CHAPTER XVIII.

THE PROBLEM OF DISTRIBUTION.

186. In Book I we were concerned with the production of wealth, and with inquiries as to the possibility of increasing wealth; in Book II we investigated the causes which give value to what is produced, and we explained the methods by which those products are exchanged against each other by means of money and the various forms of credit; in Book III we shall discuss the question of the **distribution** of what has been produced among the persons who have had a share in its production. Until we had learned the principles of value which determine the total amount to be divided, it was not possible to discuss properly the respective sums which each party to the production should receive out of that total amount. This brings us to study the principles which govern the sums paid to the laborer, to the capitalist, and to the owner of land, and the respective shares of these persons will be treated under the head of **wages, interest, and rent.**

187. In the first place, we may pass by rent, or the **share of the landlord.** It will be later seen (in Chapter XXIV) that no error is committed by doing so. In regard to the total value of articles of ordinary manufacture, or of articles produced on land which pays no rent, the question of distribution is one solely between the laborer and the capitalist.

In case a manufacturer pays a rent for the use of land

on which his buildings stand, or for water-power, or other gifts of Nature, it can be regarded simply as an additional outlay of capital. The return to this outlay is a return to capital. The same may be said of **taxes and insurance.** Such payments to the Government, or to insurance companies, require more capital to be advanced by the employer, and a return is expected from this outlay, just as in the case of capital which expects more interest when it is invested a longer time. When an employer makes advance payments for ground-rent, taxes, or insurance on his buildings or materials, additional capital is to that extent required ; and an additional sacrifice is exacted from the owner of capital, for which there must be made a return in proper proportion to the return made to any other capital.

The question for us to decide, then, is solely the principle of division between the capitalist and the laborer. Although the two things are dependent on each other, we shall first consider the share belonging to capital ; after that, we can proceed to discuss the principles which govern the distribution of the laborer's share.

188. It may be necessary, however, to describe more fully the product which is to be divided. In any industry, of course, the actual products are not divided between labor and capital ; in a stove-foundry laborers are not paid in stoves. What we mean by speaking of the product is the **exchange value of that product ;** and in a stove-foundry the value of the stoves expressed in money and goods is what is divided between the persons concerned in their production.

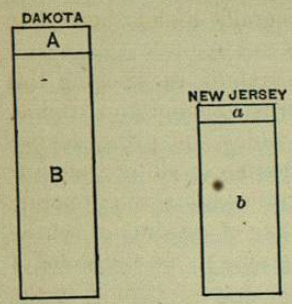
It is also to be understood that we are not speaking of a single article, or unit, of the goods made, when we are discussing the value of the product to be distributed; we have in view the total production of the industry in a given period of work, such as a month, or year, or season. Thus, in six months, or a year, 10,000 stoves may be

manufactured and sold ; and our problem is to discover what proportion of the value, or equivalent, of these 10,000 stoves—not of one single stove—goes to the laborer, and what proportion goes to the capitalist.

189. The value of this product will vary according to the laws of value discussed in previous chapters. The sacrifice to capitalist and laborer will (where competition is free) regulate the value of manufactured goods in general. Fluctuations in market values, or the action of reciprocal demand between different groups of industries, may, however, cause this **sum total to vary in amount,** and thus yield a larger or smaller value to be divided. Thus, when "business is poor," and demand is slack, the value of the annual sales in a mill may be less than usual, and less may exist for both labor and capital; or when "business revives," and "buyers are plenty," the better demand from people in other groups of industries raises the value of the total production, and increases the sum to be divided. Ignorance of this variation in the sum to be divided has been the basis of many errors by strikers. They have often demanded an increased share for wages just at a time when the total value of the product was diminishing. If they act at a time when this sum is rising in value, they are more likely to succeed.

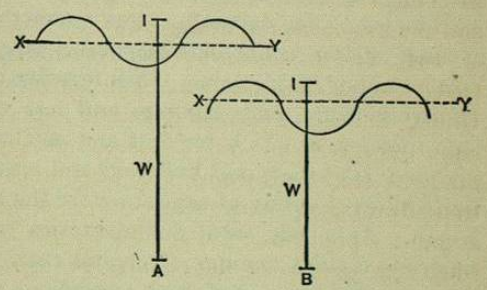
190. A very important matter to keep in mind, also, in regard to the share of labor and capital is the **quantity of the product compared with the sacrifice to labor and capital** (that is, compared to the number of days' labor on the average, and to the amount of capital employed). If we were to employ $500 of capital with 100 days of unskilled labor in growing wheat in New Jersey, we might reap 100 bushels ; but if the same amount of labor and capital were applied to the virgin prairie soil of some great wheat-growing district in the West, like Dakota, it might easily produce 150 bushels. The same labor and capital was used in both places, but the total product

in the one case was much larger than in the other. Thus there was more to divide between labor and capital in Dakota than in New Jersey. If capital were to have one tenth of the product in each case, it can be seen by the adjoining figure that in Dakota the share A, which is one tenth of the whole, is a larger quantity than *a*, which is one tenth of a smaller product in New Jersey. Likewise B is greater than *b*, because it is nine tenths of a larger sum than in New Jersey. To express it in other words, nine tenths of a large loaf is more to a laborer than nine tenths of a small one. The returns to both labor and capital, consequently, will be high in countries where the return to the exertions of labor and the use of capital are great.



191. The reasons why this return is great are illustrated by the causes which are in active operation in the United States. The vast extent of our rich agricultural land, our great mineral deposits, our supply of natural products (like petroleum), are the sources of great industrial advantages. With these conditions we must take into account a population already highly civilized at the time when that portion of the country was first occupied; the inventive character of the people; the appliances and machinery in all industries which enormously multiply the productive power of men; the water-ways and network of railways which afford easy and rapid transportation both for men and ideas; and such density of population as permits of an organization of efforts, and a division of labor on an advantageous scale. These are some of the **causes which in a new country make the return to labor and capital very much higher** than in an older or a less favored country.* The return to a given exertion of labor, and to the use of a certain sum of capital in most portions of the United States is greater than that in England or on the Continent. The loaf of bread to be divided is larger in the United States than in Europe. This is why *both* wages and interest are generally higher here than abroad.

192. We can not insist too carefully on keeping this before us in discussing the rewards to labor and capital. It fixes the level, or plane, on which the principles we arrive at for governing wages and interest will operate. It makes a great difference whether these principles operate on the high level of a great quantity of product or on the low level of a small quantity of product. If the share of labor varies, as compared with the share of capital, in the two cases it will vary on different levels. The height of the line A might represent the productiveness of an industry in the United States, and that of B the relative productiveness of the same industry in Europe. If A and B are divided in the same proportion (say one tenth for interest and nine tenths for wages), the share for capital, I, and the share for wages, W, will be much greater in the case of A than of B. In the first case, the point of division will be on the level of X, and in



* This will be true also between parts of the same country, differently favored by Nature, so long as competition between them is not free. If labor and capital will not move freely between them, the rates of wages and interest may be higher in one part than in another.

the second case on the level of Y. Now, if there are variations in the shares of wages and interest relatively to each other (while the total product remains the same), the point of division will move up and down about the level of X for A, as indicated by the curved line, and for B up and down about the lower level of Y. We have not yet found out, of course, where to draw the point of division between wages and interest (that is, the places X in A and Y in B); that is our problem in Book III. But, when we do arrive at this principle, we must remember that it makes a vast difference whether it applies to a large or small dividend, to A or to B. If a father dies leaving his property to his two children in equal shares, it makes a great difference, so far as the share of each child is concerned, whether each receives one half of a large or one half of a small fortune.

193. It is also to be remembered that **industries vary as regards the amount of labor required** in their operations; some demand a large number of laborers with a small capital, and others demand a large capital with a small number of laborers. Thus farming usually calls for relatively many more laborers and less capital than an iron-foundry, in which molders and machinists are working with machinery and buildings and materials which require a heavy outlay of capital before the business can be begun. As a rule, most manufactories require more laborers to a given amount of capital than agricultural industries, though a good deal depends on the character of the industry itself, and the kind of machinery used. As machinery is improved, a less and less number of workmen are required to work and feed it.

194. **Exercises.**—1. Apart from rent, between what two classes is the main question of distribution concerned?

2. Is it correct to say that labor and capital are paid out of the product of their industry?

3. If the summer is very long and hot, and a strong

demand for ice is felt, so that ice rises considerably in price, how would that affect the sum from which labor and capital in the ice industry is to be paid?

4. Two men have respectively a little capital in the form of a spade and some seed. One digs up rich soil for a day and plants it; the other digs up poor soil for a day and plants it. Why does the first get larger wages and interest?

5. When Oregon was held by the Modocs and other Indians, it was as rich in natural resources as now. Did the Modocs get as high wages as settlers do now? What is the reason for the vast difference between their earnings?

6. What effect has the great productiveness of an industry on the payments for labor and capital? If the "Mikado," written by Gilbert and Sullivan, is very popular, and earns a large royalty for the authors, is it just to say that this enlarges Gilbert's share only (without having any effect on Sullivan's share)? Is it just to say that the great productiveness of an industry enlarges wages only (without affecting the share of capital)?

CHAPTER XIX.

INTEREST.

195. In many treatises on political economy, and in the language of business men, the word "profits" is employed to include three different payments, which should be kept separate. It is made to cover interest, insurance, and wages of superintendence. Interest is, however, **the payment made solely for the use of capital,** and wages of superintendence form the reward paid for the exertions and skill of the manager. There is an obvious error, then, in including both under the term "profit." The amount to be paid to a manager for his work as a highly-skilled laborer is not determined by the same principle that fixes the rate of the interest which must be paid as a return for the use of capital, and it is an unnecessary confusion to include them both under the general term "profits."

The **wages of superintendence,** or the reward of the manager, we shall rigorously exclude from our present consideration, which pertains solely to the sum paid for the use of capital. The manager's wages will be considered hereafter. We can see what constitutes interest if we consider the case of a man who puts his capital into business with other partners who agree at once to secure him against all risk of loss, and to release him from any work or any superintendence of the business.

196. In connection with interest, it is well to consider

the addition made to the rate by the **risk** attendant in each special case on the loan or use of the capital. This extra payment, beyond the rate which would be paid for undoubtedly safe securities (such, for example, as United States bonds), is called **insurance.** Whenever the returns from the investment are more or less uncertain, or if the lender has some doubt that he will ever get his capital back again, the price exacted for the use of the capital will rise to a point at which it will (in the opinion of the investor) be a compensation for the amount of risk. In proportion as the investment is safe, the payment for risk will be low; in proportion as the investment is hazardous will it be high. In most enterprises, a very large amount is annually set aside as a reserve, or protection against losses and years of depression.

There are many inexperienced persons, having some money to invest, who seem to care more for their interest than for their principal. They are attracted by a high rate of interest, but do not realize that the high rate always goes with a high risk.*

197. The ordinary rate of interest on safe securities will not attract capital to an employment which is known to be uncertain in its returns, or exposed to dangerous accidents. In such industries as mining or the making of

* A few years ago an institution known as the "Woman's Bank" was founded in Boston on a pretended basis of philanthropy, of which the chief evidence was its offer to pay eight per cent per month on all deposits. The offer of eight per cent a month, or ninety-six per cent a year, ought of itself to have warned any informed person of the utter untrustworthiness of the bank. Of course, the money deposited never earned such returns, and the high rate of interest was paid, not out of earnings, but out of the principal left by other depositors. When the bank was investigated, and fresh deposits were stopped, the means of paying the high dividends ceased, and ignominious failure and prosecution of the manager followed. A little knowledge of what affects the rate of interest would have saved many confiding people from serious losses.

dynamite, for example, the payment for interest must be so much beyond the rate paid by money employed in safe investments as will cover the average losses, and put the business, in the long run, on the same footing as less hazardous industries. If a gunpowder factory blow up occasionally, the rate of interest on the capital invested in it must be high enough to make up for the mischance. The principle involved in the insurance of buildings is the same. No one knows just how many houses will burn up in a month; but a fixed charge is paid to the insurance company which experience has shown to be sufficient to cover average losses. In ordinary business, the rate is more or less varied by the circumstances of the country, the prevalence or non-prevalence of order or of commercial integrity, and the opinion formed as to the honesty of the borrower; for all of these circumstances influence the investor in estimating his risk of loss. The rate of interest is high in rough mining regions, or in places where life is held cheap, because the lender feels that his risk is enhanced in such places, and he adds a high charge for insurance. The proper payment for such insurance is a sum sufficient, in a long term of years, to make the returns from a hazardous investment equal to that which a safe investment would give throughout the like period.

198. Understanding as we now do the payment made necessary by risk and for the wages of the manager, we may go on to study **the principles which govern the rate of interest.** We want to learn what determines the amount which the owner of capital can demand for its use, wholly apart from any payment for risk or for the wages of superintendence.

It is sometimes assumed that this can be fixed by the rate of interest paid for the use of capital in the loan market; but the loan market, where some offer and others borrow capital, is merely the machinery by which the capital of the country gets into the hands of producers.* **The rate of interest in the loan market will generally be somewhat less than the rate which can be earned in production** by borrowers, or else there would be little reason for borrowing. The market rate will tend to follow the rate which can be earned by capital in production, although there will be a thousand causes for temporary variations about this normal level. The ultimate destination of capital is production, and the rate which will be paid for its use will depend upon the rate earned by producers with their capital.

199. The connection of the rate of interest in the loan market with that earned in productive employments is evident. At a time when the market rate is low, the conditions exist which create a demand for capital in production. Not content with the very low returns offered by safe securities, owners of capital begin to look yearningly at investments, like mining stocks, which, because they are less certain, offer a higher return. Then, too, a well-heralded prospectus for a new venture comes out, and tempts investors. Moreover, when rates of interest are low, even good business managers find that more capital can be used in legitimate business, for the reason that it can be got cheaply. So the low rate of interest causes an additional demand for capital, and in this way calls out a demand sufficient to employ the existing supply, or the rate will rise to a point at which the whole supply will be employed. On the contrary, when the rate is high, the

* Those who borrow to consume unproductively produce the effect, for the time, of diminishing the capital of the country, and of reducing the amount which can be offered by producers for labor. The greatest sinners in this respect are the governments who borrow enormous sums and consume them in wars and expenditures, from which no equivalent wealth is reproduced. It is said that, during the years 1870–1875, in England alone, loans were granted to foreign governments to the extraordinary sum of $1,300,000,000. (See Wallace, "Bad Times," p. 18.)

use of capital in production is discouraged, and the rate will fall until all of the supply is loaned. Thus, **capital can not be permanently loaned at rates much higher or lower than the returns to capital actually engaged in production.**

200. This leads us at once to the crucial question of distribution. What principle determines the respective shares of labor and capital when engaged in production?

We have already seen that a supply of capital is necessary to every industrial operation as now carried on, and we have seen that labor is likewise necessary. They are as necessary to each other as the two blades of a scissors. Hence, of two things both essential, if one becomes abundant relatively to the other, that one must get a smaller return provided all of it is put into use, and the one which is relatively scarce will get a larger return. In brief, **the proportional shares of labor and capital out of the product will depend upon the relative scarcity and abundance of labor and capital.** Capital, by its very definition (see section 55), must be employed in production; and capital can not be so employed without hiring labor. In order to ascertain the relative shares of laborer and capitalist, it is impossible not to compare the amount of capital offered for laborers with the number (and quality) of the laborers competing for the capital. If, for example, immigration, or the simple increase of population, should add greatly to the number of workingmen in the United States, without a corresponding addition to capital, then the share of the product which each laborer can demand will be somewhat less than before. If capital, on the other hand, should increase more rapidly than laborers, the division of the product will be altered in favor of the laborer. This last seems to have happened in the past century in a marked manner. The invention of the steam-engine, the spinning-mule, the power-loom, and the vast increase in fixed capital, have

made the accumulation of capital so great as to lower the rate of interest in all law-abiding countries. The competition of capitalists with one another, whenever a remunerative employment is disclosed, is far keener than the competition of laborers with one another for employment, great as that is; and, when capital grows rapidly, the fall in the rate of interest is a natural result. In the United States in the last thirty years every one recognizes that the rate of interest (solely for the use of capital, not for its management) has been constantly declining.

201. In Book I, Chapter VII, we found that the supply of capital depended on (1) the amount which could be saved, and (2) on the disposition to save in the minds of persons in the community. But, as civilization makes the conditions of life and property more safe and stable, it is noticed that **accumulations of capital do not necessarily diminish with the fall in the rate of interest.** As the amount which can be saved may diminish, the desire to save may increase. In fact, when men save in order to secure an income on which to retire, a fall in the rate at which they can invest their savings will probably tend to induce further savings; a larger capital is necessary to secure the desired income than when the rate was high. Yet, in general, it is probable that a fall in the rate will more or less affect the tendency to save capital. When the rate is high, men will strain a point in order to get all the capital they can save to invest; but, when the rate is low, they will have a less incentive to cause them to undergo a great sacrifice.

202. The supply of capital, however, is practically increased by any devices or means by which it is **turned over more rapidly** than before. These means have been increasing in a variety of ways of late years, and have had an important influence on the quantity of capital needed by a producer. The shortening of the period of manufacture in an industry by the introduction of improved

machinery is an example. If it formerly required ninety days, after buying materials, to make, finish, pack, sell, and get payment for a case of shoes, and if now it requires only thirty days for the same thing, it will be evident that the capital, by being turned over more rapidly, becomes three times as efficient; or, what is the same thing, only one third as much capital is required for the same results as before. Any means by which the **rapidity of circulation of the capital** can be increased will have practically the same effect as an increase in the supply of capital. The introduction of the electric telegraph, of the telephone, and of rapid communication by steam, have had a great influence in this direction. In the old days it was required that capital should be invested for months in a cargo of wheat shipped from New York to Liverpool before the payment was made. Now, without leaving the floor of the New York Produce Exchange, A may receive a telegraphic order from B, in London, to buy a cargo of wheat; may purchase the wheat; charter a vessel to carry it; engage an elevator to load the vessel; insure the cargo; draw a bill of exchange on B for the amount of the purchase; sell the bill, and get his money; and send back word by cable of the transaction—all in a few minutes.

203. We have now explained the principle according to which—if the value of the product is given—the respective shares of labor and capital are determined. This furnishes us with the principle governing the division; but it does not explain why in some cases the rate of interest is high or low. It determines the proportional, not the absolute, amount. If the proportion set aside for interest remains exactly the same, **the absolute amount of the interest will vary with the value of the product to be divided.** To this point we have already referred (sections 190 and 192). If capital gets one tenth of a large product, its share will be absolutely larger than when it gets one tenth of a small share. In short, the actual reward of capital in production at any time depends upon two things: (1) The abundance or scarcity of capital and labor relatively to each other, and (2) the value of the product to be divided.

204. In young countries, or in newly-settled districts, capital is not abundant; neither is labor. Capitalists find it difficult to engage the necessary workmen, and yet the interest for capital is large. Why is this? The abundance of fertile land and rich mineral resources give a large return to the application of labor and capital, and so **the shares of both labor and capital are large.** In Montana, and in the less settled portions of the United States, the market rate of interest is yet as high as twelve per cent.* In the North Atlantic States the market rate is from four to seven per cent. And yet in the former districts wages are higher than in the latter. We should thereby understand that high interest does not imply low wages, but that both are large because the amount to be divided is large. From this some writers have tried to show that an increase of the product necessarily increases wages alone. We can see, however, that it increases both wages and interest. A greater *proportion* can go to wages only if the relations of labor and capital to each other are altered. In other words, if workmen become scarce relatively to capital, even in a new country of great natural resources, wages will rise beyond what was before considered a high rate.

205. It is well known that natural agents lie at the basis of all production: agriculture furnishes food and animal products; mines give fuel, oil, and minerals; forests yield lumber and materials for every trade. These are the main industries in a new country. When capital is first invested, the productiveness of industrial operations is so great that both high interest and large wages can be paid.

* In many cases, however, the high rate is due to the element of risk, and in a new country this ought to be given full weight.

But these very industries are the ones which are most affected by the law of diminishing returns; so that, as population grows, and the natural resources are more and more worked, the yield to the same amount of capital and labor becomes less. Sooner or later the diminishing returns from natural agents will lower the sum to be divided between capital and labor. So that, apart from the growing accumulations of capital by saving, **capital, as well as labor, is likely to receive a less share, because the sum to be divided will become less.** Improvements which offset the action of the law of diminishing returns will, of course, tend to keep interest from falling. But the accumulations of capital are steadily increasing, even though the natural agents of our country are being more and more taken up, and we need have little doubt as to the tendency of interest to fall. **The share of the capitalist is becoming less and less.** This is a statement which may seem strange to some minds, but the truth of it may become more apparent when we have discussed the share of the manager of capital.

206. The income on any investment, like the dividend on a stock, the interest on a bond or mortgage, or the rent of a farm, will govern the **selling-price.** About 1876 the United States Government sold $737,000,000 of bonds, which pay four per cent interest—that is, they could then borrow capital at four per cent. Since then the general rate of interest on equally safe securities has fallen to less than three per cent. As a consequence, the selling-price of a four-per-cent bond has risen far above par. The reason is plain. Such a bond yields annually four dollars to its owner, and, if he is content with less than three per cent on his investment, he will be willing to pay more than one hundred dollars for such a bond; he will pay so much more (say one hundred and twenty-seven dollars) that four dollars will be about three per cent on his purchase-price. If the income from bonds, land, or stocks remains steady,

their selling-price will rise when the general rate of interest in the community falls; and their selling-price will fall if the general rate of interest should rise.

207. Exercises.—1. Distinguish between interest and the common use of the word "profits." If A puts capital into a business, and is excused from all work, and warranted against all business risks, what would you call his remuneration?

2. If A gave all his time and energies to the business, besides putting in capital, ought he to receive any more remuneration than in the first case? What would you call such extra remuneration? Does he get it simply because he owns capital? Could he get anything for the use of his capital without working?

3. Why is it that a widow, who had a little fortune left to her, can get a higher rate by investments in railway stocks than in United States bonds? Are railways always honestly and safely managed?

4. If people of many countries go to London to borrow capital, what effect would that have on the rate of interest in London? If they go from other countries to England, what is probably the relative rate of interest in the countries from which they come?

5. If strikers burn up warehouses or factories, do they lessen the capital by which they or other laborers can be employed?

6. Why are both wages and interest higher in the United States than in England or on the Continent?

7. If great numbers of foreigners emigrate to the United States, how should that affect wages? If capital, however, increases still faster than the workmen, would wages fall?

8. Why should the rate of interest on a Western farm mortgage be greater than on a mortgage on improved real estate in the midst of a great city?

9. If the rate of interest falls, does that mean that

capital can not find employment at all? Will the rate have any effect on the demand for capital?

10. If a farm, always yielding $100 rent, sold for $1,000, when the general rate of interest was ten per cent, show that its selling price will be $2,000, if the general rate of interest falls to five per cent.

CHAPTER XX.

WAGES.

208. Before going further, it will be well to define the various meanings associated with the word *wages*. The distinction between *money wages* and *real wages* is highly important. By **Real Wages** is meant **the amount of commodities of value received by a laborer for his exertion,*** either physical or mental. It is in this sense that wages vitally concern the laborer. Adam Smith says: "The real wages of labor may be said to consist in the quantity of the necessaries and conveniences of life that are given for it; its nominal wages in the quantity of money. . . . The laborer is rich or poor, is well or ill rewarded, in proportion to the real, not to the nominal, wages of his labor." By nominal, or **Money, Wages** is meant **the amount of money a laborer receives for his exertion.** People who think only of the money they receive forget that the money buys sometimes more, sometimes less; they overlook the fact that an increase of Money Wages, when prices have risen, does not increase real wages. During our civil war prices in depreciated paper rose enormously, and wages in paper money were higher than in the days of a gold currency; and many persons were ignorant enough to think they were better off simply because

* Real Wages do not comprise merely the necessaries of life, as some erroneously think. Real Wages may include comforts and even luxuries, if wages are high enough.