differences in innate initiative and ability alone would suffice to extend this preference for wage-working until the system embraced all lines of production and comprised nearly the whole of each particular line, with hundreds or even thousands of workers to each employer. One would hardly expect the system to predominate and become universal in this way unless other differences of economic advantages between different social groups had developed as well. In practice, at any rate, one does not find the system becoming universal without the preceding growth of these other differences, of which differences in property-ownership are the chief.

§ 5. *The Growth of a Proletariat.* To the rise of a fully-matured wage-system two things are, accordingly, necessary. First, the removal of legal restrictions which bind the worker to a particular master. Second, the

growth of a propertyless class, or a proletariat, willing to hire itself for wages because it has no alternative livelihood. Without the first development the worker is really a serf or a slave, and not a wage-earner selling his labour in an open market. Without the second it will hardly be profitable for employers in general to organise production on any considerable scale on a basis of wage-labour. In this country the former change occurred comparatively early, when the custom developed in the fourteenth century of allowing the serf to "commute" his feudal services for a money payment or a rent for the land he held. In other countries it did not come until later, as in Germany between 1806 and 1812, when a series of laws in different States abolished serfdom, and, latest of all the large European countries, in Russia in 1861 with the decree on the emancipation of the serfs.

The second development occurred in a greater variety of ways. Partly it occurred through the natural growth of population, in excess of the numbers that could be accommodated on the land; and existing land, becoming scarce in relation to the demand for it, acquired a considerable value in the hands of its owners and grew to be only obtainable at a price. The process was accelerated by the enclosure of land which had formerly been held or used by the small peasant-holder in customary right, and the transfer of the land into the hands of the large landowner. This occurred in England in the series of enclosures to facilitate sheep farming which created the race of "sturdy beggars" of which we hear so much in Tudor times, and by the series of Enclosure Acts between 1750 and 1850, devised to encourage modern methods of arable cultivation. In Germany (in contrast

to Denmark) similar enclosure of land on a large scale took place at the time of the emancipation of the serfs, as compensation to landlords for the loss of their fental services. A similar effect is produced in certain parts of Africa to-day by the reduction of the natives' tribal reserves or by the levying of hut or poll taxes on the native when he lives in the tribal reserve and does not work for wages outside.

At the same time in the towns the guilds, both of master-craftsmen and of traders, were becoming increasingly exclusive by a double process of obtaining charters which made it illegal for any other than a gild member to carry on that particular calling as a master, and at the same time of restricting entry into the gild by severe entrance fees and qualifications and apprenticeship regulations. By the sixteenth century in England the larger part of the wholesale and export trade of the land was a close monopoly of a comparatively small circle of wealthy traders, while at the bottom of the towns there existed a growing class of labourers having only a limited possibility of gaining access to any of the craft guilds and of setting up as master-craftsmen on their own. A small break in this process occurred in the seventeenth and eighteenth centuries, when men of capital began to give out work to be done by small craftsmen in the villages under what came to be called the Domestic System, thereby avoiding the close regulations of the town craft guilds. Any man who had sufficient capital to buy a house and a loom or a knitting-frame could set up as a craftsman in the countryside. But these country craftsmen themselves tended to be dependent rather than independent—dependent on the

"merchant manufacturers," as they were called, who gave out work to them to do, as West End tailoring houses give out work to-day to be done as home-work or in small tailoring workshops. Usually the domestic craftsman, being a man of small capital, could not undertake the marketing of his wares himself or conduct anything but quite a small workshop. Often he had the raw material advanced to him by the "merchant manufacturer," who collected the finished product from him in due course and paid him a price for the work done. In certain cases the craftsmen even rented their tools from the capitalist who employed them, as in frame-knitting where they rented their frames. As time went on many of them came to live more and more on credit advanced by the capitalist, and to be in debt to him, and so to be tied exclusively to one employer, as appears to have been common in the hand-tool trade. In other words, many of these craftsmen came to be virtually employed wage-earners, just as in peasant countries it is common (unless special institutions exist to prevent it) to find a propertyless class developing as a result of the progressive impoverishment of a section of the peasantry by indebtedness and the mortgaging of their land to traders and moneylenders. As a final stage in the process came power-machinery and factory production, which by competition took away the livelihood of the hand-loom-weaver or hand-tool-maker, and forced all except those who had the means to set up a factory themselves to migrate to the towns and seek wage-employment.

§ 6. *Different Degrees of Dependence.* Inside the wage-

system itself, however, the economic freedom of the worker can vary fairly widely. On the one hand, where the workers possess strong trade union organisations having large funds, or where they have built up prosperous co-operative organisations from which they have special facilities for securing their food supplies or for obtaining credit, or again, if through their political influence they have introduced legislation particularly favourable to wage-earners, then the economic weakness of wage-earners as a class may very largely be removed. (For a temporary period, again, the workers in a particular industry may be able to take advantage of the fact that their employers have invested in large and expensive plant which they are unwilling to leave idle, or that they possess perishable stocks of material or have valuable business connections which they are loth to jeopardise by letting their works stand idle.) To such a strengthening of the worker's position, however, there seems to be a definite limit, since any considerable powers of this kind, if they were exercised, would probably render a wage-system unworkable by making it no longer profitable for the employing class to run the system as of old.

On the other hand, circumstances are often found of a purely economic character which particularly restrict the freedom of the worker and in extreme cases tend virtually to confine his choice of employment to one employer or a small group of employers. A worker when he is bargaining individually with an employer and is not supported by a trade union will usually be hampered by lack of information of alternative employment or by lack of means to move about from place to

place in search of a better job: at any rate he will probably be less well placed in these respects than will employers, who can make enquiries by telephone, make use of foremen and agents, and if need be send to another town to recruit fresh "hands." (Hence the worker's choice will tend generally to be confined to the employment of which he has knowledge and that within the immediate locality.) In some cases one finds the employer owning the houses of his employees, and so acting as their landlord as well. This was common in the new factory towns of a hundred years ago. It still survives in the countryside in the agricultural labourer's "tied cottage" and in mining villages where miners rent "company houses." Under the "truck system," which we shall mention further in Chapter III, the employer often paid his workers in vouchers on the local store which was owned by himself—the "tommy-shops" of which Disraeli wrote in his *Sybil*. In American mining towns it is common for the company to own practically the whole town, sometimes not excluding the magistrates and police. Where this occurs, the employee will be disinclined to transfer to alternative employment or to refuse to accept the employer's contract for fear of losing his home, or in the other case he will be prevented from spending his wages in the cheapest market by the manner in which he is paid. Many of the schemes to lessen the "labour turnover" and to tie a worker to a particular firm, of which much is heard in America to-day, tend to have a similar effect. Where, again, the industry is controlled by a monopoly, the worker who is specialised to that occupation will be virtually tied to that one employer: a situation which,

in respect of the market price which the wage-earners can obtain for their labour, will be paralleled wherever any agreement exists among employers as to the terms on which they shall give employment. In an industrial system run by the State this would be found in an extreme degree: all workers would be civil servants with one employer, the State. Whether this would represent a smaller degree of economic freedom for the worker than a system of private enterprise, as Mr. Belloc suggested in his *Servile State*, or a greater freedom, would depend on circumstances—on whether the interests of the workers themselves exercised controlling influence by trade union and political power over the State which employed them, or the interests of some other class; and whether as a result they were still employed by others or in a sense employed themselves.

§ 7. *Wages and Net Produce.* The primary cost under a wage-system will consist of the wages which have to be paid to procure the necessary labour supply. For any particular employer cost will consist also of the raw material and fuel he has to buy and the "wear and tear" of machinery and the interest on the loan-capital which he has had to borrow. His capital outlay will be distributed between the purchase of machinery (generally termed *fixed capital*) and the purchase of raw materials and labour-power (generally called *circulating capital*). But for the system as a whole the cost of materials and fuel and machinery can be traced back in turn to the wages which have to be paid to get them produced and to provide for the "wear and tear" of labour; and from the point of view of all those who

venture their capital in the system over a considerable period wages will form the basis of their calculations and will figure as "cost." In each complete cycle of production, after part of the gross produce has been set aside as wages to repair the "wear and tear" of the labour supply, a surplus or net product will remain; and this, after the deduction of rent to the owners of scarce natural properties, will provide the profit and interest for the active and passive partners in the conduct of the system, by which those partners will estimate the success or failure of their enterprise. Out of this surplus will be accumulated the means of raising the system to an expanded scale and so making future cycles of production larger than those which went before.

In pursuit of financial success, as judged by the size of the "net produce," (the employing class will desire that the "costs" which they incur in the purchase of labour shall be as low as possible.) As we shall notice later, this does not necessarily mean that it will be in their interests for wage-rates to be as low as possible. But it means that the employing class as a whole will gain when wages as a *proportion* of the gross produce (or the national dividend) are as low as possible, since this will provide the widest and most favourable opportunity under the circumstances for the investment of capital. In other words, the size of the surplus or "net revenue" will constitute the existing demand for capital and will give to existing property its value. For the system as a whole it will generally be the case that this surplus or "net revenue" will be greater, under a given set of circumstances, the more dependent,

and consequently the more obedient and disciplined is the wage-earning class. (In this sense the wage-earning class can be said to be "exploitable" in greater or less degree.) On the other hand, the share of any particular employer in this "net revenue"—his profits—will depend on the efficiency of his workers, on his situation and environment, on the machinery he uses, on the ability of his organisation, his financial facilities and the astuteness of his marketing technique.

As Mrs. Marcet said in her *Conversations on Political Economy*:¹ "If the value produced by the labourer exceeds what he has consumed, the excess will constitute an income to his employer; and observe, that an income can be obtained by no other means than by the employment of the poor. . . . The rich and poor are necessary to each other; it is precisely the fable of the belly and the limbs; without the rich the poor would starve; without the poor the rich would be compelled to labour for their own subsistence."

¹ pp. 87-8.

CHAPTER II

WAGES AND THE STANDARD OF LIFE

§ 1. *Aggregate Wages and Wages per Head.* If the number of workers employed for wages remains unchanged, every increase in the wages bill of the country, or in *Aggregate Wages*, will involve a similar increase in the wages received by each worker, or in *Wages per Head*. If, however, the number of workers alters, the two things may change in different degrees or even in different directions. For instance, if the number of workers in employment increases by 20 per cent and *Aggregate Wages* increase by the same amount, *Wages per Head* will remain the same as before; while if *Aggregate Wages* increase by less than 20 per cent, *Wages per Head* will actually *fall*.

It is possible, however, for wages to increase in both of these senses, both in the aggregate and per head, while at the same time wages as a proportion of the total produce, or *Relative Wages*, decline. This will happen, if, owing to increased productivity or intensity of labour, the gross produce of industry grows at a faster pace than does the share of that produce which goes to meet wages. The converse may also be found. If an increase takes place in the number of persons employed in the economic system, the gross produce of

WAGES AND THE STANDARD OF LIFE 19

the system will tend to grow along with the wages bill by which the workers are employed; but, it will not necessarily grow in the same proportion. If it grows in smaller proportion, then wages will swallow up a larger share of the total produce and Relative Wages will rise.

It is possible, however, for wage-earners to be poorer as compared with the incomes obtained by the owners of property, and for inequality of incomes to increase at the same time as the share of the produce which goes as wages, or Relative Wages, has increased. This is possible for the reason that the income of wage-earners compared to the income of non-wage-earners will depend not only on the proportion of the whole produce which goes as wages, but also on the *number* of persons in each group, with whom wages in the one case and income on property in the other case have to be shared; and an enlarged difference of income between the two classes might co-exist with rising Relative Wages, if the number of persons seeking employment in the labour market increased rapidly while, on the other hand, property for various reasons became concentrated in fewer hands. Conversely, if diffusion of property-ownership were taking place, the distribution of wealth might become more equal, even though the share of the produce which went as wages declined.

§ 2. *Wages as a Proportion of Gross Produce.* With regard to Relative Wages, the general features of the wage-system which were discussed in the last chapter might lead one to suppose that wages would be approximately the same proportion of the total produce in all

countries where the wage-system was found. And this supposition would further lead one to expect wages per head to be higher in those countries which possess a more prosperous economic system, and for wages per head to rise as economic productivity grows.) Available evidence seems on the whole to confirm such preliminary expectations; but the data to hand by which we can compare wages at different times and in different countries remain somewhat meagre and unsatisfactory. Two special factors, however, are found which might create quite considerable variations in Relative Wages, and so have an influence on wages per head as well. The use of a large amount of labour-saving machinery might be expected to make Relative Wages lower than where machinery of this kind was much less used; just as between different industries in the same country the total wages bill as a percentage of the gross revenue varies, being high where the work is mainly manual labour, and low where a large machine horse-power is employed per man. Hence one might expect relative wages to be lower in countries where machine-industry is most highly developed, and to have a tendency to fall in the course of industrial development with the increase of mechanisation.

On the other hand, Relative Wages might be expected to be greater at those times and in those countries where the wage-earners have a greater degree of economic freedom and are less dependent, either because they are strongly organised or because there are fewer barriers to labourers setting up as farmers and artisans or small employers on their own, as is often the case in newer, less developed countries, or where special institutions

WAGES AND THE STANDARD OF LIFE 21

exist which afford facilities to the small man in obtaining capital and credit or land or in marketing produce.

§ 3. *Money Wages and Real Wages.* But before one attempts to compare the position as between periods and countries there are two further distinctions which it is important to make. (It clearly makes little difference to the standard of life of the wage-earners for the money paid to them in wages to be doubled if the amount available of the things which they consume remains unchanged.) Some of these things, of course, will consist of commodities consumed by other sections of the community as well as by wage-earners; and wage-earners, by offering more money for them, may be able to obtain more of those commodities for their own use instead of others (unless those other people are offering more money for them at the same time). But there will be some commodities, mainly cheap and essential foodstuffs, of which the wage-earners consume by far the largest amount. Here transfer from other consumers will not be possible to any considerable extent; and the only effect of the spending of more money on them by wage-earners will be to raise their price. In other words, although *money wages* have risen, *real wages*, represented by the amount of things which the wages could buy, may have remained the same.) Some persons have gone so far as to suggest that the possibility of real wages rising all round is always fairly narrowly limited by the fact that the available supply of primary foodstuffs is for the time being fairly fixed, and can only be increased after an interval of time. After that interval of time—perhaps six months or a year or two years—

the increased prices of things consumed by wage-earners will encourage capital and labour to be transferred to producing those commodities, so that their supply will ultimately be increased, and (real wages will rise as well as money wages. But this will not necessarily happen if money incomes all round have been increased, and all classes of the community are spending more money, and prices are universally rising. Then there will be the phenomenon known as *inflation*: prices generally rising, so that, while money wages increase, real wages remain as before. Something similar to this occurred in the fourteen years before the war. During this period, following increased world gold supplies and an inflow of gold into this country, money incomes generally increased; but the incomes of other sections of the community increased faster than wages. The result was, first of all, to raise the price of the things on which these other people spent their money—chiefly comforts and luxuries. This, by making the production of luxuries relatively more profitable, tended to transfer labour and capital to producing them instead of the more primary necessities consumed by the working class; and this by raising, in turn, the prices of these latter commodities, tended to produce a fall in real wages.

Conversely, while money wages remain constant, it may happen that real wages increase, because there has been an increased and cheapened supply of the commodities which wage-earners consume: each £ of wages will then “go further” and represent more real things.

Since, in practice money wages tend to be rather slow in adapting themselves to changes in the cost of living,

WAGES AND THE STANDARD OF LIFE 23

a period of rising prices will usually be a period of falling real wages: money wages in their rise will lag behind the rise of prices, and Relative Wages will have a tendency to fall. On the other hand, a period of falling general prices will tend to be accompanied by a rise of real wages, since money wages tend to lag behind prices in their fall. Where the workers are particularly weak in bargaining strength, employers will usually be more quick to reduce wages when prices fall than they are to raise them when prices rise; and what the workers stand to lose on the swings they will not gain on the roundabouts. But where the workers are strongly organised, they may resist a fall in money wages for some time after prices have fallen, while being quick to demand an increase when prices are on the rise.

In judging the standard of life of the worker and his family a further distinction is necessary between wage-rates paid per hour or per normal working day and the actual earnings of the worker. A worker's earnings may vary according as he does more than a given number of hours or less. If work is being done on piece-rates (see Chapter III), different workers may earn different amounts according as they do differing amounts of work. If a worker at one time works each day for one or two additional hours overtime, and at another time does not, his earnings will differ at the two periods even though wage-rates per hour remain the same. At times of trade depression "short-time" may be worked, as in the cotton trade, workers being employed for less than the normal number of hours per day or days per week. In mining it is quite common for underground workers to descend the pit for less than the full six

shifts in the week, either from choice or because there is not the work for them to do. In the docks where men are hired on the "casual" system for a definite job, instead of regularly for a whole week, none but the fortunate manage to secure employment all the days of the week or all the weeks in the year: in 1920 the average days per week worked by a Southampton docker, for instance, was less than three, and in London it was very little more than three. In industry in general at times of unemployment each worker on the average may only secure employment for a certain number of weeks in the year; and at such times changes in the *earnings* of workers may be considerably different from the change that is shown in their wage-rates for a "normal" day or a "normal" working week.

But it is necessary to go further. One needs to know, not only what each wage-worker earns, but how much is earned by the various breadwinners of a family-unit, and how large the family is that these earnings have to support. Here there is room for wide differences both between different periods and different countries. In Australia the average number of dependent children to each male wage-earner (married and unmarried) is .9; in Britain it is about 1.10; while the average number of children in Britain per family who were under the age of fourteen fell from somewhere about 1.29 to about 1.06 between 1911 and 1924. Moreover, between different families in the same country there may be wide variation about the average. In one family the father and perhaps two sons and a daughter may all be earning. In another family a father may have to support a large number of small

WAGES AND THE STANDARD OF LIFE 25

children and perhaps aged grandparents as well. A wage that gives a fairly reasonable standard of life to an average family may mean a starvation standard for many abnormally large households with only one breadwinner; and a wage that is too low for the average family is not inconsistent with bachelors in the same employment having money to spare for luxuries and smart clothes.

(When one tries to measure the standard of life of wage-earners, to make allowance for these differences between wage-rates and earnings is exceedingly difficult.) To obtain statistics of hourly rates of wages is not an easy matter. The Ministry of Labour in this country collates and publishes monthly in the *Ministry of Labour Gazette* the rates of wages for a large number of trades, basing them on existing collective agreements with the Trade Unions. But these figures are not complete. The minimum rates established by Trade Boards are available in the thirty-five trades where these Boards are in being; but one does not know how far these minima are being observed by employers generally or what proportion of the workpeople are being employed above the minimum rates. Apart from the few employers from whom information is available about their total wages bill, these data relate to time-rates and do not necessarily give any indication of what workers employed at piece-rates can earn: even if we know the various piece-rates paid—and these are exceedingly complicated—we do not know how many “pieces” an average worker does in an hour or a day, unless we are intimately acquainted with each particular case. Between two periods changes in machinery, etc., may have enabled

piece-workers to work more quickly and earn more in a day, even though piece-rates remained the same; and where there has been a change in the proportion of workers employed on piece-work, as during the last twenty years there has probably been an increase, alterations in wage-rates, whether per hour or per piece, will not be an adequate measure of earnings as a whole. Similarly, while one has information concerning the percentage of wage-earners unemployed, and one can make allowance for the changes in earnings which are due to this fact, no adequate comparison is possible of those who, while in employment, are working "short-time" and for less than a normal week, and those who at another time are working "overtime" and for longer than a normal working week.

§ 4. *Index Numbers.* Difficulties further arise when from the figures of money wages one tries to estimate differences in real wages by making allowance for differences in the cost of living. Where the commodities consumed in the two cases which are being compared remain the same, little difficulty is involved. Information can be collected concerning a certain "sample" of actual working-class family budgets in a given year or in a given case, and an average of the various budgets in the sample can be drawn. This average budget will be made up of various commodities in different quantities—so much bread, so much meat, fuel, light, clothing, house-room and so forth. Then the cost of purchasing this average budget in the two cases can be calculated, and the difference of cost expressed as an *index number*, with the figure in one case (called

WAGES AND THE STANDARD OF LIFE 27

"the base") for convenience expressed probably as = 100. For instance, one might have an index number of the cost of living represented in the two cases thus :

(1)	.	.	.	.	100
(2)	.	.	.	.	120

The two cases might be either two countries or two years between which a comparison was being made. Then the money wages in the two cases could be divided by the index number of the cost of living, and the relation of real wages in the two cases could in this way be obtained. For instance, if wages between two periods rose from 40s. to 48s. and the cost of living index number from 100 to 120, real wages would have remained unchanged.

But, in actual practice the various items which go to make up a family budget seldom are the same at two different periods and in two different countries. Different commodities have different importance in the two cases. One commodity will appear in one and an alternative or substitute in another. Over a certain period families may give up eating butter and take to margarine ; they may eat less ham and more beef ; they may spend less on beer and more on clothes. In Britain working-class families drink tea : on the continent they drink coffee. In some countries white wheaten bread is eaten : in others rye bread is the staple diet or potatoes and potato flour. In Eastern countries workers subsist mainly on rice. In the worker's diet in overseas countries eggs are six times as important as in Central Europe, and in Scandinavian countries milk and milk products bulk much larger than in England. When it comes to

other things than food, such as clothes, furniture, house-room, the qualities differ considerably in the various cases, and it is virtually impossible to express these differences quantitatively. Is a pound of tea to be regarded as equivalent to a pound of coffee, a pound of wheaten bread to a pound of rye bread, a pound of butter to a pound of margarine, a pair of boots bought by an English worker to a pair of sandals bought by a Chinese coolie—or to two pair of sandals, or three pair or what? Just after the war one found Prof. Bowley, on the one hand, claiming that the official cost of living index number *over-estimated* the rise in prices because in practice people had altered their habits and transferred to cheaper substitutes (e.g. from butter to margarine); while on the other hand complaints came from the trade unions that the official figure *under-estimated* the rise, since it took no account of deterioration in the quality of the things which were bought and gave too little “weight” or importance to things like clothing which had risen in price more than the average. It has sometimes been suggested that the difficulty could be overcome by taking a standard of calories, or food values, and equating different articles on the basis of the number of calories that they severally contain. But it seems doubtful whether this would suffice even when one was dealing only with food: in the light of the recent emphasis by scientists on a balance of the four vitamins in the diet an estimate of calories alone would be incomplete, and might have to be supplemented by a complicated calculation of vitamin value as well. And here no less a statistician than Prof. Bowley seems to have erred seriously during the war. For anything else

than food, where psychological as well as purely physiological considerations come in, a physical standard of this kind could hardly assist us.

The fundamental difficulty is that the "standard of life" which one is seeking to compare is hardly a quantity and cannot be measured. We may define a "standard of life" objectively as consisting in the satisfaction of certain physiological and psychological needs,¹ or subjectively as consisting in a certain degree of happiness or satisfaction of desires; but in either case, although the standard is something which can be spoken of as being greater or less and so can be compared, it is not possible to express this as greater or less by a given amount. Hence, when we try to measure and to express the standard of life in figures, we are fitting an unmeasurable thing to a certain scale of our own, just as when an examiner tries to compare the intelligence of his examinees by allotting marks to them. In either case the precise way we fit what we are trying to compare into our scale of comparison must be largely arbitrary. All we can do is to ensure that we do not place the various items in the wrong order in the scale and that we reduce the possibility of error to a minimum.

The simplest way of handling the situation is to take the budget of any given time or any given country, and to compare the cost of buying that *same budget* at other times or in other countries. This is what is done by the Ministry of Labour Cost of Living Index Number in this country, which adopts a sample budget in a given

¹ Perhaps "needs" are a quantity although "desires" are not. But even if physiological needs are capable of being expressed quantitatively in calories or something of the sort, psychological needs at present are not.

"base year"; and it was done by an enquiry into the cost of living in various countries undertaken by the British Board of Trade in 1905-9, which adopted an average English budget and enquired as to the cost of that budget in various countries. This method is quite satisfactory where the *actual* budget does not differ very much in the cases under comparison. But where the budget consumed in practice varies at all considerably quite odd and contradictory results may be found, according as one adopts one or other of the different budgets as basis. For instance, the International Labour Office of the League of Nations in 1924 investigated how much could be purchased by a carpenter's wages in various capital cities. When it took the cost in Stockholm of the food items which a *British* family consumed, it found that a Swedish carpenter's wages purchased 8 per cent *less* than a British carpenter's wage could buy in London. But when it took the food items which the *Swedish* family ordinarily consumed, it found that a Swedish carpenter's wages could purchase 9 per cent *more* of them in Stockholm than a British carpenter's wage could purchase of the same things in London. The one method showed real wages in Stockholm to be 8 per cent lower than in London, the other method 9 per cent higher. Similarly a Berlin carpenter's real wage was by one method shown to be 46.3 per cent of the London carpenter's, and 53.6 per cent by the other method.

This difficulty can be surmounted again by an arbitrary device, which amounts simply to an averaging of the results obtained by the different methods. In comparing wages in the same place at different times what is called the "chain" method is often suggested. Wages in

WAGES AND THE STANDARD OF LIFE 81

1914, for instance, may be compared with 1913 on the basis of the actual 1913 budget, and then 1915 compared with 1914 on the basis of the 1914 budget, and so on. The chief difficulty is here a practical one: the method is complicated and requires a continual revision of the budget on which the calculation is based. In the international comparison of real wages which was started by the British Ministry of Labour in 1923 and then continued by the International Labour Office in 1924 a series of "baskets," or budgets, of various foodstuffs is adopted, each "basket" being composed of different items of food in the proportion in which they enter into working-class consumption in a particular group of countries. The cost in each of various cities—London, Berlin, Stockholm, Paris, Philadelphia, etc.—of buying each of these national "baskets" is calculated—the English basket, the Scandinavian, the Central European. The cost of these several "baskets" is then compared with the wages in the various cities and expressed as a percentage; and the results for each city are averaged and taken as the index number of real wages for that city. As an instance of the method we have a comparison between three cities as follows:

RATIO OF THE NUMBER OF TIMES A CARPENTER'S WAGES IN DIFFERENT CITIES WILL PURCHASE

	The British basket.	The Scan- dinavian basket.	The Central European basket.	Average.
In London	100	100	100	100
„ Stockholm	92.0	109.0	91.4	97.4
„ Berlin	46.3	53.6	49.3	49.7

This index number, however, only includes food, and does not include fuel, light, clothing or rent; and to that extent it is seriously incomplete. Of these omissions that of rent is the most serious; and an attempt is made to repair this by deducting from real wages the percentage spent on rent, which varies between 22 per cent in Ottawa and 13 per cent in Britain to 5 per cent in Vienna and Rome. A supplementary index which makes an allowance for rent is in this way obtained. Moreover, the figures of wages only include the wages of one or two categories of workers, and not even the majority; and it is an index of real wages for a working week of given length, and no allowance is made for variations in earnings owing to overtime, changes in piece-rates, short-time and unemployment.

§ 5. *Real Wages in the Nineteenth Century* In attempting to compare real wages in England over the last 100 years one is handicapped by the fact that index numbers of changes in retail prices were only compiled in recent times. For earlier periods one has to rely on imperfect and inadequate data such as the price of corn. For changes in *money* wages over the nineteenth century Prof. Bowley has compiled the following index number:

1800-10	.	.	.	55-65
1820-30	.	.	.	65
1840-50	.	.	.	60
1860-70	.	.	.	75
1870-80	.	.	.	95
1880-90	.	.	.	90
1890-99	.	.	.	100

WAGES AND THE STANDARD OF LIFE 88

No adequate data as to working-class cost of living exist to make possible the exact conversion of this into an index number of real wages. But if we take account of the fact that prices in general approximately halved between 1800 and 1900, falling up to 1848, then rising sharply to 1860, and falling again between 1870 and 1890, we shall see that real wages probably increased nearly four times over the century. This rise in real wages began to reach a standstill about the turn of the century, and after 1900 to give place to a downward tendency as prices rose again after the Transvaal gold discoveries in the '90's. Money wages between 1900 and 1914, while they rose to a certain extent, seriously lagged behind prices, so that real wages in the years immediately before the war were some 7-8 per cent lower than in 1900.

During the inflation and rapid rise of prices of the war period money wages again tended to rise more slowly than the cost of living and real wages to fall. At the same time the greater constancy of employment and the working of overtime tended to swell family earnings even where real wages tended to decline. Against this has to be set the fact that a greater proportion than before of those employed in industry were women whose wages were usually on a lower scale than those of men. But if we take into account soldiers' pay and separation allowances, which are hardly "wages," as well as the wages of the women who had taken the place of their menfolk in the factory, it is probable that real earnings as a whole had a slight tendency to increase during the war years, even while real wage-rates fell. Such a rise in real earnings, however, was a result of a

greater amount of work being done ; and these increased earnings almost certainly went along with a smaller return in proportion to the effort that was undergone. In the two years immediately succeeding the war conditions favoured a rapid rise of wages ; and taking advantage of a comparatively strong bargaining position and the removal of war-time restrictions on trade union activities, the workers managed to secure some sweeping wage-advances ; so that by the end of 1920 and the beginning of 1921, when prices were beginning to fall again, real wages probably stood at rather more than 5 per cent higher than before the war.

§ 6. *Pre-war and Post-war.* To compare real earnings to-day with the years preceding the war is not altogether easy. Since 1920, following the severe trade depression and the deflationary fall in the price-level, wage-rates have tumbled down by leaps and bounds. Up to 1924 they fell considerably faster than the cost of living ; and in 1925 they stood at a level of about 75 per cent above pre-war, with the cost of living standing at about the same figure. Since then the cost of living has undergone an additional fall of about 5 per cent. Earnings, on the other hand, are seriously reduced by the large amount of short-time at present prevailing, and by the high figure of unemployment which amounts to 9-10 per cent of all wage-earners (and perhaps rather more if unregistered unemployed workers are included) and which at one period since 1920 reached 23 per cent. On the other hand, the Majority Report of the Colwyn Committee on the National Debt, on the ground that there had been an appreciable extension of work at

WAGES AND THE STANDARD OF LIFE 85

piece-rates in the last fifteen years and increased facilities for piece-workers to earn money, concluded that working-class earnings were in 1927 somewhat (though only a little) larger than in 1913. At the same time it was pointed out that the working week was to-day some 10 per cent shorter than before the war, so that less hours were being worked for the same weekly earnings—a fact which may be partly offset, however, by an increased intensity of work, or greater energy expended in each hour. While any exact comparison of earnings is, accordingly, difficult, it seems clear that the marked upward movement of wages of the second half of the nineteenth century, in spite of increased strength of trade unions, has in recent years “marked time”; and that working-class earnings are probably lower than they were in 1900; while the real income that the wage-earner has managed to earn on the average of the last six years has probably been smaller than in the years immediately preceding the war.

There are two special features, however, about wage-changes during and since the war which have an important bearing on the working-class standard of life. In the first place the birth-rate has been declining fairly rapidly since 1870, with the result that each new generation, though greater in absolute numbers than the generation which went before, is greater by an amount which diminishes each year. Consequently, the average number of children in a family which have to be supported out of the family earnings has a tendency to fall; and the number of children under 15 as a percentage of the total population showed in the census of 1921 a fall from 30.6 to 27.7. Partly offsetting this is the fact

that the older generation which is now past working age and has to be supported by their children tends to be larger in proportion to the next generation—the wage-earners of to-day—than used to be the case. When one has balanced the opposite effects of these two results of a decline in the birth-rate against one another, the net effect in enabling family earnings to “go further” is probably not very large. At the same, however, the increase of social insurance schemes, financed by the State, has helped to relieve families that are heavily burdened in this way.

Second is the fact that the tendency during the war was for the wages of the lowest paid workers to rise more than the average, and the wages of better paid skilled workers to rise less than the average. This was largely due to the war-time habit of making wage-advances to meet the cost of living have the form of a flat-rate increase all round rather than a percentage addition, while the tendency was enhanced immediately after the war by a considerable extension of Trade Boards, fixing minimum wages for the lowest paid workers in the lowest paid trades; so that by 1920 the effect was seen in an appreciable narrowing of the margin between skilled and unskilled wages and a considerable improvement in the real earnings of the lowest paid workers as compared with pre-war. In the wage-reductions which followed 1920 the pre-war ratio between skilled and unskilled wages was partly, though not wholly, restored. At the same time a new disparity began to appear, this time not between grades but between whole trades. In those industries which produced mainly for export and were subject to competition in the world market,

and which in consequence suffered the severest trade depression and the severest unemployment, the wage-reductions were of the most sweeping character. The industries mainly concerned with the home market, on the other hand, suffered much less from the troubles in the world at large, and wage-reductions in these trades were on a smaller scale. The result is a wide disparity, compared with pre-war, between wages in what have come to be called the "unsheltered" and the "sheltered" trades. In trades such as mining, engineering, and shipbuilding real wages and earnings have fallen below pre-war; whereas in building, transport and printing they still remain substantially above pre-war. Thus, although the margin between skilled and unskilled wages may have narrowed *on the average* to the advantage of the lower paid workers, in a number of trades both skilled and to some extent even unskilled workers are worse off than before the war.

§ 7. *Poverty.* Before the war Mr. Seebohm Rowntree conducted an investigation into the wages necessary for a worker with a wife and three children to maintain a minimum standard of life.¹ Mr. Rowntree adopted two standards: the first was a minimum standard for mere physical efficiency, below which the family could be said to be in starvation or semi-starvation; the second included certain minor comforts, and was defined as a standard of decent existence and minimum human needs, below which the worker's family, though not starving, could be said to be in poverty. At the prices ruling in 1914 the wage which he estimated as necessary

¹ *Poverty: a Study of Town Life, and The Human Needs of Labour.*

to maintain the first standard was 26s., and that necessary to maintain the second standard was 35s. 3d. At the prices ruling in 1926 the equivalent figures would have been respectively 45s. 6d. and 61s. 8d. Subsequently similar investigations were made in U.S.A. and Australia, which adopted standards about 15-25 per cent higher than those of Mr. Rowntree. In 1906-7, according to the Board of Trade wage census of that year, the *average* earnings of male workers was slightly below Mr. Rowntree's higher poverty standard, but considerably above the starvation standard. Of the lower paid workers a considerable proportion must have fallen below the lower minimum: in the case of York Mr. Rowntree gave a figure of 15 per cent of working-class families. In 1926 the average wages earned by skilled workers for a normal working week in "sheltered" trades such as printing and building were about 12 per cent above the higher standard; and the average minimum rates established by Trade Boards in 35 different trades for male workers stood at 50s., or some 5s. above the lower standard. But in engineering and shipbuilding skilled workers' wages stood at from 3s. to 6s. below the "human needs" minimum, while unskilled workers were from 5s. to 7s. below the starvation minimum.¹ This applied to workers who were in full employment. Prof. Bowley in an investigation undertaken in 1913 and repeated in 1924² into a sample of families in a sample of industrial towns adopted a similar starvation standard to that of Mr. Rowntree. In 1913 he found that in 11-12 per cent of the families

¹ Cf. J. H. Richardson, *The Minimum Wage*, p. 45 *seq.*

² *Has Poverty Diminished?* by Bowley and Hogg.

WAGES AND THE STANDARD OF LIFE 39

earnings were below what was necessary to maintain this standard. In 1924 he claimed to find a definite improvement in the position, which he attributed to the decline in the number of dependent children per family and the relatively greater improvement in the position of the lowest paid workers as compared with the average of all wage-earners. If all the wage-earners in the families investigated had been in full employment, the proportion of families definitely below the standard would have been 3.6 - 4.7 per cent. In the actual week of the investigation, owing to unemployment and short-time, 6.5 - 8 per cent were below the standard. The darkest feature of the position is that the families below the poverty line are as a rule precisely the families with the largest number of children, so that the incidence of poverty is heaviest of all upon the young; and Prof. Bowley concluded that, in spite of a certain improvement by 1924, and even assuming full-time employment, one out of every sixteen children was below the minimum standard, while one out of every six was below it at some period of life between birth and puberty.

§ 8. *An International Comparison.* When we compare the relation of real wages internationally by means of the index number of the International Labour Office in the adjoining table, we find that Britain stands midway between the higher wage-level of the more prosperous U.S.A. and the lower wage-levels of the less prosperous countries on the continent of Europe. While wages in U.S.A. are over 50 per cent above those in Britain, those in Central Europe are some 40-50 per cent below

the British standard. In Scandinavian countries, it is interesting to note, wages approach fairly closely to the English standard, being decidedly above the continental level, while in Copenhagen they definitely exceed those in London. Owing to the much increased complications of any comparison of the standard of living with countries outside Europe and North America, the International Labour Office has not included them in its index number. In Asiatic countries like India real wages are certainly lower than the lowest European country: probably they are not above 20-25 per cent of the British worker's real wage.

INDEX NUMBER OF REAL WAGES IN VARIOUS
CITIES IN APRIL, 1928.

(Base: London, April, 1928=100).

	Based on Food only.	With Allowance for Rent.
Amsterdam	85	85
Berlin	71	66
Brussels	49	53
Copenhagen	108	107
Dublin	101	110
Lodz	41	43
London	100	100
Madrid	54	—
Milan	49	48
Ottawa	155	153
Paris	56	—
Philadelphia	185	185
Prague	47	51
Riga*	50	53

WAGES AND THE STANDARD OF LIFE 41

Rome	49	..	51
Stockholm	88	..	86
Sydney*	136	..	136
Vienna	45	..	51
Warsaw	40	..	41

* Figures for January, 1927.

Of wages as a proportion of total product available estimates are also inadequate. In U.S.A. Dr. W. King has calculated the percentage which wages bear to the "value added by manufacture" at 42 per cent in 1919, as against 40 per cent in 1909, 42 per cent in 1899, and 44 per cent in 1889—showing a tendency to fall up to the war, with a slight rise during the war years. For this country Prof. Bowley has calculated that the proportion which wages bore to the total national income (including income on investments abroad) stood at 41 per cent of the total in 1880 and had fallen to 35½ per cent by 1913.¹ A later estimate of the proportion which wages bore to *home produced* social income (excluding income from abroad and mere money transfers inside the propertied class by taxation to pay war-loan interest) gave a figure of just over 43 per cent in 1911 and between 43 and 44 per cent in 1924.² A further distinction was also made between incomes from work—a category which includes incomes from professions and part of profits, and consequently is much wider than what can be classed as wages for our purpose—and incomes from property. Incomes from property, which stood at 37½ per cent of the whole in 1880, fell a little

¹ *Changes in Distribution of the National Income, 1880-1913.*

² Bowley and Stamp, *The National Income, 1924.*

to 35-6 per cent by the end of the century and then rose again to 37½ per cent in 1913. According to estimates made by Prof. Pareto, the actual distribution of income between different groups of persons appears to have quite a surprising similarity in the advanced industrial countries where the wage-system is found.

CHAPTER III

THE PAYMENT OF WAGES

§ 1. "*The Economy of High Wages.*" It is often said that while it is *earnings* which interest the worker, it is wage-rates which interest the employer, since earnings determine the wage-earner's standard of life, and the rate of pay for the amount of work done affects the employer's costs and his profit. When wages are paid, not per hour, but per piece of work done, low wage-rates, while pleasing the employer, may at the same time yield high earnings to the worker if his efficiency and speed of work are high. In other words, even while Relative Wages, or the share of the produce which goes as wages, may remain low and profits increase, so long as the gross produce of industry is growing the income of the worker may be steadily on the rise as well.

(It is not completely true, however, to say that earnings are the only concern of the worker.) The rate of pay he receives in proportion to the work he does will intimately affect him in so far as it will represent the return he gets for the effort he expends. If, when he is being paid by the piece, his earnings increase because an improved machine or better organisation enables him to turn out more with the same effort, he will, of course, directly benefit without any extra exertion on his part. But if he earns more at the old piece-rate simply by

exerting himself more, the situation will be different. His extra earnings will then be merely proportional to the extra effort he expends, and no *net* benefit of welfare will necessarily accrue to him: though he earns more, he suffers also greater "wear and tear." For the worker the rate of pay will represent what he gets for what he gives; and he can hardly be said to benefit, even if his earnings increase, unless the rate of his pay grows in proportion to the energy he expends.

Recently a great deal has been talked and written concerning "The Economy of High Wages": if the employer pays well, it is said, he will get better work done and so gain more profit. This may come about in two ways. First, if the worker and his family live at a higher standard of life, their physical and mental condition will tend to improve and their working efficiency will tend to increase. Part of this result will show itself at once and will redound to the advantage of the employer who is paying more in wages. A larger part, probably, will only show itself in the future, especially in so far as it affects the health of the children, and so will bring advantage to the next generation of employers, but not to a particular employer to-day. Below the poverty level which was discussed in the last chapter this economy of higher wages will probably be very considerable. But once that minimum is passed the gain will probably get progressively smaller: the reaction on purely physical efficiency is unlikely to proceed very far as earnings are raised, and such effects of a higher standard of life as there may be will tend to be mainly of a psychological character and to be more uncertain and indefinite. Second, the prospect of more

wages may act as an inducement to the worker to increase the amount of work that he does, either by working longer hours or by working more intensively. If the employer pays wages on a time-rate basis, the gain to him in offering a higher wage will generally be confined to the first result—affecting the worker's *ability* to work. But if he transfers to the system of paying on a piece-rate basis—paying in proportion to the “pieces” done, or “by results”—this will tend to have the second result as well, affecting the worker's *willingness* to work. The economy, however, will generally be confined to paying out more wages in an hour or a day. Save for a special reason to be mentioned presently, the employer will not get any gain from paying higher rates per piece, since that would only make each unit of product which he has to sell more costly to himself.

§ 2. *Intensity of Work and Piece-rates.* In both these cases, however, the worker, while he earns more, is not necessarily earning any more in proportion to what he gives—to the energy he is expending. If he is working more intensively or for longer hours, he is suffering more fatigue: he probably requires to spend more on food and recreation and perhaps on doctors' bills. Workers, for instance, who are working at the intensity of Western factory methods usually require a meat diet, while more leisurely toiling Eastern workers can subsist on a cereal diet. As a result, the employer will generally have a much greater interest in long working hours, the extension of overtime and increased intensity of work than will his employees.

There is a further advantage to the employer in increased intensity of working or in extended working hours. It consists in the fact that he can get additional economies from more intensive use of his machinery: each machine can be made to do more work. To a certain extent the same thing would apply if he employed a larger number of workers in each workshop. But the point where it ceases to be profitable to extend the use of existing plant by this method—by crowding more men onto each machine—comes much sooner than it does when the same number of men are employed but each man works more quickly or stays and works overtime when otherwise the machinery would be idle. Where it was practicable to introduce a multiple-shift system—two or three working-shifts a day instead of one—the same economy could be obtained along with the employment of additional workers. But where for some reason this is not practicable, or where its potentialities have already been exploited, the employer will find it an advantage to increase the speed of work of his existing workers on their existing shifts, rather than to increase the number of hands he employs. (The economy of this consists in the fact that, though the increased work that is done requires more circulating capital (for materials and wages) to finance it, fixed capital can remain the same. Hence, while Profit will increase in no greater proportion than circulating capital has to be increased, it *will* increase in proportion to the *total* capital used (circulating *plus* fixed); and Profit as a percentage of total capital will consequently rise.) And it is this fact which may make it profitable for employers within limits to raise piece-rates in order thereby to induce a

larger amount of work to be done: they may gain more in economy of plant and machinery than they lose in having to pay more in wages for each "piece" to be made.

An increase in the work done by each worker in this way will represent, in a sense, an increase in the supply of labour as much as will an increase in the number of those in the labour market who seek employment. As we shall see when we come to discuss the theory of wages, an increased supply will create a tendency for wage-rates to fall—in this case not necessarily earnings per hour but rates per piece. To this extent a lengthening of hours or a "speeding-up" of work will probably cause Relative Wages, or wages as a proportion of gross produce, to decline.¹ This will mean that, although at the outset a particular employer may find it to his advantage to offer fairly high piece-rates to encourage increased intensity of work, as soon as the "speeding-up" has become general over the whole of the industry he will begin to find it necessary either to cut the rate down or else to employ a smaller number of men.² Where the

¹ This will not necessarily be so, if the demand for labour is sufficiently elastic. (Cf. Dalton, *Inequality of Incomes*, pp. 186-7.) But in this case the elasticity will have to be fairly large—probably between 1½ and 2. The elasticity of demand for labour will, in turn, depend on the elasticity of supply of capital; and it seems improbable that the elasticity of supply of capital (allowing for the fixity of land) is in practice sufficiently large to invalidate the statement in the text.

² The pressure on him to do this will come from the fact that the increase of output requires more circulating capital to finance it. When the increase has become general, the cost of obtaining the additional circulating capital will tend to rise. The *real* rate is here referred to, not merely the money rate.

employer faces a particularly elastic market, this necessity will be postponed; but conversely where he faces a particularly inelastic market, the necessity will be hastened. This point has been strangely and persistently misunderstood. The traditional fear of the workers that "speeding-up" will lead to dismissals or rate-cutting is not the unreasonable ignorance of economic principles that it is usually made out to be; while the "rate-cutting" in which employers tend to indulge before a piece-rate system has been introduced for very long is not a wile of particularly villainous masters but is probably a normal result of the system.

§ 3. *Premium-Bonus Systems.* The result of an ordinary "straight" system of payment by results, where the worker is paid a straight rate of so much per piece however much he does, is, accordingly, to create a situation before very long where the employer finds it unprofitable to employ so many men unless he can scale down the piece-rates which he has been paying. Such a "cutting" of rates tends in turn to cause hostility to the whole system among the employees who feel that they have been cheated by the rates being cut so soon as they increased their efforts and their earnings; and such hostility may defeat the aim of the employer in offering an incentive to better work. Partly for this reason some employers prefer more complicated systems of payment by results under which the reward for increased work starts high but afterwards does not increase proportionately with the work done. This automatically scales down the rate as individual output increases. These more complicated systems are usually

called Premium Bonus Systems, and are based on a "standard time" for a given job, with a bonus for "time saved." Under the system which Mr. David Rowan introduced in Glasgow in 1898 a "standard time" is laid down for a given piece of work; and if the work is done in less time than this, the worker receives a percentage bonus equal to the percentage of time saved. Thus, if the standard time is 10 hours and the work is actually done in 8, the ordinary hourly rate for the 8 hours is paid *plus* a bonus of 20 per cent, which amounts to additional payment for another 1.6 hours. An alternative system introduced by Mr. F. A. Halsey in America in 1890 gave as a bonus a third of the hourly rate for the hours saved on the standard time. Thus, if the standard time was 10 and the work was done in 7 hours, the worker would get paid for the 7 hours *plus* a bonus equal to 1 hour's wage. When this system was introduced into England by Messrs. Weir it was altered so as to give a *half* of the hourly rate for the time saved as bonus, and in this form came to be known as the Halsey-Weir system. Of the Rowan and the Halsey systems the former yields the higher actual rate and greater incentive at the early stages of speeding-up. At the point of a 50 per cent reduction on standard time the two systems are identical, each yielding a 50 per cent increase of earnings for what amounts to a doubling of "standard" output. After this point the actual rate falls away faster under the Rowan than under the Halsey system.

§ 4. "*Task-Bonus Systems.*" A different principle underlies the "task-bonus" systems which are used in

America in connection with wider schemes of scientific management. These give a substantial bonus to the workers who attain a certain "task" or standard of efficiency, the bonus being added to the ordinary piece-wage. Under the Gantt system the task is sometimes as severe as a doubling of normal output and the bonus given is about 40 or 50 per cent of the wage. The workers who fail to reach the standard get no extra earnings. This is rather like holding a carrot before the nose of a donkey: the donkey may never reach the carrot, but his progress is nevertheless accelerated. The Emerson system, which is another variety, also lays down a certain "task"; but the "task" is usually not so severe, being designed for the average worker, and the bonus is equivalently smaller and is graduated according to the nearness which the worker gets to the task. The "carrots" are here smaller and less juicy, but the donkey is given one more frequently.

The Taylor System of Differential Piece-work, however, goes a stage further, and, in contrast to Premium-Bonus Systems, makes the piece-rate at which work is paid actually rise as the worker's speed of work increases. For instance, if 6 dozen are done in an hour, the piece-rate may be 1s. per gross, but if 7 dozen are done in an hour, the rate will be raised to, say, 1s. 1d. per gross. The advantage of this scheme, as claimed by its originator, consists in the fact that it makes the position of the slow worker much worse and that of the quick worker much better than it would be under any alternative scheme, and it consequently tends to drive all slow workers out of the factory and to attract to it all the better workers in the trade. In this way a

particular employer may be able to skim off for himself all the cream of the labour market; and he may profit by staffing his works with a smaller number of men who work more quickly even though he has to pay them at slightly more than the normal rate. But it seems to be an advantage which *one* employer may obtain or even one industry, but which can hardly be gained by all employers at the same time: all of them cannot enjoy only the cream. And if the system were to be generally adopted (in competitive industries, at any rate, as distinct from monopolies) the necessity of revising rates in a downward direction is likely to arise as much as in any other system of payment by results.

Sometimes collective bonuses have been advocated, and in one or two cases the method has been adopted. This is particularly appropriate where men are working in "gangs" and it is difficult to assess the specific contribution of each man, as for instance with boiler-makers' riveting gangs. An example of it is the Priestman System, introduced by Messrs. Priestman of Hull in 1917. Under this the workers are paid as basis the ordinary time-rate, a group-bonus is given proportional to the amount by which the output of the whole group has been increased beyond a given amount, and this bonus is divided so as to increase each man's wages in the same proportion.

§ 5. *The Field of Payment by Results.* One might be inclined to wonder at first sight why payment by results is not universally adopted if, as appears, it is of such advantage to employers; and it is common to hear its extension advocated as a panacea for high costs and

low output. It is true that there is a considerable area of industry, principally in the engineering trades, over which a battle is continually being waged concerning its extension, the employers urging and the trade unions resisting. But it is also true that there are a large number of trades where its introduction would not be practicable and where the employers do not desire it, just as in other industries, as for instance cotton, the trade unions do not oppose but quite readily support the system.

Payment by results will clearly be to the greatest advantage of the employer where the rate of work depends primarily on the worker himself and on the speed at which he chooses to go, as for instance a turner at a lathe or a coal-hewer. On the other hand, where the rate of work is mainly governed by the speed of the machinery and the worker does little more than keep pace with the machinery in a series of more or less routine operations, it may not make very much difference to the employer whether he pays by piece or by time. In the Ford works, for instance, the fitters merely attach certain screws and bolts as a continuous travelling carriage passes them, and Mr. Ford consequently prefers to pay everyone by time and not on piece-rates. In such cases it may even be the worker, rather than the employer, who prefers piece-payment, so that if he is "speeded up" he may get some recompense for the extra strain. In certain types of work quality may be more important than quantity. The worker, if he has a monetary interest in quantity, may speed up his work to the detriment of quality and turn out inferior and "shoddy" work. The employer, it is true, can reject definitely bad work and refuse to count it; but

this leads to disputes and ill-temper, and can usually apply only to the worst cases, and will not materially raise the average quality of the work that is turned out. No one would suggest that a gardener should be paid according to the number of geraniums he plants, the *chef* according to the steaks that he grills, the ploughman according to the furrows he drives. Again, where supervision of work is easy, it may pay the employer better to incur the cost of additional foremen and supervisors and to "speed up" through their influence, than to pay the workers extra according to their results. In some cases, indeed, one finds a system of bonuses to foremen proportioned to the results of the whole shop. Under one form of the Cost Premium System a standard labour cost is assessed for a whole job, and where the actual cost falls below this the foreman is credited with a proportion of this saving. At any rate, it is far from true that every case of low output and high costs is curable by an extension of payment by results. As a recent writer on the subject has said, "It is being recognised more fully to-day (that) output can be influenced by many factors, of which workers' efforts form but one, and that one possibly not always the most important."¹ Low output may be due to faults of management, to insufficient or intermittent supply of materials, tools, or appliances, to bad co-ordination of different parts of the production process, with resulting delays and congestions, to machinery being unsuitable or out of repair, to the work of the office and the drawing room being inefficient. Payment by results will not enable the employer to remedy any of these.

¹ Powell, *Payment by Results*, p. 57.

Payment by results will be most practicable and easiest to handle where the work is of a standardised character and falls into regular "pieces" which can be easily measured and are the same from week to week. But where the work does not fall into easily measurable "pieces," or where its character is continually changing, the system will be more complicated to operate, as in a foundry where a large number of different types of casting may be made and these different types change from day to day or week to week. It is in these cases that hostility to the system on the part of trade unions is most likely to arise. The aim of a trade union, as we shall see in a later chapter, is to improve the earnings of its members by bargaining *collectively*, or as a group, with the employer over wage-rates. Where the work is standardised and regular, piece-rates as well as time-rates can be fixed by direct bargaining between the trade unions and the employers; the rates for different types of work being drawn up in what is called a "price list," agreed on between the two sides and posted in the workshop. Such "price lists" exist in a large number of trades such as the textile and the boot and shoe industries. Even here, of course, certain difficulties of interpretation and consequent disputes may arise in deciding into which of the various categories a particular job may fall; and in such cases some impartial arbitrator may have to be called in; or as in the cotton industry where the piece-lists are extraordinarily complicated the employers may decide to leave the decision to trade union officials, who in this case are specially appointed for the purpose. But where the work is very varied in character and new types of work are continually arising,

standardised price-lists are not possible and piece-rates have to be settled for each job separately by a direct bargain between the management and the individual worker. The fact that in the engineering trades piece-rates are fixed in this way by what is known as the method of "mutuality," instead of by piece-lists collectively negotiated and agreed upon, is in the main responsible, no doubt, for the greater opposition that is put up by the engineering trade unions to the extension of payment by results than is found in other trades. During the war the difficulty became specially great owing to the large number of new types of work that were being continually introduced, and also owing to the wholesale promotion of unskilled men onto skilled jobs (known as "dilution"). In each case a new bargain had to be made as to the rate between the worker concerned and the management; and it was in order to introduce an element of "collective bargaining" into the settlement of such rates that the custom spread in the engineering and furnishing trades for the workers in each shop to elect a shop steward who should act as their spokesman to the management, and for the various shop stewards in turn to come together in a works committee. Where such cases arise in which it is not possible for a trade union to fix piece-rates by collective bargaining, it is now fairly common to exact a safeguarding condition that piece-workers shall not earn less than the prevailing time-rate. This is done in the engineering trades. Frequently it is urged that piece-workers should be guaranteed more than the normal time-rate, namely "time-and-a-quarter," or "time-and-a-third," since men on piece-rates usually work at a greater intensity

than time-workers, and the former may be suffering an injustice if they are receiving no more than the latter while in practice doing more work.

Over a certain field of industry, accordingly, one finds, as one would expect, a sharp difference of interests on the matter. The employers, on their side, complain of low output due to inefficient work, in some cases complaining of deliberate "ca' canny" or "going slow" and the discouragement of the quicker workers by the weight of opinion of the more indolent majority. The trade unions, on their side, in addition to general grievances about "rate-cutting" and excessive "speeding-up," oppose the system as tending to substitute individual for collective bargaining and to weaken their own position. In such cases the chief reason for the persistence of time-rates is the opposition displayed to piece-rates by the trade unions: where the union is strong the employers may be unable to introduce the change without a test of strength in a strike or a lock-out, or they may feel that the gain of a change is outweighed if it involves bad feeling and continual friction and disputes.

§ 6. *Sub-Contracting.* In cases where the workers are weak and unorganised a system of payment by results may hold the door open to numerous methods of exploitation, if only for the reason that where the method of payment is more complicated, and where it is such as to encourage the worker to accelerate his speed of work, there is more chance of advantage being taken of the worker's ignorance and weakness. In the old days abuses of this kind attached particularly to a

system known as "sub-contracting" which was then fairly common. Under this system, which was really a survival from the Domestic System before the coming of factories, the capitalist would give out work at a certain price to a small man or gang-master or sub-contractor, who then, in turn, employed workmen on the job. The sub-contractor secured his profit by getting the work done at less than the price at which he had contracted with his employer; and as a result he had a special inducement to reduce the wages he paid to a minimum. If the employer "beat him down," he in turn would "beat down" the wage he paid to those he employed. The working of a mine was often given over at a price to a "butty," as he was called. In the tin mines of Cornwall the working of a mine was often let out to a "gang-master" on what was called "tut-work" by a process of "Dutch Auction," under which the price started high and the job finally went to the lowest bidder. In the middle of the nineteenth century a large amount of the work of railway construction was done on a basis of sub-contract. To-day there are still certain survivals of this. In the Midlands coalfield the "butty" still survives in the shape of the hewer who gets a certain "stall" allotted to him when a coal seam is opened up at a certain price per ton for the coal he sends out from his "stall." He, in turn, employs assistants, often at day-rates and not piece-rates, to help him in working the "stall." But to-day the rates both of the "butty" and his assistants are as a rule carefully regulated by trade union agreements; although apparently there is not infrequently some "oiling of the palm" to secure the allotment of the most favourable "stalls." The system

also survives in a large number of the small hand trades, such as the clothing trades, where work is given out on a sub-contract basis, and it is here that some of the worst cases of "sweating" are generally found. The economist McCulloch once praised the sub-contract system in flamboyant terms. "It is in truth," he said, "the broadest, the easiest, and the safest of the various channels by which diligent, sagacious and frugal individuals emerge from poverty and attain to respectability and opulence. Those who thus rise to distinction may be emphatically said to be the architects of their own fortunes. They owe nothing to interest, to favour or to any unworthy means." But to-day it is generally recognised that the system unless carefully hedged with safeguards has possibilities of considerable evil. As trade unions have developed they have usually been hostile to the system and have often sought in the introduction of time-rates a safeguard against possible abuses.

§ 7. *Weighing and Measuring.* There are two particular ways in which a piece-worker, unsupported by legal safeguards or by a trade union, may be an easy victim for an employer or sub-contractor or foreman who is ready to take advantage of the weakness of an employee. The worker may have undertaken work on a verbal understanding as to the rate. When pay-day comes he may find that his pay has been calculated at a lower rate. Or, again, he may find that in the weighing or the counting of his work he has been credited with a smaller quantity than he thinks that he has really done. It is his word against his employer's; and if the employer

sticks to his point, the worker has no evidence that he is right and no redress. If the worker throws up the job, the employer can probably get another quite easily to fill his place; and if the vacancy cannot be filled quickly the employer loses only a little profit, whereas the worker fears that he may fare no better elsewhere and that he may be unable to get other work at all. Frequently more subtle issues may arise over the precise character or quality of the work that was ordered or over the interpretation of "bad work."

To deal with this a whole series of Acts of Parliament have been passed. As far back as 1824 an Act provided for the use of a "ticket" to be given out to the worker with each piece of work, stating the character of the work to be done and the piece-rate to be paid for it. This "ticket" was to constitute legal evidence in any dispute, but its use remained optional for an employer. In 1845 the use of "tickets" was made compulsory in the hosiery trade and in silk weaving, where there had been much complaint of abuses in this respect. The Factory and Workshop Act of 1891 made the giving of written particulars of work compulsory in all textile factories; in 1895 the Home Secretary was empowered to extend this obligation by special order to other trades; and in 1901 it was made generally compulsory for employers in giving out piece-work either to post a list of rates in a prominent place or else to issue a "ticket" of particulars with each piece of work. With regard to the measuring or weighing of the work done, the miners in 1872 secured the right of appointing a "check-weigher" elected by the piece-workers in a mine and paid by them to represent the men when the

weighing of tubs was taking place at the pit-head. But this nominal right was only a beginning: there were ways in which a mine manager could hoodwink the "interfering" check-weigher, if he desired, or even exert pressure upon his election. Later legislation, accordingly, provided that the check-weigher's rights should be actual as well as nominal. He was to have "every facility afforded to him for enabling him to fulfil the duties for which he is stationed," while on the other hand it was made illegal for him to impede the working of the mine or to interfere with the weighing. By an Act of 1894 it was made an offence for an owner or manager to exert "improper influence" on the election of a check-weigher, whether by threats, bribes or dismissal, or to refuse to give facilities for such an election. Finally the Act of 1919 provided for an extension of the system to other industries—to iron and steel founding, casting and rolling, to the loading and unloading of vessels, to chalk and limestone quarrying, and to cement and lime-working. The Home Secretary was further empowered to extend the system to any other trade that he thought fit. An important new clause in this latest Act made it necessary for the employer to give "reasonable notice" to the check-weigher of the time and place at which the weighing was to take place.

§ 8. *Truck and Deductions.* Another respect in which advantage may be taken of the weakness of an unorganised worker is in various kinds of deductions from his wages. These deductions may take the form of fines for bad work or bad time-keeping or indiscipline, or they may be on account of materials or tools supplied.

Where the employer owns a shop or a canteen, runs a benefit club, or rents a house to his employees, he may deduct the value of what is purchased at the shop, or the club fees, or the rent of the house, from the wages that are paid, handing over only the balance in actual cash. In the early factory towns this practice was quite common, gaining the name of the Truck System, and frequently resulted in considerable evil and abuse. Sometimes the employer would pay the worker entirely in kind, instead of in cash; and if the foodstuffs in question were of poor quality, were of little use to him, or were of less value than the wage he had contracted for, the worker had seldom any redress. In other cases the employer might pay part of his wages, not in cash, but in vouchers or orders on a neighbouring "tommy-shop," as it was called, owned by himself or a confederate; and if at this shop the worker was charged exorbitant prices or given shoddy goods, he had no freedom to go elsewhere unless he abandoned his employment. Since the middle of the eighteenth century legislation had been in force providing that wages should only be paid "in good and lawful money of the kingdom"; but the legislation remained a dead letter. The first serious attempt to deal with the evil was the Truck Act of 1831. This prohibited any contract which made the worker agree to take his wages in any other form than cash, or bound him to spend his wages in any particular way, and forbade deductions from wages on account of fines. A later Act in 1887 prohibited entirely the payment of wages in the form of orders for goods on tradesmen, and made it illegal for a master to dismiss an employee because he did not spend his money in a particular way.

The matter of deductions from wages for fines and tools, etc., was finally dealt with in the Truck Act of 1896. This Act, in distinction from that of 1831, legalised certain deductions of this kind, provided notice had been given and displayed publicly of the items for which such deductions should be made. The position, therefore, as it exists to-day is that payment of wages in any other form than cash is illegal, as is also any compulsion on the worker as to the way in which he spends his wages. It is also illegal (by the Shop Club Act of 1902) for an employer to make it a condition of employment that the worker should join any particular "shop club" or friendly society or private benefit club of his own. On the other hand, deductions from wages on account of rents, of tools and materials supplied, and of disciplinary fines are allowed. In some of these instances there still remains room, therefore, for an employer who desires to "nibble" by indirect means at the wages he pays to do so; and the extent and character of such deductions remain a subject for quite frequent disagreements and disputes.

§ 9. *Profit-sharing.* Some employers, in addition to, or instead of, ordinary systems of payment by results, favour a system known as profit-sharing with the aim of stimulating a collective spirit among the workpeople favourable to greater output, and of giving to the employees a financial interest in the success of the firm. Sometimes the system is coupled with some co-partnership scheme under which the employees are given special facilities for taking up shares in the business and are given a small degree of representation on the Board.

Not infrequently a further advantage is hoped for from the scheme in detaching the workers from a trade union and freeing the management from the constriction of collective bargaining and possible strikes. An early instance of this was a scheme introduced by Henry Briggs, Son & Co., colliery owners of Normanton, in 1865, together with special shareholding privileges and a seat on the Board of Directors for a workers' representative. A condition was made, however, that in order to receive the profit-bonus the employees must abandon membership of any trade union; and when later a strike was declared against a wage-reduction the bonus was discontinued. In this case the right of the men to receive the bonus was not legally established, but rested at the will of the shareholders. Messrs. Fox, Head & Co., iron manufacturers of Middlesboro, introduced a similar scheme in 1866. Fifteen years previous in France the *Compagnie d'Assurances Générales* had introduced an interesting form of deferred profit-sharing with the express object of preventing other firms from drawing away its best employees by offers of a higher salary. This profit-bonus was not paid out immediately, but was accumulated in a Provident Fund and then paid in an accumulated bonus to every employee of 25 years standing or over 65 years of age. A more recent instance in England is the well-known scheme of the South Metropolitan Gas Company, introduced in 1889, as an inducement to terminate a strike, and containing originally a condition that those participating in the scheme should not be members of a trade union—a condition which has since been abandoned.

The ground covered by such schemes in this country is

not very wide, although some increase has been shown since the war. In 1925 there were 252 schemes in operation covering 190,000 employees. On the average the profit-bonus amounts to some $\frac{5}{8}$ per cent of the worker's wage, and seldom exceeds in all 10 per cent of the total profits. About 250 schemes had also been started at one time or another and subsequently terminated. An advantage frequently cited for the system is that it implies the imparting of information concerning profits to the workers. But apart from this, profit-sharing seems to amount to little more than a particular form of bonus systems of wage-payment—a collective bonus assessed, not according to the results of a particular workman or a gang of workmen, but according to the financial results of the whole concern. In some respects it is less likely to achieve its desired results than other bonus systems of payment, since the bonus is less directly related to the worker's own effort, and is consequently likely to act as a weaker incentive to him to increase his exertions, depending as it does on several factors outside the workers' control, such as financial circumstances, the state of the market and the efficiency of the management. In so far as it is successful in its aim it will be successful for precisely the same reason as is any other bonus system—for the reason that it increases the intensity of work and the productivity of labour, and so increases gross produce to a greater extent than the bonus which has to be paid away. If it is expected to do more than this, the hope must be based on the additional aim of attaching the worker more closely to a particular firm and freeing the employer from some of the restraints of a collective bargain by sapping some of the strength of

trade unionism. And it is because they suspect such an aim to be present in most profit-sharing schemes, explicit or implicit, that trade unions commonly show hostility to such proposals.

In all systems of wage-payment, however, whether profit-sharing, differential piece-rates, premium-bonus systems or plain piece-rates, the most important question in judging its results for employer and employed is the basis from which it starts; and this clearly may differ widely from one case to another and according to differing circumstances. In judging whether a piece-rate is of benefit to a worker, it is not sufficient to know that it gives a 10 per cent increase in wage for a 10 per cent increase of effort. If the initial wage is low relatively to the effort involved, the worker may be getting only a few pence extra for increasing his labour and his output by a large amount. In the case of premium-bonus systems everything will depend on the "standard time" that is set. If the standard is set severely at the speed of the fastest man, only a few will be able to achieve the task in less time and only a few will enjoy the bonus. If the "standard time" is leniently fixed, many workers will attain a large bonus without much additional effort and will enjoy high earnings in proportion to the work they do. Similarly with profit-sharing, the basic-wage which the worker receives is probably more important than the amount of the additional profit-bonus he gets. If an employer pays £10 a year to each man as bonus, but at the same time manages to reduce wages by 4s. a week all round, his total wages bill will be no greater than before and the scheme will be costing him nothing. And it is for this reason that we may find

a trade union displaying hostility to what seems *prima facie* an attractive and remunerative scheme, if they fear that in accepting the scheme some of the rights and the possibilities of collective bargaining over basic wage-rates will be weakened or endangered.

§ 10. *Hours of Work.* Formerly employers tended to pay more attention to extending the hours of work than to increasing the intensity of the work done in each hour. True, they attempted to do the latter as well as the former by the influence of an overseer. But a hundred years ago, when it was quite common for hours of work to be over 12 and even to reach 16 hours a day, they generally neglected the fact that the pursuit of long hours by imposing excessive fatigue on the workers definitely undermined the other aim by reducing the ability of the worker to work at an intensive speed. Of course, to some extent the matter is a "vicious circle": when workers are unused to factory methods and to intensive, disciplined work, the employer will be inclined in his search for increased profit to lengthen the hours of work, and in turn these longer hours will reduce the physical and mental ability of the worker to maintain the strain of working at a high speed. The Bombay cotton operative to-day, for instance, while he works much longer hours than his Lancashire comrade, works at a very much slower speed and does much less in a single hour. Towards the end of the nineteenth century, however, it began to be realised that there was an "economy of shorter hours" as much as an "economy of high wages." Like the latter, the former, of course, only operates up to a point. Some authorities have

placed the *optimum*—the length of working day which yields the highest output, not per hour, but for the whole day—at 8 hours ; others regard the *optimum* as being at about 8½ or 9. This will clearly vary considerably in different industries according to the nature of the work and the strain it imposes. Where a shortening of hours facilitates an improved shift system, the *optimum* may be as low as 6 hours, as is Lord Leverhulme's suggestion. But the fact that it is low in one trade does not necessarily prove that it will be similarly low in others. It is fairly certain, however, that in most trades an extension beyond 9 hours will lower rather than increase the total output that the employer can obtain. This was shown particularly during the war when in the munitions trade hours were increased and holidays cut down in the attempt to increase output. But it was soon discovered that this was merely defeating its own end, and a reversion to shorter hours of working with the restoration of holidays was made.

Generally, therefore, it will be much more to the employer's interest to find ways of speeding up work intensively than to lengthen hours. If he lengthens hours he has to expand his wages-bill proportionately while the output is not increasing in the same proportion, because the efficiency of work in the extra hours tends to decline, and the longer working day by producing fatigue even tends to react on efficiency in the earlier hours of the day as well. But by the alternative method, even on a piece-rate system where the rate is not "cut," the wages-bill will only be increased in the same proportion as output is expanded. As a result, employers on the whole and in the long run have not been unwilling

to accede to the trade union demand for a shorter working day ; and to-day in the majority of trades the normal working day is limited by collective agreement between trade unions and employers to 8 or 9 hours. If a worker is employed for longer than this, he has to be paid for the extra hours at a specially high " overtime " rate, which makes it as a rule unprofitable for the employer to work him " overtime " except for some special reason. In certain cases, as in the building trade, it is part of the agreement that a particular employer who wishes to work " overtime " should first obtain consent from the local trade union secretary. In the majority of cases, however, where the trade union has secured a reduction of hours it has been customary for the union to insist on a raising of the hourly rates so that weekly wages as a result of the shortened hours shall not decline. This takes away from the employer some of the advantage which the shortening of hours gives ; but the trade unions support the claim by contending that, if the result is to be an increased output per hour, the hourly rates should equivalently be revised. Apart from legislating in the interest of women and children, the State has taken little part in limiting the hours of labour ; although in most cases where men and women are employed in the same factory a limitation on the hours of the latter has automatically limited also the hours which the former can work. The exception is that of coal mining, where hours underground were limited by law in 1908 to 8 per day, and to 7 hours in 1919, since when the limit has been subsequently again raised to 8 ; while shop assistants have also been affected by the Shop-closing Acts. But apart from this, legal limitation on the hours

of male workers, though constantly discussed and suggested, has not as yet appeared in this country; and such shortening of the working day as occurred in the fifty years before the war was arrived at in the course of collective bargaining between employers and trade unions and embodied in collective agreements between the two sides. In the years succeeding the war hours were reduced on the average by some 10 per cent in this way. But it is noteworthy that in the last year or two a certain desire has been manifested by employers in certain industries to revert to longer hours of working, and proposals have been made for revising the limit which had been fixed in previous agreements.

CHAPTER IV

THEORIES OF WAGES

§ 1. *Classical Theory.* The early economists as a rule held a very rigid and definite theory of wages. Wages consisted of the price at which the commodity labour-power was sold on the market ; and, like any other price, the variation of wages was governed by certain very definite economic laws. These laws, which their theory was designed to expound, were intended to state a connection, or a " casual " relation, between wages and certain other conditions existing in the labour market ; and if you knew how these other things were likely to change, you could calculate how wages would change : you could be sure that wages would not alter (at least in the long run) unless one of these other conditions altered first. As in mechanics a certain equilibrium of an object is not " arbitrary," in the sense that it can be shifted at the whim of the moment, but is a resultant of a number of mechanical forces, so in the labour market there was assumed to be a certain equilibrium-level of wages, closely determined by a number of economic forces—a level only to be altered if these other determining forces could first of all be made to move. Only in recent times have serious doubts developed as to whether the conditions on which wages depend may

not be more complicated, and less easily explicable by an easy mechanical formula—whether changes in wages may not react on these so-called “determining” factors as much as these latter influence wages.

§ 2. *The Subsistence Theory.*—The earliest theory that we find was in some ways the simplest of them all. It stated that the price of labour depended on the subsistence of the labourer. It equalled the amount of commodities necessary to feed and clothe a worker and his family: it represented simply the “cost” to society of “enabling the labourers to subsist and to perpetuate their race” (Ricardo). This implied that what the worker received under a wage-system was the same as what he received under slavery or serfdom—in each case enough to cover the labourer’s “wear and tear.” Indeed, some writers followed Adam Smith in thinking that “though the wear and tear of a free servant is equally at the expense of his master, it generally costs him much less than that of a slave,” because the free labourer would be more frugal and economical in arranging his own diet than would an overseer who managed the feeding of the slaves. At the same time the labour of a free labourer would probably be more efficient and productive. It also followed that if the price of necessaries increased or decreased, money wages would be bound to follow before very long; and if a tax were imposed on wages, wages must rise by an equivalent amount and the burden of the tax in this way be thrown upon the employer.

The reason for this “law” was considered to rest in the supply of labour. If wages were higher than what

was necessary to maintain the supply of labour, then workers would have larger families and the labour supply would increase. With an increased labour supply there would be more competition for the employment available, so that wages as a result were bound to fall again. Conversely, if wages were below the subsistence level, children would die off or never be born, which would result in a decreased labour supply in the next generation, so that the increased competition of masters for the smaller number of workers would raise wages again. It was a case of mechanical equilibrium: like the pendulum of a clock, any disturbance from the "normal" position brought into play forces which would bring it back to "normal" again. Things might take some time to settle down in the equilibrium—"market price" for some time might fluctuate about "normal price"—but given sufficient time the equilibrium would be restored.

It does not seem improbable that in an early stage of a wage-system this law approximately applies. But it probably applies rather because of the continual inflow of new labour from the countryside to seek employment in the towns, as the result of village poverty, enclosures, agricultural changes and destruction of handicrafts, than of any "natural" law governing the growth of population and continually keeping wages from rising above subsistence. In the light of modern experience there is certainly no warrant for assuming that population will automatically increase as wages rise; although here also the alleged connection between wages and population may be approximately correct when applied to workers on a very low standard of life, who because

of their poverty are improvident of the future and whose families are only precluded from increase because their children die of malnutrition.

§ 3. *From Ricardo to Marx.* But the exponents of this Subsistence Theory themselves made one admission which really undermined their theory as a complete explanation of wages. Ricardo, for instance, maintained that habit and custom were instrumental in determining what was "necessary" in the workers' diet. In the "subsistence level" to which wages were supposed to adapt themselves was included, not only bare physical necessities, but also a modicum of "comforts" as well. The reason for this, although not very clearly stated, was apparently a double one. The worker, having grown accustomed to certain small comforts such as a glass of beer and a pipe of tobacco, would dispense with physical necessities rather than with these, if his wages were reduced. Habit, in other words, makes these comforts into "conventional necessities." Moreover, in so far as the worker made any economic calculations in deciding when it was politic to marry and how large a family it was safe to have, it was the standard of life which he *thought* to be necessary that entered into his decision.

To admit a variable quantity such as habit into the equation was to make a considerable hole in the apparent completeness of the theory. It meant that the equation only held good so long as one took habit and custom for granted, and *assumed* a certain level of conventional necessities as entering into the subsistence level—assumed "habit" to be a "constant" in the equation.

When habit changed, then one had to admit that there would be a *new* equilibrium to which wages would adapt themselves. The theory applied only to a particular time and a particular set of habits. It could say that wages changed when habit changed. But it could not explain such changes: a change of wages might *cause* a change of habit because the new wage-level made wage-earners accustomed to a different standard, as much as altered habit caused an altered wage-level; and on this theory, consequently, there was no limit beyond which wages might not rise.

Ricardo realised this and tried to provide for it in a second part of his theory. As long as the economic world was in a state of movement and progression, capital was continually accumulating and industry was expanding. Hence, in these conditions the demand for labour was tending to increase faster than the supply of labour; and this created favourable conditions for the "market price" of labour to rise. As wages rose, new habits were formed in the working class, introducing new comforts into their standard of life. When the accumulation of capital and the expansion of industry slowed down, the conditions favourable to a rise in wages would come to an end; but by this time the standard of life which was considered "necessary" had grown in the interim by change of habit to be higher than it was before, and a new equilibrium might be created on a higher wage-level. Ricardo was quick to add, however, that habit could be revised as easily in a downward as in an upward direction, and that it usually sustained only a weak resistance to such revision—to the tendency for the supply of labour to increase

and to reduce wages again. His subsistence theory, therefore, still held good as a "static" theory, providing an equilibrium when change had slowed down to a standstill and had been stationary for a sufficient time to allow the equilibrium to be reached—like a game of musical chairs, where there is no resting place so long as the music continues and equilibrium is only reached some seconds after the music has stopped. As long as change continued, all was a flux in which each part depended equally on every other part: when movement ceased, the subsistence theory applied. The main hope of working-class improvement lay in ever maintaining the pace of capital accumulation and industrial advance.

When Marx, however, stressed the influence of this factor of habit and custom which Ricardo was inclined to treat as predominantly a short-lived influence, the whole theory assumed, at least in its practical implications, an entirely new form. Marx followed Ricardo in thinking that the market value of labour tended to equal its physical subsistence in so far as labour was similar to any other commodity; but at the same time he pointed out that labour, and its value, differed from other commodities in the importance which the "historical or social element" had in affecting its supply and its price. Consequently he maintained that "the value of labour . . . is formed by two elements—the one merely physical, the other historical or social. Its *ultimate limit* is determined by the *physical* element: that is to say, to maintain and produce itself, to perpetuate its physical existence, the working class must receive the necessaries absolutely indispensable for living and multiplying. . . . Besides this mere physical

element, the value of labour is in every country determined by a *traditional standard of life*." It was this latter influence which explained the considerable differences of wages between different countries, between different periods and even between different districts in the same country. This standard could be advanced at periods when conditions of supply and demand favoured the wage-earner; and it was this which gave to trade unions their functions in collective bargaining over wages. In practice, therefore, he concluded, "the matter resolves itself into a question of the respective powers of the combatants."¹ Wages were only determinate in so far as an extreme upper and a lower limit were concerned: between these limits they were merely a matter of custom and bargaining power.

§ 4. *The Wages-Fund Theory.* It was as a natural transition from the Ricardian theory, rather than as an alternative to it, that there developed what Prof. Cannan has called the Supply and Demand Theory. To this view there was no rigidly fixed level of wages: there was a continually changing level which at any one time was always a definite resultant of two forces—the demand for labour from the side of employers and the supply of labour which was competing for employment. The latter consisted in the number of the working population, and consisted also (although the exponents of the theory never seem to have noticed it) in the amount of work which each worker was willing to do. The demand for labour, on the other hand, consisted in the amount of capital which capitalists were willing

¹ *Value, Price and Profit*, Ed. Eleanor Aveling, p. 85 seq.

to lay out in the form of "wage-advances" to workers. This was called the "wages-fund"; and consequently this form of the Supply and Demand Theory was given the name of the Wages-Fund Doctrine.

Under any given set of circumstances, accordingly, the general level of wages could never be different from what it was. If one group of workers by legislation or trade union action secured an advance in wages, this by absorbing an unduly large part of the wages-fund must leave less available for other workers, and so leave these others with lower wages or cause them to be unemployed. Conversely, if a group of workers were forced to accept an abnormally low wage, this, while it was to be deplored, did not really rob the working class as a whole: it merely left more of the wages-fund available to employ other groups of workpeople. It followed that legislative interference or trade union action, though it might affect particular wages here and there, could not raise the *general* wage-level and could not increase the general earnings of the working class as a whole. Such action, indeed, was more likely to have a reverse effect if it hindered the accumulation of capital or encouraged the labourers to breed faster than before. Mrs. Marcet in the popular manual which was for so long the adornment of every gentleman's schoolroom made "Mrs. B." explain the matter to her pupil "Caroline" as follows: "(the rate of wages) depends upon the proportion which capital bears to the labouring part of the population of the country. . . . It is this alone which regulates the rate of wages when they are left to pursue their natural course. It is this alone which creates or destroys the demand for labour.

. . . When the number of labourers remains the same, the rate of wages will increase with the increase of capital and lower with the diminution of it ; and if the amount of capital remain the same, the rate of wages will fall as the number of labourers increase, and rise as the number of labourers diminish ; or as mathematicians would express it, the rate of wages varies directly as the quantity of capital and inversely as the number of labourers. . . . Where there is capital the poor will always find employment, (and) the demand for labour is therefore proportioned to the extent of capital."¹ It logically followed that if the rich were taxed or their prosperity was otherwise impaired, so much less capital would be available to give employment. "The greatest evil that results from this provision for the poor (through Poor Law Relief) is that it lowers the price of labour ; the sum which the capitalist is obliged to pay as poor rates necessarily reduces the wages of his labourers, for if the tax did not exist, his capital being so much more considerable, the demand for labour and consequently its remuneration would be greater."² Charity or benevolence, whether public or private, could do nothing to alter the economists' inexorable laws.

To the extent that the supply of the labouring population was affected by the standard of life that by habit and custom had come to be thought necessary, the same inadequacy was involved in this theory as we noticed in the Subsistence Theory. If it were true that habit and custom had this influence, one of the quantities in the wages-fund equation, namely the supply

¹ *Conversations on Political Economy*, pp. 109, 117-18, 130.

² *Ibid.*, p. 164.

of labour, would fail to be an independent variable : the supply of labour, influenced by a customary standard of life, might be determined by the level of wages as much as wages were determined by the supply of labour. And if this were true, the level of wages had a wide possibility of variation in either an upward or downward direction, even while the wages-fund remained unchanged.¹ As long, however, as the Malthusian dogmas held sway, few were ready to believe that any extra bite of subsistence could fail to cause the birth and survival of an extra mouth to eat it up ; and habit was conceded no more than a delaying influence on the natural laws which in the long run governed human procreation and the supply of labour. The difficulty, therefore, was not regarded as a very real one : it disappeared, at least, if one took a sufficiently " long run " view. Not till fairly late in the nineteenth century was it realised that among persons on a higher standard of life the birth-rate tends to be, not higher, but lower ; so that, even allowing for the lower infant mortality which less poverty entails, the rate of increase among such persons may be actually reduced by the fact that they live at a higher standard of life. In such a case a rise in wages and in the customary standard might have a quite appreciable reaction on the labour supply and in the opposite direction to what Ricardo imagined.

But a more important modification in the proud rigidity of the earlier theory was introduced as soon as

¹ In other words, one would have to treat " habit " as a " constant " in the equation, to which one could arbitrarily assign any quantity that one pleased.

the principle of "The Economy of High Wages" had begun to impress itself on men's minds. Lord Brassey in the '60's had been one of the first to marshal facts in support of a definite claim that higher wages often "paid" the employer because they brought higher productivity. In so far as this was true, the level of wages reacted in quite an important sense on the labour supply, both by increasing the intensity of labour, or the amount of energy which each worker could expend in an hour or a day, and also by improving the quality and skill of the energy expended. More important still, the higher wage and higher productivity might react on the demand for labour itself; and this it might do, not merely by increasing the profit of the capitalist and hence the capital that he accumulated and invested in the future, but directly and immediately by making it more attractive to the capitalist to invest, and so induce him to advance as capital a *larger part* of his present income. The demand for labour, therefore, was also found not to be an "independent variable" in the equation which the preachers of the Wages-Fund Theory framed.

In place of the older notion of a Wages-Fund economists now began to talk of the advances made in the form of circulating capital to employ labour as being "not a fund but a flow." Instead of a rigid fund which could only be augmented fairly slowly with the growth of the surplus product of industry and of capital accumulated out of this surplus, circulating capital was thought of as a quickly varying quantity, which expanded or contracted according as the investing class found it more attractive to invest for a future profit than to

spend for a present enjoyment. Income could quickly change its flow as between the two channels of spending and investment if the relative levels of the two outlets changed and exercised an altered attraction on the stream. At any given time it might be true that for a temporary period, perhaps a few months or a year, the *real* fund available out of which wages could be paid might be fixed, in the sense that the supply of food forthcoming was for the time being strictly limited in amount. For this reason it was often argued that even if larger sums of *money* were advanced to wage-earners, this would not increase the supply of necessaries forthcoming, and the result of the spending of the higher money wages would merely be for prices of necessaries to rise. But as Marx pointed out in reply to an advocate of the Wages-Fund Doctrine in 1865,¹ this rigidity applies only to a short period. After a short interval the increased demand for necessaries would summon an increase in their supply, at the expense of the production of the luxuries that the rich had previously bought: "capital and labour would be transferred from the less remunerative to the more remunerative branches; and this process of transfer would go on until the supply in the one department of industry had risen proportionately to the increased demand, and had sunk in the other departments according to the decreased demand."

§ 5. *Theory of Marginal Productivity.* This new attention to productivity in its effect upon wages seemed at

¹ *Value, Price and Profit*, which was an address made to the International in reply to a Mr. Weston on the occasion of a discussion on the wages question and trade union policy.

first merely to demolish the neat structure which the earlier economists had set up. At the same time it pointed the way to the building of a new theory out of the stones of the old; and for this building the habit of thinking in terms of little bits of things (or increments) added or subtracted at the margin, which was becoming popular among economists by the end of the nineteenth century, was soon to provide the finished plans. This new theory came to be called the Productivity Theory. Economists were at this time attempting to explain the price of a commodity in terms of the extra utility, or satisfaction to consumers, yielded by the final or marginal unit of a given supply: given a supply of x hundred bushels of wheat, the price per bushel would measure the utility to someone of the x -hundredth bushel. It seemed to follow that the price of labour was to be explained in a similar way by its marginal utility. But labour did not satisfy any consumers' wants directly, unless it were employed in domestic service: it only did so indirectly by yielding some product. Hence, given a certain supply of labour, its price was determined by the extra product which was yielded by the additional labour of the marginal man. To the employer labour was a commodity the worth of which to him was simply the product it yielded. In deciding what it was "worth" to him to take on an additional ten men he would calculate how much would be added to the total product of his factory if he employed the additional ten. This "net product" represented their worth to him and governed his "demand price" for them—the amount he would be willing to lay out in extra wages, and the extent to which he would be willing to extend his "flow"

of circulating capital: It followed that, assuming the supply of labour which sought employment to be constant, the wage that they could command equalled the extra "net product" which would be added to the total product of the country by the employment of the marginal units of the supply. Above this wages could not go without causing the marginal units of the supply (because they "cost" more than they were "worth") to be left unemployed.

Many economists proceeded to hail this statement, "Wages = the Marginal Net Product of Labour," as a unique discovery which furnished a complete theory of wages capable of taking the place of all the earlier, cruder explanations. Some, like the American Prof. J. B. Clark, even hailed it as a newly discovered "natural law," beyond which there was no more appeal than there was beyond the "natural laws" of the classical Subsistence Theory or Wages Fund. It seemed so final and satisfying to say that the wage-earner's reward varied with labour's "productivity"; from which it seemed a logical corollary to say that wages measured no more and no less than what the services performed by labour were "worth" to society. But those who were wiser and understood the situation more clearly realised that the new doctrine did not constitute a complete theory of wages. The statement, "Wages = the Marginal Net Product of Labour," might be *one* of the equations in such a theory, and an important one; but it was *only* one equation, which by itself told one nothing, for the reason that the "Marginal Net Product of Labour" was a variable quantity depending on a complicated set of factors, and its variations remained

as much a mystery as the variations of wages themselves.¹ As Dr. Marshall has said : " This doctrine has sometimes been put forward as a theory of wages. But there is no valid ground for any such pretension. The doctrine that the earnings of a worker tend to be equal to the net product of his work has by itself no real meaning ; since in order to estimate net product, we have to take for granted all the expenses of production of the commodity on which he works, other than his own wages."²

One of the quantities on which the " Marginal Net Product " of labour itself depends is the supply of labour : it will be high or low according as the supply in question is small or large. If an employer is understaffed in his factory, the additional product resulting from the employment of 10 more men will be comparatively high ; if his factory is already well-staffed, the jobs onto which 10 additional men can be put will be relatively unimportant, and the extra product which he gains by employing them will be small. In a new country, rich in undeveloped resources but still thinly populated, new settlers can produce considerable wealth by the labour of their hands ; when natural resources have been more

¹ Similarly, as a general theory of distribution the theory of marginal productivity tells one that, given a certain relation between the supply of various factors of production, the total value produced must be shared in a particular way. If one can assume the supply of the various factors as " constants," the theory is, therefore, adequate. But in practice one cannot make this assumption, and the theory tells one nothing about the way that variations in these factors are themselves related, which is the fundamental issue.

² *Principles of Economics*, p. 518. Dr. Marshall, however, goes on to add that this objection is " not valid against a claim that the doctrine throws into clear light the action of one of the causes that govern wages."

fully developed and the region become populous, it will tend to be much less easy for new settlers unaided by capital to wring a living from the soil. As the marginal utility of wheat or water is high when wheat or water are scarce, but low when they are plentiful, so the marginal productivity of labour will be high when the labour supply is relatively scarce and low when it is plentiful.

Nor does this end the matter. The product yielded by labour will depend as much (and perhaps more) on the state of natural resources, on the efficiency of organisation, and on the amount and quality of the machinery that is used, as on the worker's own personal skill and effort; and the Marginal Productivity of labour will vary with these extrinsic things as well as with the intrinsic efficiency of labour itself. For simplicity in our argument we can assume that natural resources and the state of organisation are constant factors; and what then remains relevant to our analysis will be the available supply of machinery, or of fixed capital, with which labour works. Accordingly, we need to supplement our original equation, "Wages = the Marginal Net Product of Labour," with the further explanatory statement that the "Marginal Net Product of Labour" varies, not only with the efficiency of each "man-hour," but also with the supply of fixed capital relatively to the supply of labour.

§ 6. *The Demand for Labour.* When we have carried our analysis thus far, it becomes clear that the new theory, while it is apparently different in form and phrasing, is fundamentally fairly similar to the doctrines which preceded it. Like its predecessor, it is to be

classified as a Supply and Demand Theory, modified and a little more complex. The fact that the level of wages may react on the efficiency of the worker, and so affect his output, is recognised. The Wages-Fund available for employing labour is no longer regarded as a quantity bearing a fixed proportion to the surplus produce of industry which accrues as income to the owning class. It is a fund which may be added to or reduced by the action of investors according to the relative attractiveness of investment as against present enjoyment—of industrial shares as against a Rolls-Royce or an extra month on the Riviera. But the fund, while it is elastic, remains elastic only within certain limits. These limits are set by the preference which the investor will have for spending his money at once rather than putting it by to bring in an income in the future. Most people, unless they are misers, will prefer to have a £100 to spend now than the promise of £101 in a year's time, perhaps than the promise of £105 or £106 in a year's time; and this preference for present joys is termed their "time-preference" or their "discounting of the future." This "time-preference," acting as a kind of resistance against any further flow of capital into industry, will set what is usually called the "supply-price" of capital (or its "cost-price"), which will usually be low for a small amount of investment and higher for a larger amount. The supply-price necessary to overcome the "time-preference" of investors and to attract different amounts of capital into industry will tend to vary, and can be expressed as a "supply-curve"—a curve linking up the different supply-prices of different amounts of capital. It will be this which will determine

the limits within which the Wages-Fund may vary: with a bright prospect of profit the Wages-Fund will expand by drawing to itself a larger proportion of the investor's income, and with a poor prospect of profit it will contract.

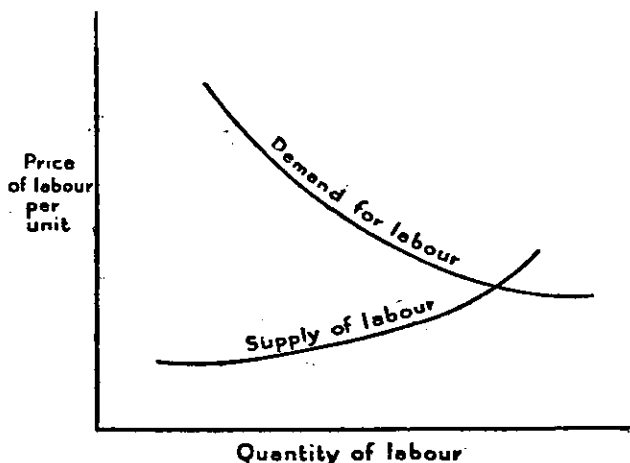
§ 7. *The Supply of Labour.* On the other hand, somewhat analogous conditions will characterise the supply of labour. The supply of labour will also tend to be an elastic thing, but elastic only within limits, these limits being similarly determined by the "supply-price" of labour.

The supply of labour can be used in several different senses. It may be applied to the *number of workers* seeking wage-employment. It may include the *number of hours* which each worker is willing to work, so that a "unit of labour" is regarded as a "man-hour" of work, and the supply of such units as being increased by any increase in the amount of overtime worked per man. It may be further stretched to include the *intensity of work* that is done in each hour—the amount of physical energy that is expended—or even to include the *quality of work* done, depending on the intelligent skill with which energy is applied. All of these things are likely to bear some kind of relation to the price of labour. It seems on the whole most convenient to think of the supply of labour as including the intensity of work, and so to take a given expenditure of physical energy as our "unit" of labour; but to treat changes in quality as merely changing the *grade* of labour with which one is dealing. Changes in the wage-level will probably react on the quality of the labour supply;

and the possibility of this reaction will have to be taken into account as a modifying factor in the theory. But more important than this will probably be the reaction of the wage-level on the intensity of work, because earnings provide both an inducement and the physical sustenance to increased energy. Different amounts of labour will require different prices per unit to call them forth. This will constitute the "supply-price" (or "cost-price") of different quantities of working-energy, and will depend on the physical and psychological resistances which limit an extension of the labour supply. With regard to the connection between the level of wages and the total population we cannot be more than very uncertain; and even though a relation may exist between the wage-level and the *rate of increase* of population, there is no necessary connection between the wage-level and the *aggregate* population. With regard to the supply of labour in other senses, however—the intensity of work, the willingness to work longer hours, the proportion of the population that offers itself for wage-employment—one probably can postulate some connection; and to this extent it will be possible to represent the supply-prices of different quantities of labour as a "supply-curve," on the assumption of a given aggregate population and a given quality of labour.

The wage-level is then seen to be dependent on two variable quantities—the amount of capital advanced to hire labour (or the "Wages-Fund") and the supply of labour forthcoming. The former at any one time will depend on past accumulations of capital, but will be modified in the course of time by the investor's willing-

ness to add to existing capital by new investments, or, on the other hand, by his unwillingness to leave existing accumulations of capital intact and his preference for transferring them to his own consumption. The future actions of investors will depend upon the supply-price of capital, as the supply of labour forthcoming will depend on the supply-price of labour. It will, therefore, be possible to conceive of a "demand-curve" for labour as well as a "supply-curve," although the shape of this "demand-curve" will differ according to the period of time that one has in mind. Putting the two curves together, we then have the accompanying picture, with



the point of intersection of the two curves as the equilibrium-point where the level of wages will tend to settle down. As an equilibrium in mechanics may be the resultant of two opposing and resisting forces, so wages

are regarded as the resultant of the two resistant forces of the investor's desire to spend his money and the worker's dislike of work.

§ 8. *Inventions and Wages.* It may be objected at this point that our argument has so far spoken as though all capital were spent directly on wages. What, it will be asked, of that part which goes as fixed capital to instal buildings and machinery? To meet this objection, a short digression and an additional complication will have to be introduced; but the complication, while it is important, does not substantially alter the argument that we have followed hitherto.

In industry in general the capital invested will divide along two main streams. One will go as fixed capital to set up plant and machinery, the other as circulating capital into the purchase of raw materials and labour-power. This second stream again divides into two further ones—the one spent on materials, and the other (variable capital, as Marx called it, or the Wages-Fund) on hiring labour. The capital will tend to be distributed along these streams in such a way that the "level" of profit at the end of each stream is approximately equal—so that the last £ spent in wages adds as much to the product of the business as the last £ spent on machinery. At any one time this will apply both to a particular business and to all businesses taken together, including those firms which are making machines for use in other industries.

The proportions in which it is most profitable to distribute the capital along these streams will differ in different industries according to the technical character

of their productive processes. But in industry as a whole in any given state of machine-technique a certain proportion will exist which is the most profitable; and any flow of new capital will tend to distribute itself in these proportions. If, however, the price of labour rises (because capital increases and offers more employment, or for any other reason), the capital which is spent on hiring labour will become less profitable than before; and this will tend to alter the previous proportions, causing more to go as fixed capital and less to go as a Wages-Fund to hire labour (as Ricardo and Cairnes both pointed out). Conversely, if labour is cheap, less machinery will tend to be used, commodities which are mainly the product of hand-labour will be produced in relatively larger quantities, and more of the capital invested will flow as a Wages-Fund. This fact will make the Wages-Fund, and the demand for labour, *more elastic* than would appear at first sight.

If a change in machine-technique takes place as the result of invention, so as either to cheapen the cost of machines or to increase their field of use, this will make investment in machinery more profitable than it was before and will tend to alter the previous proportions, so as to cause a *larger* part of the capital invested to go as fixed capital and a *smaller* part to go as a Wages-Fund to employ labour. It was this reason which Marx adduced to show that the demand for labour did not increase proportionately with the accumulation of capital, but that as capital accumulated the demand for labour (or the Wages-Fund) tended to fall relatively—“it will still increase, but increase in a constantly diminishing ratio as compared with the increase of capital.”

Whether or not the amount going as wages will decrease *absolutely*, as well as *relatively*, will depend on the circumstances of the particular case. The result of the invention will be to increase the gross produce of industry, and so to cheapen production. If this cheapening affects goods which are consumed by wage-earners, then *real* wage-earnings may not decrease when the *money*-demand for labour declines. Further, the greater profit which results from the increased productivity may attract a larger accumulation of capital, part of which will later go to increase the Wages-Fund.

Inventions, therefore, will be an additional factor which affect the demand-curve for labour, independently of any change in the supply of capital as a whole. But it will remain true that in any given state of technique the part of the total supply of capital which flows along the channel of the Wages-Fund and constitutes a demand for labour will tend to remain a constant proportion of the whole.

CHAPTER V

WAGES AND BARGAINING-POWER

§ 1. *The New Theory and the Old.* The theory of wages as we left it at the end of the previous chapter, while it has been redressed more fashionably with a finer care to detail, inherits the main features of its lineal ancestors. Apart from the admission that wage-changes may react on the quality of labour, the price of labour is still regarded as rigidly determined by formulated laws of supply and demand which brook no interference. Trade union or legislative action still remains irrelevant to the determination of the price of labour and only able to increase working-class earnings if it induces the worker to increase the intensity of his work. Considerations such as those which were examined in Chapter I may affect wages in so far as they affect the number of persons seeking wage-employment. But apart from this, factors such as "economic freedom" play no part in determining the wage-level. And we still find the old *laissez-faire* view of wages, which followed as a corollary of the classical theory, expressed as confidently as in Mrs. Marcet's primer. For instance, one authority on the subject has recently written as follows: "The idea that Trade Unions can, in the majority of cases, permanently raise the wages of their members dies very

hard. . . . In the majority of cases, at least, this belief is doomed to disappointment. In the long run it is very unlikely that Trade Unions can permanently raise wages above the competitive level." And again: "The sole result of the establishment on a large scale of minimum wages above the competitive level would be to cause unemployment and diminish production."¹ Mr. H. D. Henderson is equally confident, "The wage-level in the long run," he asserts, "is fairly rigidly determined. . . . It is . . . an illusion to suppose that the general level of wages can be appreciably and permanently raised by Trade Union action, except in so far as it increases the efficiency of the workers or incidentally stimulates the efficiency of the employers."²

§ 2. *The "Supply-Price" of Labour.* But there was a modification to be introduced into the theory of wages that was in some ways of more fundamental importance than any we have mentioned hitherto. This modification amounted to an extended insistence on that reaction of habit and custom on the supply of labour which we noticed as a disturbing factor in the Subsistence Theory—a disturbing factor which most of the economists of the time, through their belief in the overpowering influence of the law of population, considered to be of minor importance in practice. Marshall, developing this hint of Ricardo, gave to the modifying effect of "habit" some of the wider significance which Marx had seen in it. This new element that he introduced into the theory of wages amounted to the fact that the "supply-price"

¹ Lionel Robbins, *Wages*, pp. 67-8 and 72-3.
Supply and Demand, p. 145.

of labour was not an "independent variable" in the equation. One could no longer draw a "supply-curve" of labour, and then, placing it against the "demand-curve," say that the point of intersection of the two curves was the equilibrium-point to which wages would tend. One could not do so precisely because one did not know, independently of the pre-existing level of wages, in what position the "supply-curve" was, this "supply-curve" being as much determined by the level of wages as wages were determined by it. The old rigid theory could still, of course, be made logically complete by *assuming* certain conditions of supply as given; but then one had to admit that there was no reason why *in practice* this "supply-curve" could not be arbitrarily altered.

Marshall put the doctrine in general terms by saying that the "supply-price" at which labour was forthcoming depended on how keenly the worker desired to secure an income. The dislike of work, or its "disutility," was a subjective, psychological thing, which in the worker's mind was measured in terms of a certain income, and so expressed itself objectively in the amount of income he required to induce him to do a given amount of work. This was the "supply-price" of labour. But the way in which the worker measured this dislike of working depended on how much income he already had, and was accustomed to have. If he was starving, a £ would mean so much to him that he would do almost anything that was within his physical powers in order to earn it. To a man who had a plot of land or some savings, on the other hand, a £ would mean very much less, and he would require a much larger wage to induce

him to undertake the same piece of work. Hence, not only may the increase of the working population be affected by the standard of life that has become customary, but the amount of work that each worker and his family are willing to do for a £—in extent of hours, in intensity, in the number of members of the family who go out to get employment—may be influenced in the same way by the income that the family possesses.¹ The poorer the worker, the lower the “supply-price” of his labour—the more work he will do for a given wage. The wage he gets to-day may be the most important factor determining the wage he is willing to accept to-morrow; and his existing poverty may be the principal reason of his wages remaining low.

For this reason the “economic freedom” of the worker will be a factor of prime importance affecting the wage-level. Institutional changes, such as enclosures and the elimination of the independent artisan which were described in Chapter I, will not affect the wage-level only by increasing the *number* of people in the labour market: they will affect it by cutting the worker off from other means of livelihood, and so making him more dependent on wage-earning than before and more willing to work for lower wages.² If the worker has alternative

¹ It might seem at first sight as though this is merely the converse of the circumstances mentioned in the previous chapter on which the “supply-curve” of labour is based. But variations in the “supply-price” of labour which a given “supply-curve” is intended to represent are assumed to be based on certain constant facts of human psychology (disutility of work, etc.) which are not affected by the economic circumstances of the individual. What is here being mentioned is dependent on the economic circumstances of the person in question.

² In other words, the effect will be not merely to extend the

means of livelihood, or some reserve to fall back upon, some minimum will be set below which the supply-price of labour is not likely to fall. But the characteristic of the wage-earning class is that it is propertyless and has few such alternative opportunities; and this makes it essentially exploitable⁸—an exploitation which may be cumulative until a purely physical subsistence limit is reached. It may not, therefore, have been unreasonable of Ricardo to have assumed that the competitive level of wages under a wage-system tended to a subsistence level, except at times when the demand for labour was expanding rapidly.

§ 3. *The Influence of Bargaining-Power.* It follows from this view that over a considerable range wages can be affected by bargaining, in so far as the latter raises or lowers the "supply-curve" of labour. If the bargaining-power of the workers is strengthened, the price of labour per unit can be raised; if the bargaining-power of the workers is weakened, the price of labour is likely to fall. This power of bargaining to influence the wage-level is still, however, regarded as being subject to an important upper limit. This limit is set by the "demand-curve" for labour, which remains an inde-

"supply-curve" to the right by increasing the number willing to work at the former level of wages, but to lower the whole "supply-curve" of labour.

⁸ This word is used in an entirely non-ethical sense (like "fairness" in the next chapter) to mean something which can be utilised at a profit (whether a man or a horse or a piece of land or a mine). A thing can then be said to be more "exploitable" than another if some circumstance makes it specially cheap and therefore extends the possibility of its profitable utilisation by an employer. Cf. above, p. 17.

pendent factor, not subject to the arbitrary influence of bargaining-power. The Wages-Fund, though it is elastic rather than rigid, still rules the labour market. When in reply to the economists' theory that wages were inexorably determined by supply and demand, the trade unionists of the middle nineteenth century declared that they would influence wages by limiting the supply of labour through restrictions on working overtime etc., the economists retorted by accusing them of harbouring a fallacious "Work-Fund" doctrine—of thinking that by limiting the work done by each more employment could be created for others. The retort partly missed the point of the argument in so far as the trade unionists were trying to raise the supply-price of their labour by limiting its amount. But at the same time the economists' *ignoratio elenchi* contained a point of its own that was important. What they intended to say was that a restriction on the supply of labour could not increase *aggregate earnings*, and, unless it took the form of restriction of the numbers of the working population, could not increase aggregate earnings *per head*. This follows if the demand for labour, or the Wages-Fund, is elastic—if it is larger when there is more profit to be made than when there is less. Such restriction *can*, however, increase wages in proportion to the worker's expenditure of energy and his "wear and tear," and it *can* increase Relative Wages, or wages as a proportion of the total social income.

The same applies to modern trade union methods of collective bargaining, which aim, not primarily at restricting the supply of labour, but at raising the supply-price of labour and setting a minimum below

which labour cannot be purchased. Such action has quite a wide power of influencing the rate of wages that is paid in proportion to the amount of work that is done, and so of increasing welfare. But, while it can do this, it is unlikely to add to *aggregate earnings*; and if trade union action goes beyond the attempt to raise the wages of particular grades or particularly exploited groups in special circumstances, it is likely to result in unemployment. What was implied in the economists' retort to the advocates of the so-called Work-Fund leads to the apparent paradox that the more the workers allow themselves to be exploited, the more their aggregate earnings will increase (at least in the long run), even if the result is for the earnings of the propertied class to increase still faster. And on this base is erected a doctrine of social harmony between the classes. But it does not follow that the workers will prefer to be exploited to a maximum degree, or that attempts to limit this exploitation¹ are based on fallacious reasoning. And if in raising the supply-price of their labour the choice lies between restricting the number of men employed or of restricting the amount of work done by each man, the latter seems clearly the preferable alternative.

When the matter is regarded in this light, factors such as "bargaining-power" and "economic freedom" will be seen simply as influences on the "supply-curve" of labour. Some economists have attempted to treat what they call "weakness of bargaining-strength" as an abnormal feature, causing wages to fall below the "normal wage" which would prevail in a "perfect labour market" where bargaining inequality was non-

¹ Cf. above, p. 97.

existent. Actually such "weakness" seems to be entirely a matter of degree and indistinguishable from the general factors which determine the supply-price of labour. The only valid distinction of this kind seems to be that between competitive and monopoly conditions in the labour market—between the case where employers compete freely against one another for labour and the case where such competition between employers is restricted. This latter case is probably fairly common, since in Adam Smith's familiar phrase, "masters are always and everywhere in a sort of tacit, but constant and uniform, combination not to raise the wages of labour above their actual rate." And where this is found, the employers, forming a buyers' monopoly, will tend to purchase rather *less* labour than they otherwise would and to pay it at a *lower* rate. Wages will then stand *below* the "marginal net product" of the available labour. But so long as employers compete against one another for "hands," the matter will be different: there will be no reason for wages to stand *below* "marginal net product," since competition will urge employers to extend their employment of labour up to the margin where what they have to pay for more labour is almost as great as the extra product they get by employing it. Nevertheless, the position of this "margin," and hence of the wage-level, will depend on the prevailing supply-price of labour—on where the "supply-curve" intersects the "demand-curve." And since the bargaining-power of the worker, the customary standard he has in mind and the value he places upon money, etc., influence the position of this "supply-curve," there may be a large number of competitive

wage-levels, high or low, all equally "normal" to a "perfect labour market." If a "perfect labour market" is intended to mean anything more profound than this—for instance, a condition where wage-earners have "perfect" economic freedom—then it is quite inconsistent with the characteristics of a wage-system as we discussed them in Chapter I and is hardly likely to be found this side of the mythical land of Cathay.

§ 4. *Spending and Saving.* At this point, however, a further question may arise which will lead us into more controversial issues than we have met hitherto. It may well be asked: if the "supply-curve" of labour is not an independent variable—if it is determined by the customary wage-level as much as it determines it—may not the same be true of the "demand-curve" for labour and the supply of capital? Why should the one and not the other be admitted to be partly arbitrary, influenced by custom and by the economic position of the worker? If it is admitted that the price per unit of effort can be influenced by an arbitrary raising of the supply-price of labour, why retain sufficient of the rigidity of the old Wages-Fund to assert that aggregate *earnings* cannot be increased by such means?

The reason why this is usually admitted as an important modifying factor on the side of supply, but not on the side of demand, is because the aversion from saving income and investing it as capital consists in the preference for spending money at once and the strength of present desires. This preference is supposed to be a general characteristic of human psychology; and while it is true that the size of the investor's income will

influence the strength of his present needs and hence his aversion from saving, it will influence the supply of saving in the *opposite way* to the effect of the worker's income on the supply-price of work. While the aversion from working, expressed in terms of money, grows *less* as a man grows poorer, a person's aversion from saving is assumed to *increase* as he gets poorer, because his present needs become more important and more insistent. A keen desire for income, which makes the worker more keen to find employment, acts on the capitalist in the opposite way and makes him *less* ready to invest.

But it appears reasonable to question whether this is really the whole of the matter. Is not the keenness of the capitalist's desire for income, like the wage-earner's, influenced by certain standards of consumption that have become customary? And may not the valuation placed upon money-income be influenced by custom and by the level of profit and wages of yesterday as much in the capitalist's case as in the worker's, and both in a similar way? Probably this is much more the case with the capitalist, in so far as a larger part of his expenditure is on luxuries, where custom and habit and convention play a larger part in determining the strength of the desire for them. As a man becomes richer he is likely to acquire tastes which he did not have before. This is more likely to be so if a whole social group is growing richer at the same time, since the group as a whole will tend to develop certain standards of expenditure which emulation in display and ostentation between individuals will tend to advance cumulatively. The early English capitalists at the time of the Industrial Revolution had very modest tastes, and any riches they acquired

above a moderate standard of expenditure they were only too willing to reinvest. As success accustomed their minds to fortune, they acquired new tastes—a larger house, menservants, carriages and horses, a country estate, later motor-cars and summers on the Mediterranean; and as a result it required a much larger income to make them invest as much as before. Americans as a fruit of their growing prosperity have recently acquired the habit of travelling in Europe in the summer, and it has been estimated that in 1927 American tourists spent in Europe as much as some \$617 million. The fact that this taste had been acquired meant that so much less was invested than might otherwise have been done. If American capitalists had been generally poorer by \$617 million, this would not necessarily have meant that less capital was forthcoming in America: it might merely have meant that the fashion for foreign travel would not have been acquired.

If this is a factor of importance, it seems logical to conclude that the level of income of yesterday, developing certain customary standards which come to be regarded as "normal," influences to-day's supply-curve of capital as much as it influences the supply-curve of labour. The one no more than the other can be regarded as an independent variable; and the old theory, formulated as a group of equations, only remains consistent by assuming certain quantities as given (or as "constants") which can in practice be influenced by custom and hence by arbitrary "interference" such as that of collective bargaining or legislative action. Having made this admission, one has no more right to say that *in practice* the demand for labour governs wages

than to say that the level of wages governs the demand for labour. When one is discussing the effect of *small* changes in the wage-level, one may be justified in neglecting the latter reaction. But in dealing with wider changes, such neglect might be misleading and false: it might then be no longer possible to say that certain independent conditions of supply and demand create a certain equilibrium to which the wage-level will inevitably tend to return, because these very conditions of supply and demand may be themselves the result of the outcome of yesterday's bargain, which divided the produce of industry between profit and wages and so influenced to-day's actions of capitalists and wage-earners alike. And if yesterday's bargain influenced the position of to-day's "equilibrium," an arbitrary alteration of to-day's bargain may well establish an altered "equilibrium" for to-morrow. In other words, the so-called "equilibrium" will be continually changing as a result of the conditions created by a series of successive bargains; and if one party enjoys an increase of income, or more income than another party, this may be the result of superior bargaining strength or of custom inherited from the past. Moreover, it may be the principal reason for his continuing to enjoy a larger income in the future..

§ 5. *How Far Can Relative Wages Rise?* In the view of the present writer this seems to be the true situation; although it can hardly be regarded as the general view of accepted economic theory. If it be true, the proud confidence of the earlier economists in their pretty symmetry of economic laws is gone, yielding place to a

halting agnosticism which denies that in our present knowledge any rigid theory of wages is possible. The labour market from being a home of the "economic harmonies" is degraded to a disordered battleground, subject to the incalculable wrestlings of what, for want of clearer designation, we call relative bargaining-strength. But to admit to such a degree of ignorance may be nearer to wisdom than the dogmatic predictions of the classical economists. And though our general conclusion may be that no rigid theory of wages is possible, we are not left entirely in the dark. We know what are some of the important relations and connections between factors—how the variations of different things are connected together. Moreover there are still limits within which the indeterminateness is contained. The general wage-level is unlikely to fall for long below a bare physical subsistence standard—a standard which will not, of course, be a fixed level, since the amount of subsistence will depend on how arduous or intensive is the work; although, if plentiful new supplies of labour from outside (e.g. by immigration from rural districts or other countries) are available, this minimum standard may be very low, sufficient only for the worker's physical needs of the present, and not for a long life or for rearing a family, just as slaves could be undernourished and worked out quickly if plentiful new supplies of slaves were forthcoming. From the figures which were quoted in Chapter II one might judge that wages on the average are not very far above this physical limit, differences between countries corresponding fairly closely, it would seem, with differences in work-intensity which require different standards of subsistence. On the other hand,

the wage-level could not rise (at least, for any length of time) so as to absorb more than that part of the surplus produce that is at present *spent*: if it absorbed more than this, it would inevitably eat into the capital-supply. Wages under the most favourable conditions could not absorb more than the gross produce *minus* the necessary capital accumulation. (According to the orthodox theory, of course, the upper limit would be much lower than this.) If we take a rough estimate of the gross produce, or the home-produced social income, in Britain at present as being about £3600 million, and of wages as absorbing about 44 per cent of this; and if from the remaining surplus of £2000 million we deduct some £400 million for that part of State and municipal expenditure which is at present financed by taxation from non-wage-earners,¹ another £600 million as annual new capital accumulation, and a further £680 million as a mere subsistence income for the non-wage-earning sections of the community, we arrive at a figure of about £320 million as an amount which might possibly be absorbed into the wages bill. This gives a maximum possibility, with conditions remaining as they are, of wages being influenced in an upward direction by bargaining to the extent of about 20 per cent.

In practice, however, it seems almost certain that, given the continuance of the present wage-system, the actual limit to the upward movement of wages stands considerably lower than this. Indeed, it seems probable

¹ This excludes State expenditure on debt interest and repayment, since these represent mere transfers of income, and interest-payments on national debt have not been included above in the figure of total social income.

that economists have been right in concluding that the upward limit to wages, whatever its precise character, is more rigid and definite than the lower limit to wages. The reason for this conclusion is that conventional standards of consumption among the investing class, once adopted, are much slower to be revised in a downward direction, short of some cataclysm like a war or revolution, than they are to move in an upward direction. Habits of country houses and menservants and grouse-moors are more slowly abandoned than acquired. Hence any attempt to raise Relative Wages at the expense of Profits tends to meet severe resistance from accepted standards of consumption among the well-to-do, so that a decline of profit is *more* likely to result in a decline of capital accumulation than in a downward revision of standards of expenditure. Moreover, whereas the strongest trade union is unable for long to hold up its wage-standard in the face of unemployment and starvation among its members, capitalists are not forced by the same pressure of necessity to revise their standard of life if the profitable field for investment is narrowed. During prosperous periods when the gross produce of industry is expanding, wage-earners, if strongly organised, are probably in a good position for raising their wages, both in the aggregate and relatively to their own effort and to the share which goes to property-owners; and the extent to which they can do this depends mainly on their bargaining strength. But at less prosperous times, when the gross produce of industry is stationary, the power of trade unions, however strongly organised, seems in practice to be much more limited. While they may raise the price of labour, and even raise

wages relatively as a share of the total produce, their efforts to do so are likely to result in a shrinkage of the demand for labour, so that their power to increase aggregate earnings (other than by increased intensity of work), under these circumstances and short of more sweeping institutional change in the wage-system itself, is probably fairly small.

CHAPTER VI

WAGE DIFFERENCES

§ 1. *Differences between Grades.* Hitherto we have been dealing with the size of total wages in the community and with the *general* level of wages on the average ; and we have ignored the quite wide differences which are found, both in wages per hour and per piece, between different grades of workers, different districts and industries inside the same country, as well as between different nations of the world. Many important problems are connected with this question of particular wages and their differences, and it is important to extend our enquiries to this matter as well.

We have seen in Chapter I that if everyone, including the poorest wage-earners, in actual fact (as well as nominally) had an equal choice of taking to any occupation he pleased, the character of the economic system would be fundamentally different from what it is. Let us imagine, however, that inside the category of wage-occupations—leaving other means of livelihood on one side—this equality of choice was realised, and that everyone had an approximately equal chance of adopting any employment that he pleased. Under these conditions one would not expect wage-rates everywhere to be identical : they would differ for several clear and

definite reasons. But one would expect them to differ in such a way, and only by so much as would leave what Adam Smith called "the advantages and disadvantages" of various occupations equal. This *Principle of Equal Net Advantages* would tend to be realised as a result of the movement of labour from one occupation to another, as the level of water in two cisterns tends to equality if they are connected by a sufficiently adequate pipe. If one trade seemed on balance to be preferable to another after all the advantages, including the wages to be earned, had been measured against its disadvantages, workers would then tend to move into the one and to shun the other, until the shifting of supply by altering the relative wage-levels had equalised the net advantages of the two trades. Wages would then tend to differ only to the extent of differences in disagreeableness or cost of various occupations. To quote Adam Smith's own words: "The whole of the advantages and disadvantages of the different employments of labour and stock must, in the same neighbourhood, be either perfectly equal, or continually tending to equality. If in the same neighbourhood there was any employment evidently either more or less advantageous than the rest, so many people would crowd into it in the one case, and so many would desert it in the other, that its advantages would soon return to the level of other employments."¹

As a first instance, one would expect people to shun the more disagreeable or the more dangerous occupations like sewage-work or coal-mining unless the wages in those trades were sufficiently higher than elsewhere to

¹ *Wealth of Nations*, Ed. 1826, p. 99.

offset this extra disagreeableness or danger. The result of this common dislike for cleaning sewers or hewing coal would be to make applicants for employment in those trades more scarce than elsewhere ; and this very scarcity would tend to raise the wages in sewers and mines. Similar considerations would apply to an occupation which involved a greater chance of unemployment or wide uncertainty of earnings. On the other hand, if certain trades were particularly pleasant or interesting, or carried with them some special social distinction or prestige, or special privileges or chances of advancement, one would expect popular preference to flood these trades with applicants for employment and cause labour there to be cheaper than elsewhere.

Secondly, people are likely to shun those employments which require a costly education or training or a long period of probation or apprenticeship during which nothing is earned ; and this would tend to raise wages in these employments until they were higher than elsewhere. The expenditure on the preliminary training would then be in the nature of a capital outlay which would only be undertaken if the higher wage to be gained in the future sufficed to make the outlay worth while.

Finally, one might expect employments which required some scarce natural aptitude, such as those of jockeys or opera singers or steeplejacks, to offer an abnormally high wage because of the keen competition to secure the services of the limited number of persons suitable to fulfil them. But in this case the favoured persons would not be merely receiving something which compensated some extra disadvantage in their employment : they would be in a privileged position in which the total

advantages of their occupation (in Adam Smith's phrase) were greater than elsewhere ; and they could be considered as receiving an exceptional type of " scarcity-price " or " rent " of a scarce natural quality.

In the actual-wage-system under which we live " equality of net advantages " is very far from being realised ; and the extent to which wages vary more widely than the advantages and disadvantages of different occupations is considerably greater than can be reasonably explained by the final cause that we have mentioned. Most of the unpleasant work of the community is among the lowest rather than the most highly paid, as is much of the work involving danger to health and life. Low wages are frequently combined with fluctuating and inconstant employment ; and the level of incomes in skilled occupations and trained professions is generally higher by considerably more than can be called a reasonable interest on the capital laid out in the preliminary training. Clearly some further explanation of wage-differences is required.

§ 2. "*Non-Competing Groups.*" This further explanation is supplied as soon as we remove the assumption which we have made that every wage-earner has an equal chance of entering any occupation. Actually this is not the case. Those who already possess a fair income and some saved resources will be able to undertake the cost of training and apprenticeship for their children to enter a skilled occupation, whereas the unskilled labourer who can with difficulty feed his family will be unable to do the same. Hence, any difference of income, once for any reason established,

will tend to perpetuate itself, rather than to disappear. A moderately well-to-do unskilled worker's family usually tries to apprentice the eldest son to a skilled trade. But it can rarely do more than this; and once this effort has been made, the younger sons usually have to take whatever work yields immediate earnings as soon as they leave school.¹ Hence, the supply of new skilled labour is fairly rigidly limited by the means at the disposal of unskilled workers' families; so that one may possibly witness the surprising result of a narrowed gap between skilled and unskilled wages actually increasing the supply of skilled labour, owing to the improved position of families in the lower grades, and, on the other hand, of a widened gap reducing the supply. In the so-called "middle-class professions" this factor will be particularly marked: here the potential supply of lawyers or doctors or university dons will be almost entirely confined (apart from scholarships and acts of charity) to children of parents above the income-level which makes possible a somewhat costly public school and university career. The supply available for these professions will, accordingly, be particularly limited, and the level of income by reason of this will be raised. On the other hand, no further resource or equipment than a modicum of physical strength is required to work as a dockerman or a navvyman; and the supply available for such employments is likely to be plentiful and cheap. Professor Taussig has distinguished five distinct grades in each of which movement from a lower into a higher grade is hampered by a variety of circumstances. The higher grades

¹ Cf. R. L. Lewis, *The Children of the Unskilled*, pp. 15-16.

constitute what he terms (following Cairnes) "non-competing groups"—that is, groups in which supply is particularly limited because of the restricted entry of persons from outside. And since the supply of persons available for these groups of occupations is limited, the price which their services can command tends to be raised. The grades which he distinguishes are: first, unskilled workers like general labourers; second, semi-skilled workers; third, skilled craftsmen, such as mechanics, fitters, locomotive-drivers, bricklayers; fourth, clerical workers; fifth, the various "middle-class professions." The privileged position of this latter grade is, indeed, sufficiently great to remove it from the class of wage-earners as we defined it in Chapter I, and to place it in a category apart.

The privileged income which a particular grade can enjoy will be further increased if artificial restrictions are imposed on newcomers entering a trade, either by law or custom or the regulations of some association, since these restrictions will further limit the number of persons able to compete with the members of this trade for employment. It was the practice of mediæval guilds, at least in their later days, to limit competition among themselves by imposing entrance qualifications on their members; and some of the more powerful of them eventually became highly exclusive, levying entrance fees which amounted to several hundred pounds. In the last century some trade unions among skilled craftsmen (see Chapter VII) limited entrance to their trade; and limitation in the form of fairly strict apprenticeship regulations still exists. Bar fees, the customs connected with a solicitor's "articles," the price

of a share in a broker's business exercise a similar influence; while some professions virtually confine their selection to those who hail from a certain number of select public schools, and others demand at least a certain standard of social deportment and speech.

§ 3. *Differences between Industries and Districts.*

Obstacles to movement may exist, not only horizontally (so to speak) between grades of labour, but vertically between different industries or between different localities; and this will tend to cause what some economists have termed "unfairness" of wages as between localities and industries—"unfair" in the purely relative sense that labour is paid less (or more) in one place than labour of equivalent skill and efficiency elsewhere. These obstacles may take the form of ignorance as to the existence of jobs in another town or industry, of the lack of means to move both home and family to a distant place, or of unwillingness for various reasons to leave a familiar trade, coupled with an optimism that "something will sooner or later turn up." It is often said that the housing shortage of recent years has seriously reduced the mobility of labour from place to place, because a worker who has a house or rooms is loth to forsake them for the prospect of homelessness elsewhere. At the same time it has been said that the clause in the Unemployment Insurance Act which virtually allowed a man to refuse the offer of employment in another trade¹ (though not to refuse it in his own trade) without being disqualified for unemployment benefit lessens the

¹ The effect of this clause has, however, been altered by a recent amending Act.

mobility of labour from one trade and industry to another. Where movement is sluggish for any of these reasons, labour may be relatively abundant in some towns or trades at the same time as it is quite scarce in others; and this may cause wages to fall in the former and to rise in the latter, until the gap between the two is sufficiently great to encourage at any rate some movement of workers between the two. It may further happen that, when there is little movement of workers between two trades or places, the "supply-price" at which workers are willing to offer their labour may differ quite widely, so that there is a greater degree of exploitation where labour, either by custom or because of poverty, places a high valuation on money-income in terms of what it is willing to do and to forego in return. The relative lowness of wages in agriculture, for instance, has usually been attributed in large part to the tardiness with which villagers move off to improve their fortunes in the towns.

To the extent that these obstacles to movement are geographical in character differences in wages for the same class of work will tend to arise between different districts of the same industry—for instance, different coalfields, or agriculture in the north and the south—as much as between industries which are localised apart. To the extent that the obstacles are occupational in character differences in wages may arise between different trades even in the same town, as those between the "sheltered" and "unsheltered" trades of which mention was made in Chapter II. At the present time there seems very little tendency for labour to move from the misery of South Wales mining valleys to compete for employment among better-paid builders or transport

workers in the South of England, and no very large tendency to move from shipbuilding into neighbouring trades which are better paid. In addition to the reasons that have been already mentioned, this may be largely due to the fact that to-day when wages are fixed by trade union agreement there is less chance of workers undercutting those already employed by offering themselves at a cheaper rate; while it is also probably true that workers are more likely to be induced to move by the offer of new openings and rising wages in expanding trades than they are by the harsh pressure of falling wages and unemployment in their old accustomed trade and place of birth—in other words, mobility of labour is probably greater on a rising than on a falling labour market.

§ 4. "*Casual*" *Employment*. Such immobility of labour is likely to be enhanced by anything which encourages the hope that "something will turn up" in the old trade, when actually there is no longer sufficient work available there to afford constant employment to the same number of workers as before. And this hope that "something will turn up" which keeps men hanging about the fringe of the trade instead of moving off in search of better prospects elsewhere will be materially affected by the methods of engagement which the employers use. If an employer staffs his factory with a regular number of "hands" whom he employs fairly constantly from week to week and only changes for specific reasons, the worker who is dismissed will know that for the time being at any rate there is "nothing doing." But if the employer is in the habit of

changing his staff, or a part of it, frequently—taking on temporary workers at particular seasons, employing workers for a specific job, discharging them and hiring a new set of hands for the next job—then the situation is different. The discharged worker will feel that there are opportunities of being re-engaged, at least for a temporary-period, in the near future. Those who hang on the fringe of the trade will have some chance of getting employment some of the time, even if they have little or no chance of getting employment in that trade all of the time. The extreme case of the “casual method” of employment, as it is called, is found in such work as unloading cargoes at the docks, where dockers are taken on, not for regular employment, but for the loading and unloading of a particular cargo and then discharged. This tends to encourage a considerable “reserve of labour” to hang about the industry, much in excess of the number which can secure regular employment on the average. However many men are at the dockgates, each has equal chance with another of securing employment; and consequently a larger number tend to gather there than are likely to be taken on at one time even on the busiest day. In such trades not only may the average earnings of a worker be unduly low because of the inconstancy of his employment, but the keen competition for work may depress wage-rates as well. Moreover, any attempts to raise these rates, while casual methods of employment remain, may merely attract a larger reserve of labour to the industry, so that average earnings are reduced rather than raised.

§ 5. *The “Sweated Trades.”* The problem of what is

known as the "sweated trades" is a special case of wages being "unfairly" low. A "sweated trade" was defined originally by a Select Committee of the House of Lords as being characterised by "inadequate wages, inordinately long hours and insanitary conditions of labour." In many cases these so-called "sweated trades" consist of hand-work done in the home or in small workshops, such as paper box-making, hand-made lace, some chain-making and laundry work and cheap tailoring, of which a good deal was heard before the war. Often it was only the possibility of acquiring supplies of cheap labour which apparently kept these trades and their existing methods alive: otherwise the work would presumably have been done by machine methods in more up-to-date factories. Like parasites, accordingly, these trades tended to fasten onto those areas where supplies of cheap labour were obtainable. In the majority of cases this cheap labour was women's labour, driven by the death or illness or unemployment of the male breadwinner to earn some supplement to the family earnings. If the workers in question had been sufficiently well-informed, or less urgently in need of immediate earnings, and had been able to move in search of alternative employment elsewhere, they would not have accepted these exceptionally low rates. Often it was the case, therefore, that if an attempt had been made to forbid the payment of these "sweated" rates, the trades could hardly have survived in competition with better-equipped machine industry—cheap labour acted as a subsidy to their inefficiency; and in this case the workers concerned would have suffered complete loss of earnings in unemployment. Solution, to be

complete, has to achieve the transfer of the surplus labour elsewhere. The whole problem is merely a particular illustration of the tendency of poverty to breed poverty which was referred to in the last chapter. It is often the poverty of male wage-earners which compels the women members of the family to go out and seek employment, and so enables the "sweated trades" to thrive on the supply of cheap labour thereby created; and once the price of labour falls substantially, its supply-price is likely to be reduced, so that worse terms of employment are readily accepted in the future.

§ 6. *Men's and Women's Wages.* To a large extent the problem of "sweated" labour is only an extreme case of the general problem of male and female labour and their respective wages—although, of course, there may be, and is, "sweating" among men as well as among women workers. If men and women could never be substituted for one another on the same job, male and female labour would constitute a pure case of "non-competing groups," in Cairnes' sense that transfer from one group to the other was not possible. It might happen, of course, that a woman cook pretended to be a Paris *chef* or a man disguised himself as a nursemaid or a governess; but such habits do not seem to be very frequent. One would then expect the price of labour in the two groups to differ if conditions of supply and demand in one group were different from those in the other. On the side of demand there is the fact that there may be fewer remunerative jobs for which women are as fully suited as are men. In some cases women will be definitely superior, as in certain operations of cotton-

spinning or in-teaching small children ; while for heavy muscular operations like coal hewing and iron moulding women will clearly be unsuited. It is sometimes said that, because women are more liable to illness or only to apply themselves temporarily to an employment, they may be less useful to an employer for this reason alone. Added to this is the probable effect of custom in excluding women from some occupations.

The average difference, however, between the level of men's and women's wages is in most countries nearly as much as 50 per cent—a difference which seems considerably greater than is probably attributable to factors on the demand side alone. The following table¹ shows the position in various countries.

	Nature of Statistics	Date	Ratio of Women's to Men's Wage (Men's Wage = 100).
Australia	Weekly rates	Sept. 30, 1925	53
Denmark	Hourly earnings	4th. qr., 1925	58
France	Daily rates	Oct. 1924	52 ✓
Britain	Trade Board hourly minima	Jan. 1, 1926	56
Sweden	Hourly earnings	1924	61 ✓
U.S.A.	Weekly earnings	June 1925	59
New York	Weekly earnings	April 1926	56
Massachusetts	Weekly earnings	May 1926	57

In explaining the wideness of this difference the conditions of supply of female labour probably play a

¹ Cited from J. H. Richardson, *The Minimum Wage*, p. 136.

decisive part. If the supply-price of women's labour—the price for which they are willing to supply their work—is generally lower than that of men, this by itself would explain the lower rates paid in women's trades, and this in fact seems to be the case. It is true that an unmarried woman who goes out to work does so as a rule either to earn "pin-money" or to add something to the family earnings at home; and the fact that she has less urgent need to earn might be thought to make her unwilling to go out to work unless the inducement were fairly high—in other words, to raise the supply-price of their labour. In some cases the matter probably works in this way; and it might well be that if employers sought to extend their employment of unmarried women considerably, the price they would have to offer would have to be increased fairly fast. This, at any rate, would seem to apply to middle-class women—for instance, if the demand for women secretaries was considerably increased. At the same time the influence of the modern desire for independence among women operates in the other direction, as does also the effect of custom. Women have probably grown accustomed to think of themselves as unable to earn as much as men, and, having adjusted their valuations of work and income to this fact, they tend to be ready to work at a lower wage than would men—an important example of how the customary wage-level of yesterday influences the supply-price of labour and hence the wage-level of to-day. In practice this latter seems to be the preponderating effect. Of decisive influence, however, on the supply of women in the labour market is probably the number of married women who go out and seek employment because their

family is in straitened circumstances through the low earnings, unemployment, illness or death of the male breadwinner. These women, since they are driven to work only by the pressure of poverty, will be ready to work for almost anything they can get, and they will value low immediate earnings, even though spasmodic and temporary, more highly than future prospects that are better and surer—the supply-price of their labour will be low. And precisely because the supply of female labour of this kind tends to vary inversely with the earnings of male labour, the very factors which tend to depress men's wages will tend to augment the supply of female labour and to cheapen that supply still further.

Actually, however, male and female labour can be substituted for one another in certain cases; and to this extent the two do not constitute a pure case of "non-competing groups": although *persons* cannot change from one group to the other and so compete with the latter, the *demand for their several services* can be partially transferred. Hence, in so far as substitution is possible there will be a tendency for employers to substitute women for men in their factories if the former can be obtained more cheaply than the latter. This expanded demand for women and narrowed demand for men will tend to raise female wages and lower male wages, until the two are sufficiently equal for there to be no advantage to the employer in carrying the substitution further. This equality of wages, however, under these conditions would only be equality between men and women of equal efficiency and capabilities. Where a woman was less useful to an employer, the

latter might still prefer a male employee even at a slightly higher wage; and in so far as women employees tended to work less intensively than men and to do less in an hour, no competitive tendency would necessarily exist for *time-rates* to be equal. But it remains true that one would expect competition to establish approximate equality of *piece-rates* for men and women of equal capabilities and usefulness—in other words, to establish “fair” wages as between men and women.

But although such substitution of women for men and *vice versa* is possible in certain cases, its possibility is strictly limited; just in the same way as there is some possibility, but only a limited one, of transferring work from skilled to unskilled male hands. It has been estimated that only a fifth of the male workers are engaged in trades in which women are also employed to anything more than a negligible extent; while, as Mr. and Mrs. Webb have said, “even in the industries which employ both men and women we nearly always find the sexes sharply divided in different departments, working at different processes and performing different operations,” and “in the vast majority of cases these several departments, processes and operations are mutually complementary, and there is no question of sex rivalry.”¹ Custom probably plays a considerable part in making employers unwilling to teach a trade to women, and so in setting a barrier against the invasion of certain employments by women, even where, if tested, women might prove as suitable as men. Moreover, male trade unions in the past have usually made strenuous attempts to exact agreements with the employers

¹ *Industrial Democracy*, Ed. 1919, p. 496.

which have the effect of stemming the intrusion of women workers, or even of excluding them altogether, whenever there seemed any serious danger of male standards being undercut by cheaper female work. The very tendency of substitution to establish a competitive equality of wages therefore evokes resistances to stem its further operation.

§ 7. "*Equal Pay for Equal Work.*" It has frequently been urged that, in order both to do justice to women workers and to remove the danger to male workers of being undercut and supplanted by female competition, the principle of "Equal Pay for Equal Work"—in other words, equal piece-rates for workers of equal capabilities—should be adopted in all trades where men and women compete for employment. In cases where women were less useful to an employer than men this would, of course, tend to have the effect of closing the trade to women altogether, since an employer would not employ a woman at the same price in preference to the more useful man; and in so far as this occurred the tendency would be to lower the general level of female wages by confining the demand for women to a smaller number of trades. In many cases, however, where there was no marked disparity between the suitability of the two sexes for the trade, the adoption of the principle might have an opposite effect. By removing the fear of male trade unionists that they were subject to "unfair" competition it might induce them to relax or remove some of their restrictions on the entry of women, and thereby result in the admission of women to certain trades from which they were formerly excluded. Others

have argued that at least there is considerable room for the extension of trade union organisation among women, where it has hitherto been but weak or even non-existent, and the raising of the female wage-level by collective bargaining both in exclusively women's trades and also in trades where women compete with men. From the point of view of the male trade unionist such organisation of a weaker section of wage-earners cannot fail to be beneficial, both in so far as the two are competitors for employment, and because, if women members of the family are working at low wages, the supply-price of male labour tends to be undermined, as well as *vice versa*. How far this, or the establishment of the principle of "Equal Pay for Equal Work," is likely to increase the aggregate earnings of the working class all round depends on one's view of the issues discussed in Chapter V; since they both amount to a raising of the "supply-curve" for a particular section of wage-earners, namely women. If the higher female wage has the effect of improving working efficiency at all considerably, these measures of improvement will almost certainly increase earnings all round. But whether it does this or not, it will lessen the exploitableness of labour and will enable the working class as a whole to get more in proportion to the energy it expends.

§ 8. *International Wage-Differences.* When we come to enquire the reason of the wide differences of wages between different countries, such as those detailed in Chapter II, we shall find that similar considerations apply as in the case of wage-variations between different districts within the same country. In the first place it

is important to remember that money wages may differ considerably even while real wages remain the same. Money wages are frequently higher in large urban areas than in small country towns, as for instance in the case of printers, a large part of the difference being balanced by the different cost of living in the countryside and in the large town. The difficulty of comparing real wages between different countries and the possibility of errors in current estimates of them have already been referred to in Chapter II; but it is the level of real wages in different countries that for most purposes is the significant thing on which we need to fasten attention.¹ Secondly, it is necessary to compare both the real wages and also the relative skill and efficiency of labour in the two districts or countries concerned. Differences in wages between town and country or between one district and another—for instance, between the North of England and the South—may not be “unfair” in a relative sense, because they correspond to equivalent differences in efficiency and skill. Similarly, the cotton operative of Bombay or Shanghai works less skilfully and intensively than the cotton operative of Bolton or Oldham, and the difference in labour-cost to an employer

¹ For some purposes, of course, differences of money wages between two countries may be the relevant consideration. For instance, let us suppose that two countries have equal levels of real wages, but for some reason this co-exists with a difference in *money* wages between the two (i.e. in terms of gold at the prevailing rate of exchange); then the employers in the low-money-wage-country would be at a relative advantage and the employers in the high-money-wage-country at a relative disadvantage when production for export was concerned. This is said to have been an important consideration which influenced cotton manufacturers of a century ago to advocate the repeal of import duties on corn.

is considerably less than would appear from a mere comparison of the real wage. At the same time it may quite well be true that the low efficiency of the low-paid worker is an effect as much as a cause of his low standard of life: the Bombay operative is fitted as little by his diet and housing conditions as by custom and upbringing for highly intensive factory work. What is relevant at the moment is that a competitive system establishes no tendency in this case for real wages to be equal, and we have no reason to be surprised if they are not so.

International differences of real wages, however, probably exist on a considerably greater scale than differences of working skill and efficiency; and differences of this kind, between countries as inside a country, can only persist in so far as movement both of labour and the demand for it—in other words, of capital—is hindered, and the economic systems of different countries constitute "non-competing groups." In this respect labour is probably less mobile than is capital. A certain amount of immigration into high-wage countries takes place; and if the difference in wage-levels is sufficiently great, the flow may become quite large. Throughout the last hundred years there has been a steady stream of emigrants from Europe to U.S.A. Nevertheless such movement of labour is restrained and limited by various factors—by the poverty of the workers themselves, by difficulties of language and citizenship and custom, and by the natural inertia which persuades the average man to prefer the accustomed to the speculative and the unknown. Not very many Polish or French or German workers come to work in Lancashire because the promise of employment there is brighter; still less do Indians

and Chinese, save in specific cases such as seamen on British ships. And should immigration attain sufficient dimensions to undermine the standard of the higher-wage country, immigration restrictions on the entry of aliens, as in U.S.A., Australia and Britain, are likely to be imposed.

Just as inside a country, therefore, a particular grade of labour may possess a privileged position and constitute a sort of "aristocracy of labour," so the wage-earners of a country that is particularly rich in natural or acquired advantages, or more industrially advanced than its neighbours, may share some of the differential prosperity of their masters and constitute a kind of "aristocracy of labour" with regard to the rest of the world. And here custom and past tradition may play an important part. In countries where low wages have ruled custom will tend to cause the supply-price of labour to remain low, and hence to perpetuate an exceptionally low level of Relative Wages and of real wages; while in countries where labour at some time or other has been able to secure a larger share, either relative or absolute, of the produce, this very fact, by influencing both the supply-price of labour and the habits and valuations of the employing and investing class, may be the principal reason for the wage-level continuing to remain high.

In recent years, however, capital has shown an increasing tendency to move across national boundaries, particularly since the growth of modern imperialism has extended the political influence and control of the advanced industrial countries over the more backward countries of the earth. In some cases political policy

has definitely encouraged this movement of capital, as in the case of the listing of certain colonial securities under the British Trustee Acts. Just as the difference of wages between skilled and unskilled workers tends to be narrowed in so far as the latter can be substituted for the former in the same jobs, so this transferred demand for labour from the high-wage to the low-wage countries tends to undermine the privileged position of the "aristocracy of labour" in the more developed countries. If this movement of capital continued unhindered, it would eventually produce an equality of wages the world over for labour of similar efficiency and skill; and in so far as working efficiency itself is influenced by the standard of life, the movement of capital might tend to level-up many of the differences of efficiency as well. No such unlimited movement of capital, of course, exists. But sufficient movement has taken place in recent times to threaten quite seriously the higher wage standards of, at least, the more privileged sections of the working class in England and U.S.A. In U.S.A. one witnesses the much-talked-of "transfer of industry" to the Southern States where labour tends to be cheaper, which is paralleled by the tendency for European capital to flow into India, China and Japan, South America and Australasia, and to develop industry there which competes with the older-established industries of Europe. In the past the "aristocracy of labour" in Britain probably benefited from the lower standards of wage-earners and peasant producers in colonial countries, since it was able to benefit from the cheap food and raw materials which were thereby acquired. But in so far as to-day the lower-paid labour of colonial countries to

an increasing extent stands in competition with the labour of the older industrial nations, the wage-earners of Europe (if not also of U.S.A.) would probably be benefited by any extension of organisation or change of custom which raised the supply-price of their Asiatic brethren. How far such a change could at the same time benefit both sections of workers, European and Asiatic, by transferring to wage-earners part of the surplus produce which would otherwise accrue as income to the propertied classes of the world—that is a question which, like the similar problem with regard to male and female labour, will depend on the controversial issues which were discussed in Chapter V,

CHAPTER VII

TRADE UNIONISM AND WAGES

§ 1. *The Character of Trade Unions.* Trade unions are essentially the product of a wage-system in that they represent the obvious line of defence against the economic weakness in which propertyless wage-earners as unorganised individuals tend to find themselves. Some persons, indeed, have claimed to find in these organisations an historical connection with the mediæval guilds of craftsmen; while others have asserted at least a formal similarity between the two. Neither of these views seems entirely justified. It is now generally agreed that in so far as trade unions have any recognisable parentage, they must be connected with the associations of journeymen, or day labourers, which appeared spasmodically in the fifteenth and sixteenth centuries whenever germs of a distinctively wage-earning class were found, rather than with craft or mercantile guilds. The latter were essentially associations of master-craftsmen, often themselves employers of others, producing and selling certain commodities, many of them in later times coming to be associations exclusively of traders, which in many ways resemble the sales associations of the present day. A trade union, on the other hand, is an organisation of a class of persons in a peculiar social and economic

position, concerned in bargaining over the sale of labour and the conditions of employment; and since the wage-earning class has peculiarities which distinguish it sharply from other sections of society, while the sale of labour in the labour market has certain special features, which have been discussed in previous chapters, confusion rather than clarity seems the likely result of identifying a trade union with an "ordinary sales association.")

§ 2. *The Beginnings of Trade Unionism.* "The early trade unions which came with the rise of factory industry at the beginning of the nineteenth century were local trade clubs and societies, often quite small in number, and composed of select groups of skilled craftsmen and artisans who prided themselves on being a privileged "aristocracy" within the ranks of the working class.) Many of them used the customs and ritual of the old secret societies, and an elaborate initiation ceremony was common. We find bodies like the Phoenix Society of Painters in London expecting its members to attend meetings in frock-coats and top-hats. The Manchester Order of Bricklayers excluded "any member found fighting" and maintained rules against "wrestling, leaping, racing, football, acts of bravado, drunkenness or immoral conduct," while another society excluded any "drunkard, swearer or sabbath-breaker."¹ Banned as illegal conspiracies by the law until 1824, when the Combination Acts were repealed, and refused any recognition by employers, their methods were more often direct action than negotiation; and while the masters

¹ R. W. Postgate, *The Builders' History*, pp. 18 and 32.

called in the police and military, the strikers on their side often resorted to sabotage and violence. During the 1830's there were ambitious attempts to link up these local trade clubs by federation into larger national organisations, of which the Federation of Cotton Spinners, the Builders' Union and Robert Owen's grandiose scheme of the single Grand National Consolidated Trade Union were the chief. But so long as the basis of organisation remained local and sectional, with the personnel of each local union possessed of no wider horizon than that of its own town and dominated primarily by specific group interests, wider federations were almost bound to lack cohesion. And it was not until a group of far-looking trade union leaders, who were competent administrators as well as autocrats when need arose, succeeded in building strong national unions with centralised finances in the '50's and '60's out of the heterogeneous local trade clubs, that the main lines of modern trade union organisation were laid.

§ 3. *The "Old Unionism."* These new national "amalgamated" unions, of which the Amalgamated Society of Engineers, formed in 1851, was the model, while they were national in scope, remained like the old trade clubs essentially organisations of the superior skilled craftsmen which did not admit or cater for the lower unskilled grades. Cautious and conservative in outlook, and in general rejecting the strike weapon in favour of the establishment of joint negotiating boards with the employers and of conciliation and arbitration, they aimed to secure for themselves a privileged position in the labour market by making their labour scarce.

Their methods were virtually the monopolist measures of the old guilds, designed to make their craft more securely into a "non-competing group" and so to sell their services at a higher price. This "fundamental principle" of their policy was clearly enunciated by one union, the Flint Glassmakers, in an address of the Executive in 1857: "It is simply a question of supply and demand, and we all know that if we supply a greater quantity of an article than what is actually demanded the cheapening of that article, whether it be labour or any other commodity, is the natural result." "You keep your own wages good," said the retiring Secretary in a farewell address in 1854, "by the simple act of clearing the surplus labour out of the market."¹ Many of the old local trade clubs had used methods of this kind; which the new amalgamated unions now took over and used on a national scale. The Dublin Coopers and the Cork Stonemasons had the custom until quite recently of levying a tax of 1s. a week on all "outsiders" coming to seek employment from another town. Half of this amount went into a special fund for the purpose of paying the return fare for "outsiders" and sending them out of the town as soon as trade slackened and any danger of unemployment appeared. The national craft unions pursued the same sectional objects principally by careful regulations concerning apprenticeship, which had the effect of limiting entry to the trade, and by exacting agreements from employers which provided for careful demarcation of the work, both between one craft and another (as between plumbers and fitters or joiners and patternmakers) and between craftsmen and

¹ Cit. Webb, *History of Trade Unionism*, Ed. 1920, p. 201.

less skilled men, thereby "earmarking" demand for members of the particular union and preventing the transfer of demand for their services to other workers. Originally the limitation of apprentices had been sanctioned by law under the old Statute of Apprentices. But this situation was terminated in 1814; and the early craft unions were merely continuing a custom which had formerly been enforced by law. The Stonemasons limited—and still limit—the number to one apprentice for every 5 or 6 men working, and exacted an apprenticeship period of 5 to 7 years. The Flint Glassmakers allowed one for every six workmen; the Lithographic Printers one for every five with a maximum of six in any firm; while some of the Sheffield cutlery trades limited apprenticeship to sons of existing craftsmen. Among compositors the rules still vary from town to town; but it is quite common for a rigid maximum to be placed on the number of apprentices that can be taken by any one firm. In addition, the craft unions often attempted to restrict the working of overtime; they strengthened the economic position of their members by building large reserves in the shape of Friendly Benefit funds for use in case of sickness, accident, unemployment, or old age; while in several cases they maintained an emigration fund, as was done by the Flint Glassmakers, the Compositors, the Bookbinders, the Ironmoulders and the Engineers, in order to ship surplus members of the craft overseas.

These methods of what later came to be known as the Old Unionism mark the nearest approach of trade unions in character to the old guild or the modern sales association or cartel. But with the growing invasion of

the factory by machine-methods, for ever narrowing the domain of the old handicraftsman, the power of craft unions to maintain their privileged position gradually waned. The demand for special skill contracted, as this skill was required over a narrowing field. The training required to mind a machine, however complicated, was less than was formerly needed to equip a millwright or a lithographic printer; and to-day the skilled worker is more generally a mere responsible operator of a complex machine-process than an artisan who has learned to fashion material with his hands. The old stringent apprenticeship rules, as a result, had to be relaxed or abandoned, or else they were automatically circumvented by "progression (or promotion) within the trade." Printing establishments in towns where apprenticeship limitations are severe often fill vacancies by drawing compositors from country firms where the apprenticeship regulations do not apply or are not enforced; while in a modern engineering shop there exists a gradation of different machines from the simplest, operated by the least experienced semi-skilled hand, up to the more complex operations requiring skill and experience. Between any of these processes it is very hard to draw a frontier-line to distinguish where skilled work begins and semi-skilled operations end; and in practice unskilled workers by passing from one process to the other can gradually acquire the necessary skill for the higher processes without a formal apprenticeship, and are in fact to an increasing extent promoted in this way. Consequently, the guild-like practices of the Old Unionism are now largely obsolete. They still survive in a few trades—the boilermakers,

the Sheffield cutlery trades, sections of the building trades are instances. But in trades like engineering and printing the passage of events is rendering them less and less important; while in a large number of trades, such as textiles and mining and transport, they do not exist.

§ 4. *The "New Unionism."* In the last twenty years of the nineteenth century a new wave of trade union organisation, known as the "New Unionism," appeared. Twenty years previously a speaker at a conference of the Working Men's International had suggested that the growth of craft unions might create a "fifth estate"—the outcast unskilled workers—beneath the "fourth estate" of the organised skilled artisans. This had to some extent occurred, and might have occurred still more noticeably had not the process of the machine sapped much of the economic foundation for a privileged estate of skilled craftsmen. At any rate, it was precisely to this so-called "fifth estate" that the New Unionism appealed—to the masses of low-paid "unshorn chins and fustian jackets" who had been left outside the gates of the Old Unionism; and the growth of a number of new "general labour" unions at this period, such as the Dockers' Union, the Workers' Union, the Gasworkers', the Seamen's Union and the National Union of General and Municipal Workers, represented the first comprehensive attempt of the unskilled workers to organise themselves. From the nature of the case these new unions could not employ the privileged methods of their skilled superiors—apprenticeship and demarcation rules were out of the question where apprenticeship did not exist and crafts were not defined; nor, being poor, could

they place much reliance on the reserve strength afforded by large friendly benefit funds. The only method which remained for them was to strengthen their own ability to secure an improved price for their labour by substituting a collective bargain on behalf of the whole group of workers in place of the individual bargain of each separate worker with an employer. By bargaining collectively through a trade union they could establish a "standard rate" to arrest the tendency of individual workers to undercut one another by bidding for employment and so cumulatively to lower the supply-price at which labour was offered over the whole trade. As long as some workers stood outside the union and were not included in the collective bargain, the "standard rate" only applied over part of the trade, and the possibility still remained of the standard being undercut by the competition of other workers who offered their labour at a lower rate. It accordingly became the dominating aim of the new unions to make their organisation as all-embracing as possible; their ideal being to prevent the employment of non-union labour altogether; whereas the employer on his side had a natural interest in reserving the freedom of what in America is called the "open shop" to substitute non-union for union labour if he desired.

At the outset the old craft unions were inclined to look with contempt, if not with actual hostility, on these new unions among the lower grades. Particularly did they frown in the dignity of ripe age upon the "hot-headed" methods of the younger generation. But as the new unions grew in strength and influence, while on the other hand industrial development rendered the

privilege-methods of the Old Unionism increasingly obsolete, the craft unions were even inclined to look to the younger unions for alliance and support. Where unskilled workers to an increasing extent could encroach on skilled workers' jobs, as in the engineering trades, the power of the craft union on its own to exact terms from an employer was considerably weakened. On the other hand, a strike of unskilled workers could often be easily broken by the employers if the skilled craftsmen (for instance, engine-drivers on the railways) stood apart and continued at work. A certain sense of interdependence accordingly developed between the two sections; and this prepared the soil for a movement towards Industrial Unionism, or the linking up of all workers in one industry, irrespective of craft or grade, into a single organisation, which filled the stage of trade union discussion in the six or eight years before the war. The arguments in favour of such reorganisation had special force, since in England trade unionism, like Topsy, had "just growed," and the unplanned growth had resulted in a multiplicity of sectional, overlapping and often rival unions—over 1000 in all. The need for larger units of organisation, to increase the effectiveness of collective bargaining, was sufficiently felt to bear fruit in a number of amalgamations and federations of separate unions. Many of the separate craft unions merged together, as in the engineering trades, where the Amalgamated Engineering Union was eventually formed out of the old Amalgamated Society of Engineers along with several other craft unions. Unskilled workers' unions which overlapped were joined or federated, as in the case of the Transport Workers' Federation.

Generally, however, the attempt to link up both skilled and unskilled workers in a single industrial union met with too strong resistance from the skilled crafts, who feared to lose their privileges if merged in a larger unit. The signal success of the apostles of industrial unionism was the National Union of Railwaymen, formed in 1913 to include all grades in the railway service; but even here two craft unions, the Amalgamated Society of Locomotive Engineers and Firemen and the Railway Clerks' Association, remained outside.

§ 5. *Trade Unions and the State.* Collective Bargaining inevitably implied the use of the strike weapon as a last resort if the bargainers failed to come to terms. Just as an individual bargain is not free if one of the parties has not the right to refuse to close on the other's terms, so a collective bargain can have no meaning unless the parties have full right to refuse to close the bargain if they are not satisfied; and this means on the employers' side the right to refuse to employ the workers on the latter's terms, and on the workers' side to refuse to work on the masters' terms—in other words, to declare a strike. In the event of such a collective refusal to agree, the master will desire to obtain either non-unionists, or deserters from the union, or workers from another town or trade who will accept employment on his terms. If he can do this, he can "break the strike": if he cannot, his hope of victory will be confined to a trial of endurance with the union, until the latter's funds are exhausted and starvation forces it to "come to heel." The strikers on their side will rely for success, not only on the power to hold out and keep

themselves from starvation, but also on the ability to prevent the masters from staffing their factories with "blacklegs" (as is the opprobrious term). To do this by dissuading non-unionists from entering the factories is the purpose of "picketing"—posting union "pickets" at all entrances to places of work—which plays such a prominent part in every strike. Such "persuasion" may take a variety of forms, from a polite suggestion to a "blackleg" that he should "stand by his mates" to the besieging of a man's house and the use of personal violence. Legislation in 1871 and 1876 had expressly permitted "peaceful picketing" so long as no threats, either in word or gesture, were used¹; and it had also removed the illegality which had previously attached to strikes as conspiracies "in restraint of trade." But in 1901 an important legal judgment, known as the Taff Vale case, laid trade unions open to the danger of being sued as corporately responsible for any acts committed by its members during a strike—if a striker broke a window the national union could be held responsible—and also of being sued for damages on account of losses incurred by employers as the result of a strike. This situation caused the new unions and even some of the older craft unions to join in forming the Labour Representation Committee (later to become the Labour Party), and to run independent candidates for Parliament, in order to secure legal sanction for the right of

¹ The 1927 Act has attempted to narrow the definition of "peaceful picketing" by forbidding expressly the "watching and besetting" of a man's house, the attendance of pickets in such numbers or in such a manner as to "intimidate" anyone; "intimidation" being defined as causing "apprehension of boycott, or exposure to hatred, ridicule or contempt."

collective bargaining and the strike. This their pressure was successful in doing; and in 1906 the Liberal Government passed the Trades Disputes Act by which the Taff Vale judgment was explicitly reversed.

Once having entered politics to secure legal recognition for their activities, it was natural that the trade unions should seek to use political action directly in furtherance of their aims. This led to the policy of securing State interference in the labour market in order to set a "standard rate" by law and thereby raise the supply-price of labour, particularly among the most poorly paid. In other words, it resulted in the policy of the legal minimum wage.

§ 6. *Reformist v. Revolutionary Trade Unionism.* Having passed from bargaining on detailed wage-rates to furthering a general political policy, the New Unionism, whether conscious of it or not, had come to adopt a definite social philosophy. This social philosophy has come to be known in England as State Socialism: in continental socialist circles it is termed Reformism. It involved the acceptance (at any rate for the time being) of the main characteristics and institutions of the wage-system, with the co-existence of a propertied and a propertyless class which the system implied; but at the same time it involved the attempt to extend State interference in the labour market, both to give legal status to trade unions as recognised institutions of a wage-system, and to raise the standard of life of wage-earners by minimum wage legislation and allied means. In certain cases it implied also the control or supersession of the private employer by the State.

This view, however, of the correct goal of trade union policy met an important alternative opinion in working-class circles. The alternative was not of very great importance in this country before the war, when economic conditions favoured easy improvement in the working-class standard of life; but it has come to be of considerable importance since the war, particularly on the continent of Europe. This latter policy, which is usually termed Revolutionary Trade Unionism, regards it as the function of the trade unions to act as spearheads of a revolt against the wage-system itself, until the working class is sufficiently powerful to challenge the rule of the propertied class and to transfer the control of industry to the workers' own political and economic organisations. This view does not deny the desirability of trade unions struggling by collective bargaining for reforms in the workers' standard of life; but it denies that such attempts should be confined to what is "practicable" or "reasonable" within the wage-system. Every such struggle for reform, it is argued, necessarily comes up against the limits imposed by the rights and desires and standards of consumption of the propertied class: the "practicality" of a wage-advance is relative to what is conventionally accepted as the reasonable standard for the investing class. Hence every claim for advance in Relative Wages is likely to challenge the continuance of these accepted rights and standards, and if pressed by the trade unions these claims are likely to meet increasingly severe resistance all along the line, until the revolutionary issue is finally raised of the very continuance of a propertied class. In several unions in this country the issue between these two views

of trade union policy is beginning to be acute, and an organised opposition, in the shape of the National Minority Movement, is beginning to form. In some countries the advocates of Revolutionary Unionism have formed their own separate, and in some cases rival, unions; but in the majority of cases, where Revolutionary Trade Unionism has been linked politically with the Communist movement, they have worked to permeate the existing unions, to win them over for the new policy and to supplant the former Reformist leadership. This contest inside the unions between the two policies tends to be conducted with increasing bitterness, and in many cases actual splits and expulsions of the opposition elements from the unions have occurred; while in some cases, where the revolutionary policy has secured a majority, the old leaders have seceded to form rival Reformist unions on their own.

§ 7. *Workers' Control.* The issue between the divergent views of trade union policy becomes particularly clear when the question of workers' participation in control of industry is raised. In recent years the matter of admitting wage-earners to some participation in the control of industry has been increasingly discussed both among employers and employed. The crudest form has been the proposals advanced by some employers for what in America are termed "company unions"—associations of workpeople belonging to a particular firm—as a means of attaching workers more securely to a particular master, of weakening the hold of trade unionism and substituting individual bargains in place of collective wage-agreements. Sometimes schemes of co-partner-

ship and profit-sharing, such as were described in Chapter III, are introduced, with or without conditions which weaken the attachment of the employees who participate in the scheme to a trade union. In a number of cases the employers, while fully recognising trade unions and continuing to negotiate with them, have encouraged the formation of elected works committees as a means of increasing loyalty to the firm, of assuaging industrial unrest and increasing the worker's willingness to work and his efficiency. These works committees, elected by the employees in the factory, sometimes are merely instruments for ventilating grievances to the management; sometimes they have definite advisory functions of passing their opinion on changes and innovations, such as the appointment of foremen, the introduction of new processes, alteration in the shift system; sometimes they are given a degree of control over specific things such as welfare work, sanitation, or minor matters of timekeeping and discipline. In this country the institution of such councils in each factory was recommended by the Whitley Committee set up by the Government during the war; and up to 1920 about 1000 were created on the initiative of employers, many of which have since, however, gone out of existence. In Germany works councils are compulsory by law, and are given certain defined legal powers of a minor order. In the majority of cases the trade unions put forward their own candidates for election to the councils and frequently dominate them; but in certain cases the employers have used the works council "to drive breaches into the principle of collective bargaining."¹

¹ C. W. Guilleband, *The Works Council*, p. 62.

In America the movement has also spread considerably since the war, being linked on the one hand with schemes for factory "welfare work" and on the other hand with the campaign in certain industries for the "company union" and the "open shop."

The trade unions on their side have advanced claims for some participation in control as a logical development of normal collective bargaining. When a wage-agreement has been made between the employers and a trade union, there frequently remain detailed matters of interpretation in applying the terms of an agreement to the particular case. This will involve such matters as weighing and measuring, which were discussed in Chapter III, the question of hours and overtime, and in the case of skilled workers matters of apprenticeship rules and demarcation of work. When work is on piece-rates difficulties of interpretation are particularly numerous since there is always the question of the category in a "price-list" into which a particular job falls, while the most comprehensive "price-list" can hardly cater for every variation of jobs and certainly not for such new types of work and new processes as may arise. It is natural that a trade union, pursuing the aim of collective bargaining, should not be content merely with laying down the general terms of an agreement, but should desire to have some say in the manner of its application to detail. Moreover, the sale of labour has this peculiarity. Unlike other commodities, the seller of labour does not cease to have an interest in what he sells as soon as the act of sale is completed: he has a vital concern in the way in which his labour is used after it has been sold. A wage that might be considered

good under normal circumstances may be "low" if the place and manner of employment involve danger to health and life. In some trades working conditions in the factory are already dealt with in collective agreements between employers and trade unions. In textile weaving clauses are to be found which provide that workers shall not be required to work where there is an undue volume of steam; and in the potteries that ovenmen shall not be required to work in a temperature higher than 120 degrees. The demand for a voice in the control of working conditions in the factory, as well as over interpretation of piece-work scales, demarcation of work, hours of work and overtime, naturally develops as collective bargaining becomes more complete; and as trade unions grow stronger they tend to advance claims to have a say in wider matters which affect the workers' interest—on business policy so far as it affects unemployment, on methods of engagement and discharge (e.g. the casual labour problem), even on the general organisation of the industry in so far as it affects the ability of the trade to pay good wages.

§ 8. *The Machinery of Collective Bargaining.* The actual machinery of collective bargaining itself, as it develops, tends to merge by degrees into machinery which may be described as a form of joint control over industrial policy. At its most elementary and undeveloped stage collective bargaining takes the form of negotiations between an individual employer and a deputation of his workpeople, without any recognition by the former of the right of a trade union to speak on behalf of his men. The next stage may be where a trade

union has secured sufficient recognition for periodic meetings to take place between the officials of the union and either individual employers or the officials of an employers' association. Such negotiations here take place as a rule only when disputed points arise, and only by the consent of the employers at the moment. A further stage is reached when the two parties agree to summon a joint meeting of the two sides at the request of either. Here again meetings only take place when a dispute has actually arisen; but the parties virtually bind themselves to meet and negotiate before taking any action. Finally, collective bargaining in its most developed form is found when regular machinery is set up in the form of a joint committee of the two sides or a conciliation board composed of representatives of the employers and the trade unions, which holds meetings at regular intervals to discuss current business, and possesses a definite constitution and rules of procedure. As recently as immediately before the war in this country important groups of employers, including railway companies, refused to recognise the right of trade unions to bargain for their employees; and over a large sphere of American industry to-day collective bargaining has not advanced beyond the most elementary first stage. But in the principal industries in Britain to-day regular machinery exists such as in the fourth stage that we have described, and protracted negotiations take place to arrive at a settlement before the dispute reaches the acute stage of a strike or an employers' lock-out. In some cases the machinery is purely local in character, in others national, covering the whole country; in many cases both district and national

machinery exists; and trade unions generally favour national negotiation and national agreements, since these give the greatest possibility of establishing a standard rate over the whole industry. In some cases special provision is made for referring the dispute to an impartial arbitrator, if the two sides cannot agree by conciliation. The arbitrator then gives his judgment on the merits of the case, which the parties are free to accept or reject as they choose.

§ 9. *Conciliation and Arbitration.* In Britain the Government has confined itself to encouraging the voluntary institution of conciliation machinery of this kind. The Conciliation Act of 1896 provided that agreements arrived at by such conciliation boards might be registered, if the parties agreed, and have the force of a civil contract; and it further empowered the Board of Trade to appoint an arbitrator to give a decision on a dispute on the application of both parties. The Industrial Courts Act of 1919 extended these provisions, instituting a formal Arbitration Court to which disputes might be voluntarily referred, and empowering the Minister of Labour to set up a Court of Enquiry at his discretion to investigate and to publish the facts of any dispute. The Whitley Committee proposed that every industry where organised bodies of employers and workers existed should institute a permanent standing Joint Industrial Council, representing employers and employed, and having regular meetings to discuss current business. There was to be no compulsion in the institution of these: the Ministry of Labour was to "encourage" their formation and to give them every facility, but

that was all; and in the years after the war such Whitley Councils, as they have come to be called, have been instituted in a large number of industries. It was the original intention of the framers of the Report that, starting as mere conciliation boards (such as already existed in the larger industries), they should gradually extend their discussions to wider matters concerning their industry, and so become virtually Parliaments of industry, exercising powers of joint control. In practice they have developed little further than conciliation boards which meet regularly and not merely when a dispute has already arisen. Having no powers to deal with matters which the employers do not choose to refer to them, and able only to achieve anything by agreement between the two sides and not by a majority decision, they have been confined almost entirely to discussing agreements over wages and hours.¹ A significant proposal has recently been made, however, by the Whitley Council in the Boot and Shoe Trade and adopted by the Trade Union Congress, that the Government should give legal sanction to an agreement arrived at by a Whitley Council at the latter's request. This, if carried into force, would mean that a decision of a Whitley Council could be made legally binding on a minority of workers in an industry who desired to strike against it, or on a minority of employers who did not wish to operate it. In some other countries, however, as in Australia and New Zealand, the State has adopted compulsory powers with regard to conciliation and arbitration, compulsorily instituting conciliation

¹ Notable exceptions are the boot and shoe and the printing trades.

machinery, in some cases making a strike or lock-out illegal until the matter has been referred to a State-appointed arbitrator, in other cases even making the acceptance of the arbitrator's award binding on the two parties.

The Reformist trade unions have usually shown acute hostility to any form of joint control with the employers, such as copartnership or profit-sharing, which they considered to have the intention or the effect of weakening the influence of trade unionism and undermining collective bargaining. Similarly, they have been opposed to compulsory arbitration, on the ground that this virtually takes away the freedom of collective bargaining by removing the right to the ultimate resort of the strike : while the employer is always free to close his works or reduce the number he employs if the wage-level is too high for his liking, the trade union is deprived of the right to withdraw labour from the factory if it considers the wage to be too low. As a general policy, however, they have not been opposed to schemes of joint discussion or control, such as Whitley Councils and works committees, so long as these schemes explicitly recognised the right of the trade union to bargain collectively on behalf of the men. Revolutionary Trade Unionism, on the other hand, while recognising the obvious need for negotiations with employers over collective agreements, is usually opposed to all schemes of joint control with the existing employing class, on the ground that these imply an acceptance of the limits of the wage-system, or at any rate involve a necessarily weakened power to use the trade unions in the future as a means of attacking the wage-system and supplanting

the existing employing class in control. To admit the need for parleys with the enemy, as any General may, is fundamentally different, they contend, to accepting the rôle of joint partners in administration: the very psychological difference involved in the latter case weakens the power of militant opposition. Such partnership, it is argued, can only be a very junior one, so long as the existing wage-system continues, and is hardly likely to be offered by employers except in return for, or in hope of, some *quid pro quo*, implying a restraint on the trade union's freedom of action, or a limitation of its action to what is "reasonable" on the basis of the existing rights and standards of the employing class. Just as an employer may seek to "tame" a works council in his own interest, so the employing class, it is alleged, may seek by offers of control to "tame" the trade unions themselves. At the present time, when much is heard concerning Industrial Peace agreements on a national scale, this issue is becoming particularly acute; and on the outcome of the struggle between these two opposing views of trade union policy the whole future history of the British trade union movement seems likely to turn.

CHAPTER VIII

THE MINIMUM WAGE

§ 1. *State Intervention.* The "standard rate" which a trade union attempts to establish by collective bargaining is in effect a minimum wage. But it is subject to the consent of the employers to the terms of the proposed bargain; it applies only to those firms that are voluntary parties to the agreement; and even if registered, as the Conciliation Act of 1896 enables it to be, the agreement has only the force of a civil contract to bind it, affording a possibility to the trade unions, if they care to go to the trouble and expense, of suing employers for arrears of wages where the agreed rate is not paid. When, however, the aid of the State is summoned to institute a *legal* minimum wage, this minimum can be enforced compulsorily over the whole or a particular part of the trade, and it then becomes a criminal offence, punishable in law, for an employer to pay less than this legal rate.

The machinery and method of minimum wage enforcement is varied. First, different minima may be fixed for different industries by *ad hoc* boards appointed to deal with each industry alone. Secondly, a national commission may fix the minima for various industries, using its discretion as to how far to vary the minima in the differing cases. Thirdly, an actual figure may be

laid down in an Act of Parliament as a minimum to apply over the whole country. In the first case the minima of different industries may vary quite widely, being fixed on different principles and according to the differing conditions of industries; and as a result the criterion of relative "fairness" in the wage-level, as it was defined in Chapter VI, may not be observed. In the second case the different minima are likely to approximate much more closely, and to show greater co-ordination. But, on the other hand, the single national body may be less cognisant of the precise conditions in a particular industry than a board specially appointed to deal with that trade. A figure laid down in an Act of Parliament—to take the third case—is likely to be insufficiently flexible and adaptable: it may be at the same time sufficiently high in some industries where low-grade labour is employed to cause unemployment, and sufficiently low relatively to existing standards in other industries as to have no significance there as a minimum. The first of these methods is that adopted in England under the Trade Board system, and in the Wages Boards which are found in certain Australian States, most notably in Victoria and Tasmania. The second system is found in certain parts of Canada and U.S.A., and in New South Wales, Queensland, West and South Australia and New Zealand. The most notable case of the third method is the Minimum Wage Act of New South Wales in 1908, which prohibited the employment of any person at less than 4s. a day. Similar clauses are to be found in the legislation of Queensland, Victoria, and South Australia, New Zealand and a few States of U.S.A.

§ 2. *The Trade Board System.* The first legislation of this kind in England, the Trade Boards Act of 1908, was intended specifically to deal with the problem of the "sweated trades." It was, therefore, designed, not so much to raise the general level of wages all round, as to raise the supply-price of labour in cases where it was abnormally low, and to adjust wage-rates in these trades on a principle of "fairness" relatively to what was customarily paid for the same type of work elsewhere. The Act applied by name to four trades—tailoring, paper-box making, machine-made lace and chain-making—and empowered the Board of Trade to institute such machinery (subject to Parliamentary confirmation) where, and only where, it was "satisfied that the rate of wages prevailing in any branch of the trade is exceptionally low as compared with that in other employments." The characteristic feature of these Boards was that, while (unlike the subsequent Whitley Councils) they were compulsorily constituted, they had mainly a representative character, being predominantly composed of persons chosen as representatives of employers and employed in the industry. The major element of the Board was, therefore, persons who intimately knew the nature of the trade with which they were dealing; and to this extent it was a case of the industry legislating for itself. To represent the standpoint of the State, however, a certain number of "appointed members"—usually economists or prominent social workers, or occasionally lawyers—were added to the Board; and in practice these had considerable influence as a deciding voice between the two sides. It was the duty of the Board to fix a rate which it considered reasonable as a minimum. If it chose, it

could appoint sub-Boards for particular districts or sections of the trade, with the duty of making recommendations to the National Board, but without the power of making decisions on their own; and the National Board had the option either of fixing a single minimum for the whole trade, or, on the advice of its sub-Boards, of causing the minimum to vary to suit the different conditions of different districts. The rate or rates on which it decided, subject to confirmation by the Board of Trade, then became the legal minimum for that industry, enforceable in criminal law. By 1913 four other trades had been added to the original four; and by 1918 thirteen Boards were in existence, covering nine trades and half a million workers. The only other instances of minimum wage legislation in England (apart from the special case of the munition trades during the war) were in agriculture and coal mining. Under the Coal Mines Minimum Wage Act of 1912, which followed the coal strike of that year, district boards in the principal coalfields, composed of employers and workmen with an independent chairman, were empowered to fix minimum rates below which a piece-worker's earnings should not fall. In 1917 the Corn Production Act established a national minimum of 25s. for agriculture. This war-time arrangement was terminated in 1920; and since 1924 minima have been fixed by District Wages Boards, composed of representatives of farmers and agricultural workers, with the addition of "appointed members" nominated by the Ministry of Agriculture. In both of these cases, therefore, the fixing of rates is in the hands of *district*, and not national, bodies.

During the war the Whitley Committee recommended

that the functions of Trade Boards should be widened, and that from dealing specifically with sweated trades they should be extended as a substitute for collective bargaining to all unorganised trades where no adequate machinery for collective bargaining existed. This intention was embodied in an amended Trades Board Act of 1918, which gave power to the Minister of Labour to extend the Act (without specific sanction of Parliament) to any trade where in his opinion "no adequate machinery exists for the effective regulation of wages throughout the trade." The result was a considerable extension of Trade Boards, until by 1921 they had been instituted in a further 28 trades, and covered some million and a half workpeople, of whom nearly three-quarters were women. This represented the high-water-mark of minimum wage action. The rapid extension of the system aroused keen complaints from employers as soon as trade depression and a falling price-level appeared in 1921, particular objection being lodged against the habit of many Boards, not only of fixing minima for the lowest-paid workers in each trade, but of fixing separate minima for the better-grade workers as well. Bowing to these complaints, the Government instituted a Committee of Inquiry under Viscount Cave; and this Committee reported in 1922 in favour of a certain curtailment of the functions of the Boards. The criterion of relative "unfairness" in the wage-rate, which the 1909 Act had adopted, was championed in preference to that of "no adequate machinery" in the 1918 Act as the general principle for establishing Boards; it was suggested that minima for workers other than the lower grades should be enforceable only

by civil action, and not under the criminal law; and greater facilities for district boards within an industry, fixing different district rates, was advocated. No new legislation has at present been introduced to embody the recommendations of the Cave Committee; but it has influenced the action of the executive sufficiently to call a halt to any extension of the Trade Board system since 1921.

§ 3. *Minimum Wage Problems.* One of the main problems which have faced the Trade Boards has been the fixing of minimum rates for workers on piece-rates and the question of allowing abnormally slow or inefficient workers to be employed below the minimum. To fix a minimum for piece-workers is particularly complicated, owing to the difficulty of defining the "piece"; and to legislate for every possible type of job, and in such a way as to avoid evasion, is almost impossible. The only alternative is to adopt the device of fixing an amount per hour as the least that a worker on piece-work must receive. But what of the particularly "slow" worker who does not normally earn as much as this minimum in an hour? If the employer is forced to pay him this, the worker will probably "get the sack." The 1909 Act provided that an employer should be considered as having observed the law if the piece-rate in force yielded the minimum earnings per hour to the "ordinary worker." But how is the "ordinary worker" to be defined? Here again an arbitrary device has had to be adopted. The assumption is made that a certain proportion of the workers are "ordinary"—Mr. Cadbury has said 95 per cent; the Tailoring Trade

Board ventured the more cautious estimate of 80 per cent. The remainder are assumed to be abnormally "slow workers"; and the law is regarded as being observed if the prevailing piece-rates yield the stated minimum earnings per hour to all but this 20 per cent (or whatever the percentage chosen). There then arises the further question as to whether this minimum for piece-workers should not be set at a higher level than for workers employed on time-rates, seeing that the former usually work at greater intensity and produce on an average a quarter or a third as much again as workers employed on time; and since the 1918 Act certain Trade Boards have taken the option afforded to them of fixing a separate and higher basic minimum rate per hour for piece-workers. To deal with "slow workers" employed on time-rates, it is usually the custom of Trade Boards to issue special "permits" to employers to pay in these cases below the minimum hourly rates. It is also customary to issue "learners' certificates" to enable young persons who are learning the trade to be paid a special wage. If the Board is too free in the issue of these permits, possibility is provided of evading the legal minimum; while if it is too strict, a number of workers less efficient than the normal, by reason of age or illness or accident, may be discharged from employment. Similarly with the special rates and the "learners' certificates" for young persons who are learning the trade: if these rates are fixed too low, the employer, attracted by their cheapness, will tend to take on a large number of young workers and then discharge them later when these have to be paid at adult rates; if the rates are fixed too high, the employer will not find

it worth while to teach persons the trade, and young workers will be unable to enter the trade.

A second problem is concerned with the question of varying the minimum between districts or sections of the industry; and much controversy has raged on this point. In some cases the cost of living may differ from one district to another, so that equal *real* wages will only pertain if *money* wages differ by an equivalent amount. Again, if labour in different districts is of different quality, the criterion of "fairness" is satisfied if the lower-grade labour in one district is paid at less than the higher-grade labour elsewhere. In such cases a certain variation of the minimum rates between districts may be desirable: otherwise, if the rate is fixed with reference to the high-grade district, it may rob the lower quality workers in the other district of employment; while if it is fixed at a level which is adequate to the latter district, it may be too low to give any adequate protection to the workers in the former. Similar considerations apply to the fixing of different rates for different grades of workers generally. But where no such differences of quality exist, there is no case for allowing firms in a district to pay lower rates than elsewhere simply on the ground that they "cannot afford" to pay higher—the frequent complaint, for instance, of small dressmaking establishments in the country or of small shopkeepers or of out-of-date collieries. To discriminate in favour of these would simply be to subsidise the inefficient employer and to encourage labour and capital to stay in districts and employments where it was less productive than it might be elsewhere. The only question here is the possibility of moving the surplus labour

from the less efficient districts or sections of the trade which cannot stand the imposition of the national minimum, and finding it alternative employment. Only if such movement of labour presents considerable difficulty is there a serious case for allowing a lower district minimum to be enforced. In general Trade Boards seem to have favoured the fixing of national minima for the whole trade—too much, indeed, for the liking of the Cave Committee—and have generally allowed district variation only where special circumstances seemed clearly to demand it.

More difficult than problems of fixing minimum rates has so far been the difficulty of enforcing them. It is a principle which is now fairly well established by experience that a law left for enforcement to the workers' own initiative is almost invariably a dead-letter. The workpeople are probably ignorant of the terms of the law in the first place; even if they realise that they are being illegally cheated, they are probably too timid of losing their employment to take action; while even if this is not so, the workers have seldom the means or the legal experience to engage in prolonged litigation. Where strong trade unions exist, these may make it their business to investigate non-observance of the law and to start legal proceedings; but the industries covered by Trade Boards are precisely those where trade union organisation does not exist or covers only part of the trade. The responsibility for enforcing the Trade Board rates, therefore, falls on the inspectorate which is maintained by the Ministry of Labour for this purpose. Actually this inspectorate is quite inadequate for the huge task which faces it: in 1924 it sufficed

to visit no more than 3 per cent of the enterprises concerned, at which rate a firm would only be inspected on the average once every thirty years. Even so, it is often difficult for an inspector to detect evasion of the law in the case of workers on piece-rates. As a result there appears to be fairly widespread failure to observe the minima: in the years 1923 and 1924, for instance, the inspectors detected breaches of the law in some 30 per cent of the firms which they visited.¹

§ 4. *State Arbitration.* In some countries the State has taken measures to fix, not only a *minimum* rate of wages binding on employers, but also a *maximum* which precludes the trade unions from using their bargaining strength to secure a higher wage. In its simpler form this has consisted in making a collective agreement binding on the parties to it, not merely as a civil contract, but in the sense that it becomes a legal offence to refuse to observe the agreement. This may be done either at the discretion of the Government or only in cases where the parties agree to register it and so to endow it with legal force. As a further stage in compulsory action, a collective agreement may be made what is called the "common rule"—that is, made binding over the whole trade, whether party to the original agreement or not. This may also be done either at the discretion of the State (as happens in Queensland), or only at the request of the parties who have signed the original agreement, as would be the effect of the proposal of the Whitley Council for the Boot and Shoe

¹ *Report of the Ministry of Labour for the years 1923 and 1924*, Cmd. 2481, pp. 182-3, 258-67.

Trade in this country, referred to in the last chapter. In a more developed form we find the system as part of a general system of compulsory arbitration, where a Board of Arbitration or an Industrial Court (as in New South Wales, Queensland, New Zealand and South Australia) gives a decision as to what it considers to be a reasonable wage in the trade, and this becomes legally binding on employers and employed alike. Sometimes the arbitration court gives its award only when a dispute has arisen, and the award is applicable only to the parties to the dispute. In other cases the award can be made on the initiative of the court at any time, and can be made the "common rule" for the whole trade. When State interference has reached this stage, the freedom of collective bargaining disappears, and instead the State assumes responsibility for regulating the level of wages. But while the State forbids the workers collectively to refuse to work at the wage-rate which it lays down, and forbids employers to challenge the legal rate by a general lock-out (if that can ever be clearly defined), it cannot, short of much more sweeping measures, prevent employers from reducing the employment that they offer if they consider the legal rate too high.

§ 5. *The Limits of Remedial Action.* What power has such interference, either by trade unions or by the State, to increase wages, relatively and absolutely? And if it has some power to do so, within what limits can this power be exercised? That the establishment of a minimum wage can increase the rate of pay per unit of work done is clear; and to this extent it can increase

Relative Wages by causing more of what is produced to accrue to wage-earners and so to leave proportionately less surplus produce available for the propertied class. But it does not follow that *total earnings*, either per worker or in the aggregate for all wage-earners, can be increased thereby. If the higher wage brings an equivalent increase in working efficiency, the employer will still find it profitable to employ as many units of labour as before even at the higher wage; and earnings will be increased in roughly the same ratio as wage-rates have been raised. If there is any element of buyers' monopoly in the employers' purchase of labour (see above, p. 100), and the employer is getting his labour at a price below what the marginal unit he buys is worth to him, there is room for wage-earners to "squeeze" profits up to a point without necessarily reacting unfavourably on their own employment. Even here, however, it is possible to argue that, if profits are reduced, less capital is likely to be accumulated and invested, and there will be a smaller demand for labour than there otherwise would have been in the future. But where these conditions do not apply, the power to raise the price of labour without causing the amount of labour purchased by employers to shrink in *greater proportion* will depend simply on how *elastic* is the employers' demand-curve. To the extent that this demand for labour is elastic—that it stretches or contracts considerably for a given change in price—a raising of the rate of wages must result in *diminished aggregate earnings*, either in the shape of diminished opportunities of earnings for each worker or in the shape of a diminished number of workers employed. And, if the wage-earning population

remains also undiminished, this must mean a smaller average income per head.

In certain cases this latter condition may not be fulfilled, and the demand for labour may be fairly *inelastic*. This will apply to labour for which machinery cannot be easily substituted. It will tend to apply where labour-cost is only a small fraction of the total cost of production, so that a rise in the former is of insufficient importance to affect the total scale of production. It will tend to apply where the labour is employed in making a commodity for which the demand is *inelastic*—perhaps a necessity, or a luxury for the very rich who do not mind how much they are made to pay. In these cases the wage-rate can be raised without causing an equivalent contraction in employment, and aggregate earnings can be raised as well. Moreover, from a short-run point of view the demand for labour will generally tend to be *inelastic*, since the employer will have plant and machinery which he is loth to leave idle, and perhaps perishable stocks of raw material and balances of money-capital which may as well be used. Only after a year or two, when time has elapsed for the supply of new investments and the replacement of old plant and machinery to be appreciably affected, will the higher labour-cost cause any considerable shrinkage in the employment of labour.

This was often the strength of the old craft unions using the methods of the Old Unionism. In so far as their labour could not be easily replaced by machinery or by rival groups of workers, the consequent inelasticity of demand for their services made it easy for them to increase the aggregate earnings of the group as a whole ;

and in so far as they managed to restrict their own numbers, they had an additional means of securing an increased income per head for their members. But as their exclusive position tended to break down, and the demand for their services became more elastic as these became more easily replaceable, the power of the older craft unions to maintain a privileged wage-level was weakened. In so far as they still succeeded in maintaining a privileged level, it was increasingly at the expense of other sections of workers, since what they gained by excluding workers from their ranks lower grades of workers probably lost by the increased competition of the excluded workers in the unskilled market. For the mass of unskilled and semi-skilled labour, however, for whose services machinery could fairly easily be substituted, the employers' demand was considerably more elastic; and the power of the New Unionism to secure an increase in aggregate earnings by raising the supply-price of labour was much more narrowly limited, unless it was accompanied by increased intensity of work.

We noticed in Chapter V that what could be postulated as the result of small changes in the wage-level could not necessarily be postulated as surely for more considerable changes. Whereas the conception of an equilibrium in the labour market may be valid for small displacements from that position, in the sense that any such movement will tend to evoke forces which restore the original equilibrium, the conception is not necessarily valid for larger displacements, since these may be considerable enough to react on the general underlying conditions of supply and demand, and so to establish an

entirely new equilibrium. It is as if a violent push to a pendulum succeeded in dislodging the clock itself to a new position in the room, whereas a gentler blow would leave unchanged the position of the clock and the position whither the pendulum would ultimately come to rest. Hence, when we are considering sectional action to raise wages in a particular trade, or only minor increases in the general wage-level, economic theory can make fairly definite predictions concerning the effect of such action. It can show that, save from a short-run view, or in special cases where the demand for labour is inelastic, the power of trade union or legislative action to raise aggregate earnings is strictly limited, unless it is accompanied by a higher intensity or quality of work. But when changes in the wage-level, not of an isolated trade or section of workers, but of industry in general, and of a fairly considerable amount, are in question, such predictions cannot be made with any certainty. Here the change may be sufficiently considerable and general to alter the conditions of supply of capital by its effect on custom and habit and conventional standards, and so to shift the whole demand-curve for labour as well.

Where the product of industry is expanding rapidly, the chances of increasing wages, both relative and absolute, may, therefore, be very considerable; and if trade unions are strong enough or legislative action sufficiently resolute, it does not seem impossible that nearly the whole fruits of industrial progress might be made to accrue to the wage-earning class, and Relative Wages be raised to an almost indefinite extent so long as the progress continued. But where industrial

advance has slowed down or come to a standstill, the possibility of advancing working-class earnings seems much more circumscribed, and the predictions of orthodox economic theory to be more nearly true; since in this case an attempt to press forward the general wage-level at the expense of capitalist standards of consumption would meet a much fiercer resistance—so fierce, perhaps, as to present the harsh alternative to wage-earners' organisations of breaking or being broken. Resistance to a sacrifice of accustomed rights and standards is always more resolute than to the disappointment of new acquisitions which were no more than dimly anticipated. Indeed, on the continuance or cessation of the industrial progress of the nineteenth century much in the future of working-class policies and of the wage-system itself appears to depend. If this progress continues, improvement of working-class standards inside the framework of the existing wage-system will be smiled upon, and the Reformist policy as the easier course is likely to win acceptance. But if this progress in the advanced industrial countries of Europe should cease or move at a much slackened *tempo*, Reformist dreams are likely to wither in contact with harsh, resistant facts, and the wage-earners' dislike of the constraints of the existing wage-system may kindle into a devouring flame.