

Alfred Marshall
"Theories and Facts about Wages"*
(1885)

Space for Notes



1. I have been asked to give an account of the doctrines as to wages held by the past and present generations of economists, with some statement of the actual facts of the case. It is difficult to treat such large questions in a short space; but I hope to be able to give the main outlines of them.

We hear a great deal about the supplanting of old-fashioned theories of wages by newer and truer doctrines. But in fact the change in the theory itself has not been very great. Although a good deal of new work has been added, and the old work has been developed, yet but very little has been destroyed. Almost everything that was ever said by the great economists of the first half of the century is true now if properly understood. Much of it will remain true for ever, or at all events till the glorious time comes when people are willing to work as hard from a sense of duty as now they work for pay. There has been a great change; but it has not been in the theory itself, it has been in understanding how it is to be applied, and how it is not to be applied.

At the beginning of the century, when the great economists, Malthus and Ricardo, wrote, the world was in a miserable condition, which, thank God, has passed away. The general principles which they laid down were almost all true; but their way of expressing them was coloured by the peculiar character of the facts among which they lived. It required a great mental effort to grasp the principles of their reasoning; and the effort was made by but few of their followers. But it was easy to take hold of isolated sentences and to repeat them without the conditions implied in the context. And this was done. Political Economy became fashionable. In Parliament and the counting house, in the pulpit and the press, the authority of Political Economy was invoked for all kinds of purposes; but before all and above all, for the purpose of keeping the working-man in his place. Nearly all the greatest economists have been earnest and fearless friends of the working classes; they have been impelled to the study of economics chiefly by a desire to see how far it was possible to diminish the evils of poverty. But Ricardo had very little sympathy one way or the other; and many of those who made themselves a reputation by the confidence with which they misunderstood parts of what he said, were partisans of capital. The reputation of Economic Science has suffered and is suffering for the misdoings of its camp followers.

2. At the beginning of the century the prices of things consumed by the labourer, taken one with another, were nearly double what they are now. And meanwhile the average money wages of manual labour have nearly doubled. There has not indeed been a very great rise in the wages of all occupations; the improvement is chiefly due to the fact that then there were very few skilled workers, while now there are comparatively few who are entirely unskilled. The average income for each man, woman, and child in the manual labour classes was about £12 then, and is not less than 42s now. These classes have now none too much of the necessaries, comforts, and luxuries of life; but then they had less than a third of what they have now. Starvation and disease ran riot in the land.

Some causes of this misery were seen clearly enough by everyone, without aid from the economists. The great war with France had cost about fifteen hundred million pounds; and that was probably a good deal more than the value of everything that was left in the country, except the land. The imperial taxes were 20 per cent of the

total income of the country; the mere interest on the debt was 10 percent of it. Next an unparalleled series of bad harvests had made wheat terribly dear; it was frequently over £6 a quarter, and once over £10.

But besides all this, the administrators of the Poor Law were raising up new evils by attempting to relieve suffering indiscriminately. What they really did was to discriminate against the industrious and in favour of the dissolute. Farmers sometimes had to turn away hard working men who had saved a little money, and make them live on that, in order to make room for drones forced on them by the parish. The industrious were so much worse provided for than those who went to the parish, that in time independent labourers almost ceased to exist. Wages were lowered all round and eked out by parish pay. He got on best who was the best adept at the arts of imposition. In the South, where the system was carried to the greatest lengths, the labourer has never recovered from the injury thus done to his character and wages. A hundred years ago wages were higher in the South than in the North of England; now they are half as much again in the North as in the South. In these and other ways the Poor Laws did evil. Mischief was done, not by the amount of relief given, but by its being given in the wrong way and to the wrong persons, so as to cause the survival of the worst in place of the best. Probably half of all the lives of extreme misery and want in the country are due to this cause.

The nation at large did not get to see this last cause of misery till 1834; but the economists saw it earlier. They looked at the history of England, and found that the working population had been well off when it had been increasing slowly in number, and badly off when it had been increasing fast. They studied the history of wages, and found that wages were once really high; it was just after the black death had destroyed a great part of the population. Again, they knew that from 1700 to 1760 population had been almost stationary, and their wages had steadily risen. But from 1760 onwards numbers had increased fast, and misery had increased faster. Trade, indeed, had grown, and there had been a marvellous series of mechanical inventions, but these had been able to do little to diminish the difficulty of getting food. The economists looked abroad, and they saw poverty wherever there was a dense population. If in any happy valley they found everyone well off, they found then, what we find now, a custom that only one son out of each family should marry. They found that in England before 1760 it was not very easy for a man to get a house for himself while he was quite young; he had generally to go on a good while living with other young men in his father's or employer's house before he could see his way to marry. But since then manufacturers had made so many new openings that it had become the habit for everyone to marry when he wanted to, and to trust to luck. And then later on the Poor Law officers made life pretty easy for the father of a large family, if he would only give up all attempts to help himself and cringe enough to them. Meanwhile, as bread grew dearer, cultivation was creeping up the hillsides. Wheat was grown on miserable land that would not give eight bushels an acre, though more labour had been spent on it than was wanted to raise twenty or thirty bushels on fairly good land.

3. The economists saw all this; and they thought rightly, that at that particular time there was no truth more important, none on which the philanthropist should insist with more earnestness, than what they called the law of Diminishing Return. This was:-The natural law of the fertility of the land is that, other things being equal, an increased application of capital and labour to land will not increase in like proportion the raw produce raised from it. They went on to apply this to the question of wages. If twenty men are employed on a farm and a twenty-first wants to be taken on, he will produce less than the others did, and therefore the farmer cannot afford to pay him so much; and he must therefore take a less quantity of corn as wages. (I say a less quantity of corn so as to avoid all trouble about changes

in the price of corn.) The next step will be for the farmer to lower everybody else's wages to his level. The next step will be for the landlord to say to the farmer, "you get your labour for lower wages (at all events when measured in corn), and so you can afford to pay me more rent; if you do not agree to pay it, I will find someone else who will". A rise of rents and a fall of wages is therefore, they argued, the necessary consequence of an excessive growth of population. He who truly loves the people will urge them not to marry early.

Now the first sentence of this reasoning has the clause "other things being equal", and the conclusions may be invalid if other things are not equal. The economists knew of this condition, but they did not pay much attention to it: and this is not so much because they were careless as because it had then no great practical importance. No one, however sagacious, would have anticipated the strange combination of causes which have since then lowered the price of corn all reasonable expectations were in the other direction. The new machinery was manufacturing things cheaply; but the working-man could not consume many of them himself, and if he wanted to send them abroad and to buy food with them, he had to pay enormous taxes for doing so. The economists were convinced of the advantages of free trade, but they had no hope that the landed interests which then ruled the country could be made to allow it. And even with free trade they did not expect to be able to buy large supplies of corn cheaply, for the wheat lands of America were then chiefly on the poor soil of the Atlantic border. The middle region of America was but little known, and seemed too far off for extensive trade; while the richest wheat land of all, that in the North-Western States and California, was less known than the centre of Africa is now. Since then England has adopted free trade, and railways and steamships have come into existence. So great has been the growth of knowledge, of mechanical invention, and of the aid which capital affords to labour, that the working-man can buy his bread from abroad at the cost of less labour than he could get it with even in 1760, before the rapid growth of population had set in. The old economists made wonderfully good use of their knowledge as far as it went; but we, knowing what they could not even guess, can see the way to improving the first part of their doctrine of wages. But before doing this let us look at the rest of it.

4. Great as was the poverty of the English people then, foreign countries were poorer still. In most of them population was sparse, and therefore food was cheap; but for all that they were underfed, and could not provide themselves with the sinews of war. France, after her first victories, helped herself along by the forced contributions of others. But the countries of Central Europe could not support their own armies without England's aid. Even America, with all her energy and national resources, was not rich; she could not have subsidised Continental armies. The economists looked for the explanation, and found it chiefly in England's accumulated capital, which, though small when judged by our present standard, was very much greater than that of any other country. Other nations were envious of England, and wanted to follow in her steps; but they were unable to do so, partly indeed for other reasons, but chiefly because they had not capital enough. Their annual income was required for immediate consumption. There was not in them a large class of people who had a good store of wealth set by, which they did not need to consume at once, and which they could devote to making machines and other things that would aid labour and enable it to produce a larger store of things for future consumption. A special tone was given to their arguments by the facts that capital was scarce everywhere, even in England; that the efficiency of labour was becoming more and more dependent on the machinery by which it was aided; and lastly, that some foolish followers of Rousseau were telling the working classes that they would be better off without any capital at all.

In consequence, the economists gave extreme prominence to the statements; first, that labour requires the support of capital, i.e. of good clothes, etc., that have been already produced; and secondly, that labour requires the aid of capital in the form of factories, stores of raw material, etc. Of course the workman might have supplied his own capital, but in fact he seldom had more than a little store of clothes and furniture, and perhaps a few simple tools of his own—he was dependent for everything else on the savings of others. The labourer received clothes ready to wear, bread ready to eat, or the money with which he could purchase them. The capitalist received a spinning of wool into yarn, a weaving of yarn into cloth, or a ploughing of land, and only in a few cases commodities ready for use, coats ready to be worn or bread ready to be eaten. There are, no doubt, important exceptions, but the ordinary bargain between employers and employed is that the latter receives things ready for immediate use and the former receives help towards making things that will be of use hereafter. These facts the economists expressed by saying that all labour requires the support of capital, whether owned by the labourer or by someone else; and that when anyone works for hire, his wages are, as a rule, advanced to him out of his employer's capital advanced, that is, without waiting till the things which he is engaged in making are ready for use. These simple statements have been a good deal criticised, but they have never been denied by anyone who has taken them in the sense in which they were meant.

The older economists, however, went on to say that the amount of wages was limited by the amount of capital; and this statement cannot be defended; at best it is but a slovenly way of talking. It has suggested to some people the notion that the total amount of wages that could be paid in a country in the course of, say, a year, was a fixed sum. If by the threat of a strike, or in any other way, one body of workmen got an increase of wages, they would be told that in consequence other bodies of workmen must lose an amount exactly equal in the aggregate to what they had gained. Those who have said this, have perhaps thought of agricultural produce, which has but one harvest in the year. If all the wheat raised at one harvest is sure to be eaten before the next, and if none can be imported, then it is true that if anyone's share of the wheat is increased, there will be just so much less for others to have. But this does not justify the statement that the amount of wages payable in a country is fixed by the capital in it, a doctrine which has been called "the vulgar form of the wages fund theory", and which was used for partisan purposes by shallow and dogmatic hangers-on of economic science. Unfortunately isolated sentences can be quoted even from the best of the older economists which seem to support this doctrine. The whole spirit of their reasoning was opposed to it, but those who thought any stick good enough to beat the trades unions with, seized eagerly on these carelessly-worded sentences.

5. Let us, then, look at the doctrine which the economists meant to express by this unfortunate phrase. They saw that if wages rise in one trade without any corresponding increase in efficiency of work, someone or other must lose what that trade gained. They classed all incomes as rent, profits, and wages. Of course, part of the loss might fall on rent; but the economists could prove that that was not very likely unless population diminished. And, therefore, it must fall on profits or wages, or both. If it fell on profits they argued that capital would shrink; there would be less accumulated wealth with which to pay wages to labour, and supply it with the requisite raw material, etc. Therefore there would be less effective demand for labour; and so, by one route or another, other workers would suffer for the extra gain got by the first group. The complete argument has a good deal more detail, and in whatever form it is expressed, it takes up a great many pages in every thorough economic treatise. But what has just been given is its backbone.

Now, when one looks at the argument one finds that there is really nothing in it

about a fixed wages fund. There is something in it about there being at any time a definite (not a fixed) wages and profits fund. A world of trouble would have been saved if they had used this phrase from the beginning. The French and German economists, though on the whole they had not done nearly so much good work as the English, have never given any countenance to the doctrine that there is a determinate wages fund.

The great difference between the views of wages taken by English economists in the past and the present generation is then this—they all regard wages as paid out of capital; but while the older economists talked as though wages were limited by the amount of capital that had been already put aside to pay wages with, the younger economists have, for the last ten or fifteen years, put the case in another way. They see that if the efficiency of industry were increased, and more things were produced, higher wages would be paid at once by drawing more rapidly on the stocks already in hand. It might be necessary to be a little careful about the stocks of some kinds of raw produce which could not be replenished very quickly. But with a few exceptions the increased supplies would come in so soon that the stores need never run low. Therefore, the younger economists do not speak of wages as limited by capital. But they say that every increase of capital raises wages, because it increases the productiveness of industry; it increases the competition of the capitalist for the aid of labour, and thus lowers the rate of interest and increases that part of the total produce which capital is compelled to resign to labour.

6. I will now put together the new version of the economic doctrines in my own words, and illustrate it by a reference to facts.

First, as to what determines the produce of capital and labour. With equal capital per head, equal individual efficiency, and equal knowledge of the arts of production, the amount of raw produce raised per head is greatest in a rich new country that is well settled but thinly peopled, and steadily diminishes with every increase in the population. But this abundance of raw produce is not of much use to them unless some of it can be sold at a high price to manufacturing countries. Unless this can be done, life in a thinly peopled country is very hard, because nothing except raw produce can be got easily. That is verified by history. The early colonists of America got freedom and plenty of plain food; but in almost every other respect they were worse off than the English agricultural labourer on 15s. a week is now. If trade with other places were impossible, the law of the total productiveness of industry, counting in raw and manufactured commodities together, would be generally a law of increasing and not of diminishing return. That is to say, an increase in population (accompanied by a corresponding increase of capital) would increase and not diminish the average material well-being—at all events, until the country had become crowded and raw produce had to be raised in very expensive ways. The railway and steamship have improved the condition of all countries, but most of all, those whose population is very thin and those whose population is very thick. As things are, the total necessities, comforts, and luxuries that can be got by given capital, labour, and intelligence, is perhaps greatest where the population is ten to the square mile, and diminishes very slowly with every increase in the population. But it must be admitted that the advantage that America and Australia have over the crowded countries of Western Europe is not quite so great as appears. Real as well as money wages are, no doubt, higher there than here; but the work that has to be done to earn them is harder. Even in America itself many of those who can and will work hardest go West, and wages are therefore much higher West than East; but if the Western men came East they would get more than average wages, and some of the Eastern men who go West find it difficult to get employment.

But of course every improvement in knowledge and in the arts of production, as well as every increase in the capital per head, increases the total production per head. So great has been the increase of prosperity in this country, while population has been growing rapidly, that if we could reduce raw and manufactured goods to a common standard of price, we should probably find the average real income of the manual labour classes now higher than was the average income of all, rich and poor together, a century ago.

7. Passing now from the amount of produce per head to the way in which it is distributed, we may first consider the landlord's share. The old economists, writing when the importation of corn on a large scale was out of the question, said that an increase of the population compelled poorer soils to be cultivated, and raised rents; and they expected a rapid and constant rise of rents in England. It has turned out otherwise. Imported food has been so cheap that agricultural rents have sometimes fallen fast. So that agricultural rent proper, i.e. what remains after deducting interest on capital sunk in the land, is now probably not more than it was early in the century. It was then a very important part of the total income of the country—perhaps a sixth part; while now it is certainly less than a twentieth part. But the increase of wealth and population has raised the value of land for purposes of residence, of railways, mining, etc. ; so that on the whole the owners of land have probably not lost by free trade.

8. After deducting rent from the total produce of industry, there remains what has just been called the Wages and Profits Fund. But profits are made up of two parts—interest, which goes to the owner of capital, and the earnings got by the employer of the capital. There is a growing tendency to class these earnings, which may be called the Earnings of Management, with other kinds of earnings; so I prefer to speak of this Fund as the Earnings and Interest Fund. Just to fix the ideas, I will give a rough estimate as to this. We may take agricultural rent proper and ground rents at about £75 millions. At least £50 millions more are got from foreign investments, which we do not want to count in here. The rest of the national income, that which constitutes the Earnings and Interest Fund for the labour and capital employed at home, is a little over £1000 millions. Nearly £250 millions are interest on capital, and nearly £800 millions are earnings of labour. This last sum we may again regard as divided up into about £500 millions for the wages of the working-classes, and nearly £300 millions for the earnings of all other classes, including employers. Of course we might go further, dividing up each of these two parts into the shares of many different grades or classes of labour. Each of these classes of labour has its work in production; we may call it a factor of production.

9. Well, then, the great law of distribution is, that the more useful one factor of production is, and the scarcer it is, the higher will be the rate at which its services are paid. For instance, if two skilled labourers, after allowing for the expense of the machinery they use, can do as much as five unskilled, they will get as much wages as the five unskilled can get should they stay in the trade. Again, supposing an employer can devise such economic arrangements of machinery, etc., as to make the labour of 500 labourers reach as far as ordinary employers would the labour of 600, then his earnings of management will exceed theirs by the wages of a hundred labourers. But he can go on doing this only so long as there are not many employers like him. If there are, they will compete with one another, lower the price of their goods, and distribute the benefit of their skill among the community at large. These illustrations explain the general principle, which we may now state a little more carefully.

The total Earnings and Interest Fund depends on the resources of nature and the efficiency of capital and labour acting on it. The larger this is, the more there will

be to be divided up, and the larger, other things being equal, will the share of each be. Thus, in a new and rich country interest can be high, and the earnings of all classes of labour, from the employer down to the lowest unskilled labourer, can be high. But, other things being equal, if any one factor of production increases relatively to the others, it will become in less and less request. If, for instance, capital increases much faster than labour, without there being many inventions to open up new fields for its employment, capital will go a-begging, and the rate of interest will fall. If the number of people who want to do clerk's work increases out of proportion to the population, their wages will fall. If the number of unskilled labourers increases relatively to others, they will find difficulty in getting employment; interest will rise at their expense, and the earnings of employers and of all other kinds of labour will rise at their expense. On the other hand, if the number of unskilled labourers were to diminish sufficiently, then those who did unskilled work would have to be paid good wages. If the total production was not increased, these extra wages would have to be paid out of the shares of capital, and of the higher kinds of labour; but even so, the great aim would have been attained of making the increase of wealth hurry up the diminution of want a little faster. But, if the diminution of unskilled labour is brought about by increasing the efficiency of labour, it will increase production, and there will be a larger fund to be divided up.

10. Now let us apply this general reasoning to the changes in the distribution of wealth in modern England. The leading influence in these changes is, that capital is growing at least twice as fast as population. Population is not quite doubling itself in fifty years, while capital is doubling itself in less than twenty-five. If it had not been for the new uses that are always being found for capital in different forms, it would have been impossible to employ so much with any great advantage.

It must have either migrated, or have competed for occupation until it had forced down its price to perhaps one per cent a year. Even as things are, it has had to submit to a continually decreasing rate of interest; and its loss has been labour's gain.

This change is partly disguised by the fact that when capital is largest its total share of the produce is largest too. For instance, if in California the capital which each workman makes use of is equal in value to his work for one year, while in Lancashire it is equal to his work for ten years, then, though the rate of interest is lower in Lancashire than in California, the fraction of the produce which goes to capital may be six or seven times as large in Lancashire as in California. This accounts for the apparent anomaly, that while the total produce per head is larger in Lancashire, the wages are higher in California. If Lancashire had only as much capital per head as California has, the total produce handed over to capital would of course be less; but that would be no gain to labour. For production could not be carried on efficiently, labour would have to pay a higher rate of interest for whatever capital it did use, and wages would be much lower than they are.

11. The profits of business include the earnings of management got by the employer, as well as the interest got by his capital. But in spite of exceptional cases to the contrary, earnings of management are falling, just as interest is; and for the same reasons. This is a special instance of a great fact that has been noticed in America and on the Continent (especially by M. Leroy Beaulieu) as well as in England. It is that the difference between the earnings in different grades of labour is steadily diminishing. A generation ago so few people got a good education, that for every pound spent on it there might fairly be expected a total return of from perhaps ten to a hundred pounds in after life. But the growth of intelligence has made people more willing to look far ahead; the standard of education has risen in

all the ranks of life. So that while the rate of interest on capital invested in material things is about a quarter less than it was, the interest on capital invested in education has perhaps fallen one-half. For each pound invested in education, there is perhaps not more than half as much returned in extra earning in after life as there used to be.

On the other hand, extraordinary natural abilities of every kind find a wider scope and secure higher earnings than ever. If we take as our standard the wages of unskilled labour, there is a steady fall in the earnings that an expensive start in life will secure to people of average ability, whether they be musicians, or painters, or medical men, or lawyers, or, lastly, business men. The fact is much more important, though it attracts much less attention than the fact that in all these occupations people with exceptional ability can make fortunes unheard of till now.

12. Exceptionally favoured men in business get command over vast capitals, and are thus able to do great things. But nearly all very rich men owe a good deal of their wealth to judicious and fortunate speculation. These gains are chiefly at the expense, not of the general public, but of less successful speculators. In old times fortunes were more even, and if a man failed, his story was long remembered in his neighbourhood; so a fairly true average of gains and losses could be struck. Now, those who fail are quickly lost to sight; their losses heap up the conspicuous gains of successful men. Partly for this reason, few people are aware how great a fall there has been in the real average earnings of men of business with a moderate capital and average ability.

Parallel changes are going on within the ranks of hired labour. Simple writing, simple machine turning, weaving, and similar occupations are sinking in the industrial scale. Almost any one with a sound body and mind, and with a little training, is fit for them. But they used to get high wages, because an insufficient number of people had had the training. Not long ago a clerk who did the simplest work got the wages of two or three agricultural labourers. Now he gets, in England, hardly more than the wages of one; in Australia less than the wages of one. But judgement, self-possession, promptness, and shrewdness, are qualities for which the demand is increasing faster than the supply, though that is increasing very fast. Wages are rising steadily in all occupations in which these qualities are wanted in a high degree; and they are rising most rapidly in occupations which require these together with great powers of physical endurance.

Whenever any new kind of skill is wanted, it is at first rare, and must be paid highly. But if it does not require exceptional natural abilities, there will soon be a good supply of it, and wages are likely to fall. This is, in nine cases out of ten, the explanation of any fall there has been in the wages of particular trades during the last fifty years. But meanwhile new trades are always breaking out that require higher abilities and get higher payment. And in spite of the fact that wages are falling in many trades, the average real wages of manual labour are rising rapidly. It must be remembered that 20s. a week now will buy as much as 25s. would twelve years ago. Thus there is a constant tendency for the lower ranks of industry to gain on the higher; so that a steadily increasing share of the benefits of progress is going to those who have the greatest need to be lifted up.

But to this rule there is one great exception. Those who have a poor physique and a weak character—those who are limp in body and mind—are falling, or if not, it is because they are already as low as they can go. They are found in greatest numbers wherever there is most wealth, but they are not the products of wealth, any more than thrushes are born of gooseberry trees. There are no feeble people in the Prairies. Some feeble people go there, but they either get back quickly to a large town, or else they die. Charity and sanitary regulations are keeping alive, in our

large towns, thousands of such persons, who would have died even fifty years ago. Meanwhile economic forces are pressing heavily on them, for they can do nothing but easy monotonous work, most of which can be done as well, or better, by machinery or by children. Public or private charity may palliate their misery, but the only remedy is to prevent such people from coming into existence. It must be remembered that the poorest of the poor are descended from all ranks of society; probably the upper ranks contribute more than their proportionate share to them. Crime and dissoluteness in one generation often engender disease, feebleness, dissoluteness, and crime for many generations to come. The long chains of evils that thus result cannot be cut short without the active aid of all classes; but if all classes help wisely but boldly, tenderly but firmly, they can, I believe, do it.

13. It would be out of place hereto discuss the institution of private property. Assuming, as I do, that it is to be kept up without fundamental change, I think I have shown that though there are still great evils, though there is still much needless misery, yet in the main, and on the whole, the changes at present at work are such as to be desired; only they are not going fast enough. Fast as is the increase in the supply in the higher grades of labour, and the diminution in that of the lower, we want them to be faster. An equal increase in all grades would lower earnings a little, but not much if capital grew fast. But an increase of population may go with a rapid rise of average wages, if the children of each grade are brought up with the intelligence, self-command, and vigour that now belong to the grade above them. Persons in any rank of life who are not in good physical and mental health have no moral right to have children. But in spite of popular Malthusianism, though not in opposition to Malthus' principles, we may affirm that those who bring up a large, healthy family with a thoroughly good physical, mental, and moral training relatively to their own rank of life, do a service to their country. If the children emigrate, they do a still greater service to the world. A good training is not complete if it only makes them efficient producers, it must also make them wise and temperate consumers and good citizens.

It is to be hoped that all these children will save a little capital of their own, and that some of them will rise from lower ranks to be employers of labour. Everyone who so passes upwards benefits labour in two ways—he diminishes the competition of labour for employment, and he increases the competition for labour on the part of employing and directing power.

If small men of business are being pushed out by big men, big men are being pushed out by joint-stock companies and other associations of little men. These are gradually making the great mass of the nation owners of its most important industries and employers of its ablest and most powerful business men. Among these associations the genuine co-operative societies have the noblest work. Besides his wages and interest on his capital, they are giving the workman high mental and moral aspirations; they afford him a real insight into the problems of business, and they help to diminish industrial strife. They are the best of all known means for enabling an increasing share of the income of the country to go into the hands of those who have the greatest need for it and can turn it to the best use.

* From Alfred Marshall, *Principles of Economics*, Ninth (variorum) edition, with annotations by C.W. Guillebaud, Volume II: Notes, London: Macmillan and Co. Ltd for the Royal Economic Society, 1961, pp. 598-614. Introductory editorial note on p. 598: "In 1885 Marshall read a paper to the Industrial Remuneration Conference, which was entitled "How far do remediable causes influence prejudicially (a) the continuity of employment, (b) the rates of wages? ". He attached to this paper four Appendices, of which the fourth (Appendix D), entitled "Theories and Facts about Wages," was originally written for and printed in the *Annual of the Wholesale Co-operative Society for 1885*, and was reprinted in the published *Proceedings of the Industrial Remuneration Conference (1885)*." [a. Reference to this article will be found on page 823 n. in vol. 1 of the present edition.]

