BOOK III

THE LAWS OF DISTRIBUTION

The machines that are first invented to perform any particular movement are always the most complex, and succeeding artists generally discover that with fewer wheels, with fewer principles of motion than had originally been employed, the same effects may be more easily produced. The first philosophical systems, in the same manner, are always the most complex, and a particular connecting chain, or principle, is generally thought necessary to unite every two seemingly disjointed appearances, but it often happens that one great connecting principle is afterward found to be sufficient to bind together all the discordant phenomena that occur in a whole species of things.—*Adam Smith, Essay on the Principles Which Lead and Direct Philosophical Inquiries, as Illustrated by the History of Astronomy.*

CHAPTER I

THE INQUIRY NARROWED TO THE LAWS OF DISTRIBUTION—THE NECESSARY RELATION OF THESE LAWS

The preceding examination has, I think, conclusively shown that the explanation currently given, in the name of political economy, of the problem we are attempting to solve, is no explanation at all.

That with material progress wages fail to increase, but rather tend to decrease, cannot be explained by the theory that the increase of laborers constantly tends to divide into smaller portions the capital sum from which wages are paid. For, as we have seen, wages do not come from capital, but are the direct produce of labor. Each productive laborer, as he works, creates his wages, and with every additional laborer there is an addition to the true wages fund—an addition to the common stock of wealth, which, generally speaking, is considerably greater than the amount he draws in wages.

Nor, yet, can it be explained by the theory that nature yields less to the increasing drafts which an increasing population make upon her; for the increased efficiency of labor makes the progressive state a state of continually increasing production per capita, and the countries of densest population, other things being equal, are always the countries of greatest wealth.

So far, we have only increased the perplexities of the problem. We have overthrown a theory which did, in some sort of fashion, explain existing facts; but in doing so have only made existing facts seem more inexplicable.

It is as though, while the Ptolemaic theory was yet in its strength, it had been proved simply that the sun and stars do not revolve about the earth. The phenomena of day and night, and of the apparent motion of the celestial bodies, would yet remain unexplained, inevitably to reinstate the old theory unless a better one took its place. Our reasoning has led us to the conclusion that each productive laborer produces his own wages, and that increase in the number of laborers should increase the wages of each; whereas, the apparent facts are that there are many laborers who cannot obtain remunerative employment, and that increase in the number of laborers brings diminution of wages. We have, in short, proved that wages ought to be highest where in reality they are lowest.

Nevertheless, even in doing this we have made some progress. Next to finding what we look for, is to discover where it is useless to look. We have at least narrowed the field of inquiry. For this, at least, is now clear—that the cause which, in spite of the enormous increase of productive power, confines the great body of producers to the least share of the product upon which they will consent to live, is not the limitation of capital, nor yet the limitation of the powers of nature which respond to labor. As it is not, therefore, to be found in the laws which bound the production of wealth, it must be sought in the laws which govern distribution. To them let us turn.

It will be necessary to review in its main branches the whole subject of the distribution of wealth. To discover the cause which, as population increases and the productive arts advance, deepens the poverty of the lowest class, we must find the law which determines what part of the produce is distributed to labor as wages. To find the law of wages, or at least to make sure when we have found it, we must also determine the laws which fix the part of the produce which goes to capital and the part which goes to land owners, for as land, labor, and capital join in producing wealth, it is between these three that the produce must be divided. What is meant by the produce or production of a community is the sum of the wealth produced by that community—the general fund from which, as long as previously existing stock is not lessened, all consumption must be met and all revenues drawn. As I have already explained, production does not merely mean the making of things, but includes the increase of value gained by transporting or exchanging things. There is a produce of wealth in a purely commercial community, as there is in a purely agricultural or manufacturing community; and in the one case, as in the others, some part of this produce will go to capital, some part to labor, and some part, if land have any value, to the owners of land. As a matter of fact, a portion of the wealth produced is constantly going to the replacement of capital, which is constantly consumed and constantly replaced. But it is not necessary to take this into account, as it is eliminated by considering capital as continuous, which, in speaking or thinking of it, we habitually do. When we speak of the produce, we mean, therefore, that part of the wealth produced above what is necessary to replace the capital consumed in production; and when we speak of interest, or the return to capital, we mean what goes to capital after its replacement or maintenance.

It is, further, a matter of fact, that in every community which has passed the most primitive stage some portion of the produce is taken in taxation and consumed by government. But it is not necessary, in seeking the laws of distribution, to take this into consideration. We may consider taxation either as not existing, or as by so much reducing the produce. And so, too, of what is taken from the produce by certain forms of monopoly, which will be considered in a subsequent chapter (Chap. IV), and which exercise powers analogous to taxation. After we have discovered the laws of distribution we can then see what bearing, if any, taxation has upon them.

We must discover these laws of distribution for ourselves—or, at least, two out of the three. For, that they are not, at least as a whole, correctly apprehended by the current political economy, may be seen, irrespective of our preceding examination of one of them, in any of the standard treatises.

This is evident, in the first place, from the terminology employed.

In all politico-economic works we are told that the three factors in production are land, labor, and capital, and that the whole produce is primarily distributed into three corresponding parts. Three terms, therefore, are needed, each of which shall clearly express one of these parts to the exclusion of the others. Rent, as defined, clearly enough expresses the first of these parts—that which goes to the owners of land. Wages, as defined, clearly enough expresses the second—that part which constitutes the return to labor. But as to the third term—that which should express the return to capital—there is in the standard works a most puzzling ambiguity and confusion.

Of words in common use, that which comes nearest to exclusively expressing the idea of return for the use of capital, is interest, which, as commonly used, implies the return for the use of capital, exclusive of any labor in its use or management, and exclusive of any risk, except such as may be involved in the security. The word profits, as commonly used, is almost synonymous with revenue; it means a gain, an amount received in excess of an amount expended, and frequently includes receipts that are properly rent; while it nearly always includes receipts which are properly wages, as well as compensations for the risk peculiar to the various uses of capital. Unless extreme violence is done to the meaning of the word, it cannot, therefore, be used in political economy to signify that share of the produce which goes to capital, in contradistinction to those parts which go to labor and to land owners.

Now, all this is recognized in the standard works on political economy. Adam Smith well illustrates how wages and compensation for risk largely enter into profits, pointing out how the large profits of apothecaries and small retail dealers are in reality wages for their labor, and not interest on their capital; and how the great profits sometimes made in risky businesses, such as smuggling and the lumber trade, are really but compensations for risk, which, in the long run, reduce the returns to capital so used to the ordinary, or below the ordinary, rate. Similar illustrations are given in most of the subsequent works, where profit is formally defined in its common sense, with, perhaps, the exclusion of rent. In all these works, the reader is told that profits are made up of three elements—wages of superintendence, compensation for risk, and *interest,* or the return for the use of capital.

Thus, neither in its common meaning nor in the meaning expressly assigned to it in the current political economy, can profits have any place in the discussion of the distribution of wealth between the three factors of production. Either in its common meaning or in the meaning expressly assigned to it, to talk about the distribution of wealth into rent, wages, and profits is like talking of the division of mankind into men, women, and human beings.

Yet this, to the utter bewilderment of the reader, is what is done in all the standard works. After formally decomposing profits into wages of superintendence, compensation for risk, and interest—the net return for the use of capital—they proceed to treat of the distribution of wealth between the rent of land, the wages of labor, and the PROFITS of capital.

I doubt not that there are thousands of men who have vainly puzzled their brains over this confusion of terms, and abandoned the effort in despair, thinking that as the fault could not be in such great thinkers, it must be in their own stupidity. If it is any consolation to such men they may turn to Buckle's "History of Civilization," and see how a man who certainly got a marvelously clear idea of what he read, and who had read carefully the principal economists from Smith down, was inextricably confused by this jumble of profits and interest. For Buckle (Vol. I, Chap. II, and notes) persistently speaks of the distribution of wealth into rent, wages, interest, *and* profits.

And this is not to be wondered at. For, after formally decomposing profits into wages of superintendence, insurance, and interest, these economists, in assigning causes which fix the general rate of profit, speak of things which evidently affect only that part of profits which they have denominated interest; and then, in speaking of the rate of interest, either give the meaningless formula of supply and demand, or speak of causes which affect the compensation for risk; evidently using the word in its common sense, and not in the economic sense they have assigned to it, from which compensation for risk is eliminated. If the reader will take up John Stuart Mill's "Principles of Political Economy," and compare the chapter on Profits (Book II, Chap. 15) with the chapter on Interest (Book III, Chap. 23), he will see the confusion thus arising exemplified in the case of the most logical of English economists, in a more striking manner than I would like to characterize.

Now, such men have not been led into such confusion of thought without a cause. If they, one after another, have followed Dr. Adam Smith, as boys play "follow my leader," jumping where he jumped, and falling where he fell, it has been that there was a fence where he jumped and a hole where he fell.

The difficulty from which this confusion has sprung is in the preaccepted theory of wages. For reasons which I have before assigned, it has seemed to them a self-evident truth that the wages of certain classes of laborers depended upon the ratio between capital and the number of laborers. But there are certain kinds of reward for exertion to which this theory evidently will not apply, so the term wages has in use been contracted to include only wages in the narrow common sense. This being the case, if the term interest were used, as consistently with their definitions it should have been used, to represent the third part of the division of the produce, all rewards of personal exertion, save those of what are commonly called wage-workers, would clearly have been left out. But by treating the division of wealth as between rent, wages, and profits, instead of between rent, wages, and interest, this difficulty is glossed over, all wages which will not fall under the preaccepted law of wages being vaguely grouped under profits, as wages of superintendence.

To read carefully what economists say about the distribution of wealth is to see that, though they correctly define it, wages, as they use it in this connection, is what logicians would call an undistributed term—it does not mean all wages, but only some wages—viz., the wages of manual labor paid by an employer. So other wages are thrown over with the return to capital, and included under the term profits, and any clear distinction between the returns to capital and the returns to human exertion thus avoided. The fact is that the current political economy fails to give any clear and consistent account of the distribution of wealth. The law of rent *is* clearly stated, but it stands unrelated. The rest is a confused and incoherent jumble.

The very arrangement of these works shows this confusion and inconclusiveness of thought. In no politico-economic treatise that I know of are these laws of distribution brought together, so that the reader can take them in at a glance and recognize their relation to each other; but what is said about each one is enveloped in a mass of political and moral reflections and dissertations. And the reason is not far to seek. To bring together the three laws of distribution as they are now taught, is to show at a glance that they lack necessary relation.

The laws of the distribution of wealth are obviously laws of proportion, and must be so related to each other that any two being given the third may be inferred. For to say that one of the three parts of a whole is increased or decreased, is to say that one or both of the other parts is, reversely, decreased or increased. If Tom, Dick, and Harry are partners in business, the agreement which fixes the share of one in the profits must at the same time fix either the separate or the joint shares of the other two. To fix Tom's share at forty per cent. is to leave but sixty per cent. to be divided between Dick and Harry. To fix Dick's share at forty per cent. and Harry's share at thirty-five per cent. is to fix Tom's share at twenty-five per cent.

But between the laws of the distribution of wealth, as laid down in the standard works, there is no such relation. If we fish them out and bring them together, we find them to be as follows:

Wages are determined by the ratio between the amount of capital devoted to the payment and subsistence of labor and the number of laborers seeking employment.

Rent is determined by the margin of cultivation; all lands yielding as rent that part of their produce which exceeds what an equal application of labor and capital could procure from the poorest land in use.

Interest is determined by the equation between the demands of borrowers and the supply of capital offered by lenders. Or, if we take what is given as the law of profits, it is determined by wages, falling as wages rise and rising as wages fall—or, to use the phrase of Mill, by the cost of labor to the capitalist.

The bringing together of these current statements of the laws of the distribution of wealth shows at a glance that they lack the relation to each other which the true laws of distribution must have. They do not correlate and co-ordinate. Hence, at least two of these three laws are either wrongly apprehended or wrongly stated. This tallies with what we have already seen, that the current apprehension of the law of wages, and, inferentially, of the law of interest, will not bear examination. Let us, then, seek the true laws of the distribution of the produce of labor into wages, rent, and interest. The proof that we have found them will be in their correlation—that they meet, and relate, and mutually bound each other.

With profits this inquiry has manifestly nothing to do. We want to find what it is that determines the division of their joint produce between land, labor, and capital; and profits is not a term that refers exclusively to any one of these three divisions. Of the three parts into which profits are divided by political economists —namely, compensation for risk, wages of superintendence, and return for the use of capital—the latter falls under the term interest, which includes all the returns for the use of capital, and excludes everything else;

wages of superintendence falls under the term wages, which includes all returns for human exertion, and excludes everything else; and compensation for risk has no place whatever, as risk is eliminated when all the transactions of a community are taken together. I shall, therefore, consistently with the definitions of political economists, use the term interest as signifying that part of the produce which goes to capital.

To recapitulate:

Land, labor, and capital are the factors of production. The term land includes all natural opportunities or forces; the term labor, all human exertion; and the term capital, all wealth used to produce more wealth. In returns to these three factors is the whole produce distributed. That part which goes to land owners as payment for the use of natural opportunities is called rent; that part which constitutes the reward of human exertion is called wages; and that part which constitutes the return for the use of capital is called interest. These terms mutually exclude each other. The income of any individual may be made up from any one, two, or all three of these sources; but in the effort to discover the laws of distribution we must keep them separate.

Let me premise the inquiry which we are about to undertake by saying that the miscarriage of political economy, which I think has now been abundantly shown, can, it seems to me, be traced to the adoption of an erroneous standpoint. Living and making their observations in a state of society in which a capitalist generally rents land and hires labor, and thus seems to be the undertaker or first mover in production, the great cultivators of the science have been led to look upon capital as the prime factor in production, land as its instrument, and labor as its agent or tool. This is apparent on every page—in the form and course of their reasoning, in the character of their illustrations, and even in their choice of terms. Everywhere capital is the starting point, the capitalist the central figure. So far does this go that both Smith and Ricardo use the term "natural wages" to express the minimum upon which laborers can live; whereas, unless injustice is natural, all that the laborer produces should rather be held as his natural wages. This habit of looking upon capital as the employer of labor has led both to the theory that wages depend upon the relative abundance of capital, and to the theory that interest varies inversely with wages, while it has led away from truths that but for this habit would have been apparent. In short, the misstep which, so far as the great laws of distribution are concerned, has led political economy into the jungles, instead of upon the mountain tops, was taken when Adam Smith, in his first book, left the standpoint indicated in the sentence, "The produce of labor constitutes the natural recompense of wages of labor," to take that in which capital is considered as employing labor and paying wages.

But when we consider the origin and natural sequence of things, this order is reversed; and capital instead of first is last; instead of being the employer of labor, it is in reality employed by labor. There must be land before labor can be exerted, and labor must be exerted before capital can be produced. Capital is a result of labor, and is used by labor to assist it in further production. Labor is the active and initial force, and labor is therefore the employer of capital. Labor can be exerted only upon land, and it is from land that the matter which it transmutes into wealth must be drawn. Land therefore is the condition precedent, the field and material of labor. The natural order is land, labor, capital; and, instead of starting from capital as our initial point, we should start from land.

There is another thing to be observed. Capital is not a necessary factor in production. Labor exerted upon land can produce wealth without the aid of capital, and in the necessary genesis of things must so produce wealth before capital can exist. Therefore the law of rent and the law of wages must correlate each other and form a perfect whole without reference to the law of capital, as otherwise these laws would not fit the cases which can readily be imagined, and which to some degree actually exist, in which capital takes no part in production. And as capital is, as is often said, but stored-up labor, it is but a form of labor, a subdivision of the general term labor; and its law must be subordinate to, and independently correlate with, the law of wages, so as to fit cases in which the whole produce is divided between labor and capital, without any deduction for rent. To resort to the illustration before used: The division of the produce between land, labor and capital must be as it would be between Tom, Dick, and Harry, if Tom and Dick were the original partners, and Harry came in but as an assistant to and sharer with Dick.

CHAPTER II

RENT AND THE LAW OF RENT

The term rent, in its economic sense—that is, when used, as I am using it, to distinguish that part of the produce which accrues to the owners of land or other natural capabilities by virtue of their ownership—differs in meaning from the word rent as commonly used. In some respects this economic meaning is narrower than the common meaning; in other respects it is wider.

It is narrower in this: In common speech, we apply the word rent to payments for the use of buildings, machinery, fixtures, etc., as well as to payments for the use of land or other natural capabilities; and in speaking of the rent of a house or the rent of a farm, we do not separate the price for the use of the improvements from the price for the use of the bare land. But in the economic meaning of rent, payments for the use of any of the products of human exertion are excluded, and of the lumped payments for the use of houses, farms, etc., only that part is rent which constitutes the consideration for the use of the land—that part paid for the use of buildings or other improvements being properly interest, as it is a consideration for the use of capital.

It is wider in this: In common speech we speak of rent only when owner and user are distinct persons. But in the economic sense there is also rent where the same person is both owner and user. Where owner and user are thus the same person, whatever part of his income he might obtain by letting the land to another is rent, while the return for his labor and capital are that part of his income which they would yield him did he hire instead of owning the land. Rent is also expressed in a selling price. When land is purchased, the payment which is made for the ownership, or right to perpetual use, is rent commuted or capitalized. If I buy land for a small price and hold it until I can sell it for a large price, I have become rich, not by wages for my labor or by interest upon my capital, but by the increase of rent. Rent, in short, is the share in the wealth produced which the exclusive right to the use of natural capabilities gives to the owner. Wherever land has an exchange value there is rent in the economic meaning of the term. Wherever land having a value is used, either by owner or hirer, there is rent actual; wherever it is not used, but still has a value, there is rent potential. It is this capacity of yielding rent which gives value to land. Until its ownership will confer some advantage, land has no value.*

Thus rent or land value does not arise from the productiveness or utility of land. It in no wise represents any help or advantage given to production, but simply the power of securing a part of the results of production. No matter what are its capabilities, land can yield no rent and have no value until some one is willing to give labor or the results of labor for the privilege of using it; and what any one will thus give depends not upon the capacity of the land, but upon its capacity as compared with that of land that can be had for nothing. I may have very rich land, but it will yield no rent and have no value so long as there is other land as good to be had without cost. But when this other land is appro-

* In speaking of the value of land I use and shall use the words as referring to the value of the bare land. When I wish to speak of the value of land and improvements I shall use those words.

priated, and the best land to be had for nothing is inferior, either in fertility, situation, or other quality, my land will begin to have a value and yield rent. And though the productiveness of my land may decrease, yet if the productiveness of the land to be had without charge decreases in greater proportion, the rent I can get, and consequently the value of my land, will steadily increase. Rent, in short, is the price of monopoly, arising from the reduction to individual ownership of natural elements which human exertion can neither produce nor increase.

If one man owned all the land accessible to any community, he could, of course, demand any price or condition for its use that he saw fit; and, as long as his ownership was acknowledged, the other members of the community would have but death or emigration as the alternative to submission to his terms. This has been the case in many communities; but in the modern form of society, the land, though generally reduced to individual ownership, is in the hands of too many different persons to permit the price which can be obtained for its use to be fixed by mere caprice or desire. While each individual owner tries to get all he can, there is a limit to what he can get, which constitutes the market price or market rent of the land, and which varies with different lands and at different times. The law, or relation, which, under these circumstances of free competition among all parties (the condition which in tracing out the principles of political economy is always to be assumed), determines what rent or price can be got by the owner, is styled the law of rent. This fixed with certainty, we have more than a starting point from which the laws which regulate wages and interest may be traced. For, as the distribution of wealth is a division, in ascertaining what fixes the share of the produce which goes as rent, we also ascertain what fixes the share which is left for wages, where there is no co-operation of capital; and what fixes the joint share left for wages and interest, where capital does co-operate in production.

Fortunately, as to the law of rent there is no necessity for discussion. Authority here coincides with common sense,* and the accepted dictum of the current political economy has the self-evident character of a geometric axiom. This accepted law of rent, which John Stuart Mill denominates the *pons asinorum* of political economy, is sometimes styled "Ricardo's law of rent," from the fact that, although not the first to announce it, he first brought it prominently into notice.† It is:

The rent of land is determined by the excess of its produce over that which the same application can secure from the least productive land in use.

This law, which of course applies to land used for other purposes than agriculture, and to all natural agencies, such as mines, fisheries, etc., has been exhaustively explained and illustrated by all the leading economists since Ricardo. But its mere statement has all the force of a self-evident proposition, for it is clear that the effect of competition is to make the lowest reward for

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* I do not mean to say that the accepted law of rent has never been disputed. In all the nonsense that in the present disjointed condition of the science has been printed as political economy, it would be hard to find anything that has not been disputed. But I mean to say that it has the sanction of all economic writers who are really to be regarded as authority. As John Stuart Mill says (Book II, Chap. XVI), "there are few persons who have refused their assent to it, except from not having thoroughly understood it. The loose and inaccurate way in which it is often apprehended by those who affect to refute it is very remarkable." An observation which has received many later exemplifications.

† According to McCulloch the law of rent was first stated in a pamphlet by Dr. James Anderson of Edinburgh in 1777, and simultaneously in the beginning of this century by Sir Edward West, Mr. Malthus, and Mr. Ricardo.

which labor and capital will engage in production, the highest that they can claim; and hence to enable the owner of more productive land to appropriate in rent all the return above that required to recompense labor and capital at the ordinary rate—that is to say, what they can obtain upon the least productive land in use, or at the least productive point, where, of course, no rent is paid.

Perhaps it may conduce to a fuller understanding of the law of rent to put it in this form: The ownership of a natural agent of production will give the power of appropriating so much of the wealth produced by the exertion of labor and capital upon it as exceeds the return which the same application of labor and capital could secure in the least productive occupation in which they freely engage.

This, however, amounts to precisely the same thing, for there is no occupation in which labor and capital can engage which does not require the use of land; and, furthermore, the cultivation or other use of land will always be carried to as low a point of remuneration, all things considered, as is freely accepted in any other pursuit. Suppose, for instance, a community in which part of the labor and capital is devoted to agriculture and part to manufactures. The poorest land cultivated yields an average return which we will call 20, and 20 therefore will be the average return to labor and capital, as well in manufactures as in agriculture. Suppose that from some permanent cause the return in manufactures is now reduced to 15. Clearly, the labor and capital engaged in manufactures will turn to agriculture; and the process will not stop until, either by the extension of cultivation to inferior lands or to inferior points on the same land, or by an increase in the relative value of manufactured products, owing to the diminution of production—or, as a matter of fact, by both processes—the yield to labor and capital in both pursuits has, all things considered, been brought again to the same level, so that whatever be the final point of productiveness at which manufactures are still carried on, whether it be 18 or 17 or 16, cultivation will also be extended to that point. And, thus, to say that rent will be the excess in productiveness over the yield at the margin, or lowest point, of cultivation, is the same thing as to say that it will be the excess of produce over what the same amount of labor and capital obtains in the least remunerative occupation.

The law of rent is, in fact, but a deduction from the law of competition, and amounts simply to the assertion that as wages and interest tend to a common level, all that part of the general production of wealth which exceeds what the labor and capital employed could have secured for themselves, if applied to the poorest natural agent in use, will go to land owners in the shape of rent. It rests, in the last analysis, upon the fundamental principle, which is to political economy what the attraction of gravitation is to physics—that men will seek to gratify their desires with the least exertion.

This, then, is the law of rent. Although many standard treatises follow too much the example of Ricardo, who seems to view it merely in its relation to agriculture, and in several places speaks of manufactures yielding no rent (when, in truth, manufactures and exchange yield the highest rents, as is evinced by the greater value of land in manufacturing and commercial cities), thus hiding the full importance of the law, yet, ever since the time of Ricardo, the law itself has been clearly apprehended and fully recognized. But not so its corollaries. Plain as they are, the accepted doctrine of wages (backed and fortified not only as has been hitherto explained, but by considerations whose enormous weight will be seen when the logical conclusion toward which we are tending is reached) has hitherto prevented their recognition.* Yet, is it not as plain as the simplest geometrical demonstration, that the corollary of the law of rent is the law of wages, where the division of the produce is simply between rent and wages; or the law of wages and interest taken together, where the division is into rent, wages, and interest? Stated reversely, the law of rent is necessarily the law of wages and interest taken together, for it is the assertion, that no matter what the production which results from the application of labor and capital, these two factors will receive in wages and interest only such part of the produce as they could have produced on land free to them without the payment of rent—that is, the least productive land or point in use. For, if, of the produce, all over the amount which labor and capital could secure from land for which no rent is paid must go to land owners as rent, then all that can be claimed by labor and capital as wages and interest is the amount which they could have secured from land yielding no rent.

Or to put it in algebraic form:

As Produce=Rent+Wages+Interest,

Therefore, Produce−Rent=Wages+Interest.

Thus wages and interest do not depend upon the produce of labor and capital, but upon what is left after rent is taken out; or, upon the produce which they could obtain without paying rent—that is, from the poorest land in use. And hence, no matter what be the increase in productive power, if the increase in rent keeps pace with it, neither wages nor interest can increase.

The moment this simple relation is recognized, a

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* Buckle (Chap. II, History of Civilization) recognizes the necessary relation between rent, interest, and wages, but evidently never worked it out.

flood of light streams in upon what was before inexplicable, and seemingly discordant facts range themselves under an obvious law. The increase of rent which goes on in progressive countries is at once seen to be the key which explains why wages and interest fail to increase with increase of productive power. For the wealth produced in every community is divided into two parts by what may be called the rent line, which is fixed by the margin of cultivation, or the return which labor and capital could obtain from such natural opportunities as are free to them without the payment of rent. From the part of the produce below this line wages and interest must be paid. All that is above goes to the owners of land. Thus, where the value of land is low, there may be a small production of wealth, and yet a high rate of wages and interest, as we see in new countries. And, where the value of land is high, there may be a very large production of wealth, and yet a low rate of wages and interest, as we see in old countries. And, where productive power increases, as it is increasing in all progressive countries, wages and interest will be affected, not by the increase, but by the manner in which rent is affected. If the value of land increases proportionately, all the increased production will be swallowed up by rent, and wages and interest will remain as before. If the value of land increases in greater ratio than productive power, rent will swallow up even more than the increase; and while the produce of labor and capital will be much larger, wages and interest will fall. It is only when the value of land fails to increase as rapidly as productive power, that wages and interest can increase with the increase of productive power. All this is exemplified in actual fact.

CHAPTER III

OF INTEREST AND THE CAUSE OF INTEREST

Having made sure of the law of rent, we have obtained as its necessary corollary the law of wages, where the division is between rent and wages; and the law of wages and interest taken together, where the division is between the three factors. What proportion of the produce is taken as rent must determine what proportion is left for wages, if but land and labor are concerned; or to be divided between wages and interest, if capital joins in the production.

But without reference to this deduction, let us seek each of these laws separately and independently. If, when obtained in this way, we find that they correlate, our conclusions will have the highest certainty.

And, inasmuch as the discovery of the law of wages is the ultimate purpose of our inquiry, let us take up first the subject of interest.

I have already referred to the difference in meaning between the terms profits and interest. It may be worth while, further, to say that interest, as an abstract term in the distribution of wealth, differs in meaning from the word as commonly used, in this: That it includes all returns for the use of capital, and not merely those that pass from borrower to lender; and that it excludes compensation for risk, which forms so great a part of what is commonly called interest. Compensation for risk is evidently only an equalization of return between different employments of capital. What we want to find is, what fixes the general rate of interest proper? The different rates of compensation for risk added to this will give the current rates of commercial interest.

Now, it is evident that the greatest differences in what is ordinarily called interest are due to differences in risk; but it is also evident that between different countries and different times there are also considerable variations in the rate of interest proper. In California at one time two per cent. a month would not have been considered extravagant interest on security on which loans could now be effected at seven or eight per cent. per annum, and though some part of the difference may be due to an increased sense of general stability, the greater part is evidently due to some other general cause. In the United States generally the rate of interest has been higher than in England; and in the newer States of the Union higher than in the older States; and the tendency of interest to sink as society progresses is well marked and has long been noticed. What is the law which will bind all these variations together and exhibit their cause?

It is not worth while to dwell more than has hitherto incidentally been done upon the failure of the current political economy to determine the true law of interest. Its speculations upon this subject have not the definiteness and coherency which have enabled the accepted doctrine of wages to withstand the evidence of fact, and do not require the same elaborate review. That they run counter to the facts is evident. That interest does not depend on the productiveness of labor and capital is proved by the general fact that where labor and capital are most productive interest is lowest. That it does not depend reversely upon wages (or the cost of labor), lowering as wages rise, and increasing as wages fall, is proved by the general fact that interest is high when and where wages are high, and low when and where wages are low.

Let us begin at the beginning. The nature and functions of capital have already been sufficiently shown, but even at the risk of something like a digression, let us endeavor to ascertain the cause of interest before considering its law. For in addition to aiding our inquiry by giving us a firmer and clearer grasp of the subject now in hand, it may lead to conclusions whose practical importance will be hereafter apparent.

What is the reason and justification of interest? Why should the borrower pay back to the lender more than he received? These questions are worth answering, not merely from their speculative, but from their practical importance. The feeling that interest is the robbery of industry is widespread and growing, and on both sides of the Atlantic shows itself more and more in popular literature and in popular movements. The expounders of the current political economy say that there is no conflict between labor and capital, and oppose as injurious to labor, as well as to capital, all schemes for restricting the reward which capital obtains; yet in the same works the doctrine is laid down that wages and interest bear to each other an inverse relation, and that interest will be low or high as wages are high or low.* Clearly, then, if this doctrine is correct, the only objection that from the standpoint of the laborer can be logically made to any scheme for the reduction of interest is that it will not work, which is manifestly very weak ground while ideas of the omnipotence of legislatures are yet so widespread; and though such an objection may lead to the abandonment of any one particular scheme, it will not prevent the search for another.

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* This is really said of profits, but with the evident meaning of returns to capital.

Why should interest be? Interest, we are told, in all the standard works, is the reward of abstinence. But, manifestly, this does not sufficiently account for it. Abstinence is not an active, but a passive quality; it is not a doing—it is simply a not doing. Abstinence in itself produces nothing. Why, then, should any part of what is produced be claimed for it? If I have a sum of money which I lock up for a year, I have exercised as much abstinence as though I had loaned it. Yet, though in the latter case I will expect it to be returned to me with an additional sum by way of interest, in the former I will have but the same sum, and no increase. But the abstinence is the same. If it be said that in lending it I do the borrower a service, it may be replied that he also does me a service in keeping it safely—a service that under some conditions may be very valuable, and for which I would willingly pay, rather than not have it; and a service which, as to some forms of capital, may be even more obvious than as to money. For there are many forms of capital which will not keep, but must be constantly renewed; and many which are onerous to maintain if one has no immediate use for them. So, if the accumulator of capital helps the user of capital by loaning it to him, does not the user discharge the debt in full when he hands it back? Is not the secure preservation, the maintenance, the re-creation of capital, a complete offset to the use? Accumulation is the end and aim of abstinence. Abstinence can go no further and accomplish no more; nor of itself can it even do this. If we were merely to abstain from using it, how much wealth would disappear in a year! And how little would be left at the end of two years! Hence, if more is demanded for abstinence than the safe return of capital, is not labor wronged? Such ideas as these underlie the widespread opinion that interest can accrue only at the expense of labor, and is in fact a robbery of labor which in a social condition based on justice would be abolished.

The attempts to refute these views do not appear to me always successful. For instance, as it illustrates the usual reasoning, take Bastiat's oft-quoted illustration of the plane. One carpenter, James, at the expense of ten days' labor, makes himself a plane, which will last in use for 290 of the 300 working days of the year. William, another carpenter, proposes to borrow the plane for a year, offering to give back at the end of that time, when the plane will be worn out, a new plane equally as good. James objects to lending the plane on these terms, urging that if he merely gets back a plane he will have nothing to compensate him for the loss of the advantage which the use of the plane during the year would give him. William, admitting this, agrees not merely to return a plane, but, in addition, to give James a new plank. The agreement is carried out to mutual satisfaction. The plane is used up during the year, but at the end of the year James receives as good a one, and a plank in addition. He lends the new plane again and again, until finally it passes into the hands of his son, "who still continues to lend it," receiving a plank each time. This plank, which represents interest, is said to be a natural and equitable remuneration, as by giving it in return for the use of the plane, William "obtains the power which exists in the tool to increase the productiveness of labor," and is no worse off than he would have been had he not borrowed the plane; while James obtains no more than he would have had if he had retained and used the plane instead of lending it.

Is this really so? It will be observed that it is not affirmed that James could make the plane and William could not, for that would be to make the plank the reward of superior skill. It is only that James had abstained from consuming the result of his labor until he had accumulated it in the form of a plane—which is the essential idea of capital.

Now, if James had not lent the plane he could have used it for 290 days, when it would have been worn out, and he would have been obliged to take the remaining ten days of the working year to make a new plane. If William had not borrowed the plane he would have taken ten days to make himself a plane, which he could have used for the remaining 290 days. Thus, if we take a plank to represent the fruits of a day's labor with the aid of a plane, at the end of the year, had no borrowing taken place, each would have stood with reference to the plane as he commenced, James with a plane, and William with none, and each would have had as the result of the year's work 290 planks. If the condition of the borrowing had been what William first proposed, the return of a new plane, the same relative situation would have been secured. William would have worked for 290 days, and taken the last ten days to make the new plane to return to James. James would have taken the first ten days of the year to make another plane which would have lasted for 290 days, when he would have received a new plane from William. Thus, the simple return of the plane would have put each in the same position at the end of the year as if no borrowing had taken place. James would have lost nothing to the gain of William, and William would have gained nothing to the loss of James. Each would have had the return his labor would otherwise have yielded—viz., 290 planks, and James would have had the advantage with which he started, a new plane.

But when, in addition to the return of a plane, a plank is given, James at the end of the year will be in a better position than if there had been no borrowing and William in a worse. James will have 291 planks and a new plane, and William 289 planks and no plane. If William now borrows the plank as well as the plane on the same terms as before, he will at the end of the year have to return to James a plane, two planks and a fraction of a plank; and if this difference be again borrowed, and so on, is it not evident that the income of the one will progressively decline, and that of the other will progressively increase, until at length, if the operation be continued, the time will come when, as the result of the original lending of a plane, James will obtain the whole result of William's labor—that is to say, William will become virtually his slave?

Is interest, then, natural and equitable? There is nothing in this illustration to show it to be. Evidently what Bastiat (and many others) assigns as the basis of interest, "the power which exists in the tool to increase the productiveness of labor," is neither in justice nor in fact the basis of interest. The fallacy which makes Bastiat's illustration pass as conclusive with those who do not stop to analyze it, as we have done, is that with the loan of the plane they associate the transfer of the increased productive power which a plane gives to labor. But this is really not involved. The essential thing which James loaned to William was not the increased power which labor acquires from using planes. To suppose this, we should have to suppose that the making and using of planes was a trade secret or a patent right, when the illustration would become one of monopoly, not of capital. The essential thing which James loaned to William was not the privilege of applying his labor in a more effective way, but the use of the concrete result of ten days' labor. If "the power which exists in tools to increase the productiveness of labor" were the cause of interest, then the rate of interest would increase with the march of invention. This is not so. Nor yet will I be expected to pay more interest if I borrow a fifty-dollar sewing machine than if I borrow fifty dollars' worth of needles; if I borrow a steam engine than if I borrow a pile of bricks of equal value. Capital, like wealth, is interchangeable. It is not one thing; it is anything to that value within the circle of exchange. Nor yet does the improvement of tools add to the reproductive power of capital; it adds to the productive power of labor.

And I am inclined to think that if all wealth consisted of such things as planes, and all production was such as that of carpenters—that is to say, if wealth consisted but of the inert matter of the universe, and production of working up this inert matter into different shapes, that interest would be but the robbery of industry, and could not long exist. This is not to say that there would be no accumulation, for though the hope of increase is a motive for turning wealth into capital, it is not the motive, or, at least, not the main motive, for accumulating. Children will save their pennies for Christmas; pirates will add to their buried treasure; Eastern princes will accumulate hoards of coin; and men like Stewart or Vanderbilt, having become once possessed of the passion of accumulating, would continue as long as they could to add to their millions, even though accumulation brought no increase. Nor yet is it to say that there would be no borrowing or lending, for this, to a large extent, would be prompted by mutual convenience. If William had a job of work to be immediately begun and James one that would not commence until ten days thereafter, there might be a mutual advantage in the loan of the plane, though no plank should be given.

But all wealth is not of the nature of planes, or planks, or money, which has no reproductive power; nor is all production merely the turning into other forms of this inert matter of the universe. It is true that if I put away money, it will not increase. But suppose, instead, I put away wine. At the end of a year I will have an increased value, for the wine will have improved in quality. Or supposing that in a country adapted to them, I set out bees; at the end of a year I will have more swarms of bees, and the honey which they have made. Or, supposing, where there is a range, I turn out sheep, or hogs, or cattle; at the end of the year I will, upon the average, also have an increase.

Now what gives the increase in these cases is something which, though it generally requires labor to utilize it, is yet distinct and separable from labor—the active power of nature; the principle of growth, of reproduction, which everywhere characterizes all the forms of that mysterious thing or condition which we call life. And it seems to me that it is this which is the cause of interest, or the increase of capital over and above that due to labor. There are, so to speak, in the movements which make up the everlasting flux of nature, certain vital currents, which will, if we use them, aid us, with a force independent of our own efforts, in turning matter into the forms we desire—that is to say, into wealth.

While many things might be mentioned which, like money, or planes, or planks, or engines, or clothing, have no innate power of increase, yet other things are included in the terms wealth and capital which, like wine, will of themselves increase in quality up to a certain point; or, like bees or cattle, will of themselves increase in quantity; and certain other things, such as seeds, which, though the conditions which enable them to increase may not be maintained without labor, yet will, when these conditions are maintained, yield an increase, or give a return over and above that which is to be attributed to labor.

Now the interchangeability of wealth necessarily involves an average between all the species of wealth of any special advantage which accrues from the possession of any particular species, for no one would keep capital in one form when it could be changed into a more advantageous form. No one, for instance, would grind wheat into flour and keep it on hand for the convenience of those who desire from time to time to exchange wheat or its equivalent for flour, unless he could by such exchange secure an increase equal to that which, all things considered, he could secure by planting his wheat. No one, if he could keep them, would exchange a flock of sheep now for their net weight in mutton to be returned next year; for by keeping the sheep he would not only have the same amount of mutton next year, but also the lambs and the fleeces. No one would dig an irrigating ditch, unless those who by its aid are enabled to utilize the reproductive forces of nature would give him such a portion of the increase they receive as to make his capital yield him as much as theirs. And so, in any circle of exchange, the power of increase which the reproductive or vital force of nature gives to some species of capital must average with all; and he who lends, or uses in exchange, money, or planes, or bricks, or clothing, is not deprived of the power to obtain an increase, any more than if he had lent or put to a reproductive use so much capital in a form capable of increase.

There is also in the utilization of the variations in the powers of nature and of man which is effected by exchange, an increase which somewhat resembles that produced by the vital forces of nature. In one place, for instance, a given amount of labor will secure 200 in vegetable food or 100 in animal food. In another place, these conditions are reversed, and the same amount of labor will produce 100 in vegetable food or 200 in animal. In the one place, the relative value of vegetable to animal food will be as two to one, and in the other as one to two; and, supposing equal amounts of each to be required, the same amount of labor will in either place secure 150 of both. But by devoting labor in the one place to the procurement of vegetable food, and in the other, to the procurement of animal food, and exchanging to the quantity required, the people of each place will be enabled by the given amount of labor to procure 200 of both, less the losses and expenses of exchange; so that in each place the produce which is taken from use and devoted to exchange brings back an increase. Thus Whittington's cat, sent to a far country where cats are scarce and rats are plenty, returns in bales of goods and bags of gold.

Of course, labor is necessary to exchange, as it is to the utilization of the reproductive forces of nature, and the produce of exchange, as the produce of agriculture, is clearly the produce of labor; but yet, in the one case as in the other, there is a distinguishable force co-operating with that of labor, which makes it impossible to measure the result solely by the amount of labor expended, but renders the amount of capital and the time it is in use integral parts in the sum of forces. Capital aids labor in all of the different modes of production, but there is a distinction between the relations of the two in such modes of production as consist merely of changing the form or place of matter, as planing boards or mining coal; and such modes of production as avail themselves of the reproductive forces of nature, or of the power of increase arising from differences in the distribution of natural and human powers, such as the raising of grain or the exchange of ice for sugar. In production of the first kind, labor alone is the efficient cause; when labor stops, production stops. When the carpenter drops his plane as the sun sets, the increase of value, which he with his plane is producing, ceases until he begins his labor again the following morning. When the factory bell rings for closing, when the mine is shut down, production ends until work is resumed. The intervening time, so far as regards production, might as well be blotted out. The lapse of days, the change of seasons, is no element in the production that depends solely upon the amount of labor expended. But in the other modes of production to which I have referred, and in which the part of labor may be likened to the operations of lumbermen who throw their logs into the stream, leaving it to the current to carry them to the boom of the sawmill many miles below, time *is* an element. The seed in the ground germinates and grows while the farmer sleeps or plows new fields, and the everflowing currents of air and ocean bear Whittington's cat toward the rat-tormented ruler in the regions of romance.

To recur now to Bastiat's illustration. It is evident that if there is any reason why William at the end of the year should return to James more than an equally good plane, it does not spring, as Bastiat has it, from the increased power which the tool gives to labor, for that, as I have shown, is not an element; but it springs from the element of time—the difference of a year between the lending and return of the plane. Now, if the view is confined to the illustration, there is nothing to suggest how this element should operate, for a plane at the end of the year has no greater value than a plane at the beginning. But if we substitute for the plane a calf, it is clearly to be seen that to put James in as good a position as if he had not lent, William at the end of the year must return, not a calf, but a cow. Or, if we suppose that the ten days' labor had been devoted to planting corn, it is evident that James would not have been fully recompensed if at the end of the year he had received simply so much planted corn, for during the year the planted corn would have germinated and grown and multiplied; and so if the plane had been devoted to exchange, it might during the year have been turned over several times, each exchange yielding an increase to James. Now, therefore, as James' labor might have been applied in any of those ways—or what amounts to the same thing, some of the labor devoted to making planes might have been thus transferred—he will not make a plane for William to use for the year unless he gets back more than a plane. And William can afford to give back more than a plane, because the same general average of the advantages of labor applied in different modes will enable him to obtain from his labor an advantage from the element of time. It is this general averaging, or as we may say, "pooling" of advantages, which necessarily takes place where the exigencies of society require the simultaneous carrying on of the different modes of production, which gives to the possession of wealth incapable in itself of increase an advantage similar to that which attaches to wealth used in such a way as to gain from the element of time. And, in the last analysis, the advantage which is given by the lapse of time springs from the generative force of nature and the varying powers of nature and of man.

Were the quality and capacity of matter everywhere uniform, and all productive power in man, there would be no interest. The advantage of superior tools might at times be transferred on terms resembling the payment of interest, but such transactions would be irregular and intermittent—the exception, not the rule. For the power of obtaining such returns would not, as now, inhere in the possession of capital, and the advantage of time would operate only in peculiar circumstances. That I, having a thousand dollars, can certainly let it out at interest, does not arise from the fact that there are others, not having a thousand dollars, who will gladly pay me for the use of it, if they can get it no other way; but from the fact that the capital which my thousand dollars represents has the power of yielding an increase to whomsoever has it, even though he be a millionaire. For the price which anything will bring does not depend upon what the buyer would be willing to give rather than go without it, so much as upon what the seller can otherwise get. For instance, a manufacturer who wishes to retire from business has machinery to the value of $100,000. If he cannot, should he sell, take this $100,000 and invest it so that it will yield him interest, it will be immaterial to him, risk being eliminated, whether he obtains the whole price at once or in installments, and if the purchaser has the requisite capital, which we must suppose in order that the transaction may rest on its own merits, it will be immaterial whether he pay at once or after a time. If the purchaser has not the required capital, it may be to his convenience that payments should be delayed, but it would be only in exceptional circumstances that the seller would ask, or the buyer would consent, to pay any premium on this account; nor in such cases would this premium be properly interest. For interest is not properly a payment made for the use of capital, but a return accruing from the increase of capital. If the capital did not yield an increase, the cases would be few and exceptional in which the owner would get a premium. William would soon find out if it did not pay him to give a plank for the privilege of deferring payment on James' plane.

In short, when we come to analyze production we find it to fall into three modes—viz:

Adapting, or changing natural products either in form or in place so as to fit them for the satisfaction of human desire.

Growing, or utilizing the vital forces of nature, as by raising vegetables or animals.

EXCHANGING, or utilizing, so as to add to the general sum of wealth, the higher powers of those natural forces which vary with locality, or of those human forces which vary with situation, occupation, or character.

In each of these three modes of production capital may aid labor—or, to speak more precisely, in the first mode capital may aid labor, but is not absolutely necessary; in the others capital must aid labor, or is necessary.

Now, while by adapting capital in proper forms we may increase the effective power of labor to impress upon matter the character of wealth, as when we adapt wood and iron to the form and use of a plane; or iron, coal, water, and oil to the form and use of a steam engine; or stone, clay, timber, and iron to that of a building, yet the characteristic of this use of capital is, that the benefit is in the use. When, however, we employ capital in the second of these modes, as when we plant grain in the ground, or place animals on a stock farm, or put away wine to improve with age, the benefit arises, not from the use, but from the increase. And so, when we employ capital in the third of these modes, and instead of using a thing we exchange it, the benefit is in the increase or greater value of the things received in return.

Primarily, the benefits which arise from use go to labor, and the benefits which arise from increase, to capital. But, inasmuch as the division of labor and the interchangeability of wealth necessitate and imply an averaging of benefits, in so far as these different modes of production correlate with each other, the benefits that arise from one will average with the benefits that arise from the others, for neither labor nor capital will be devoted to any mode of production while any other mode which is open to them will yield a greater return. That is to say, labor expended in the first mode of production will get, not the whole return, but the return minus such part as is necessary to give to capital such an increase as it could have secured in the other modes of production, and capital engaged in the second and third modes will obtain, not the whole increase, but the increase minus what is sufficient to give to labor such reward as it could have secured if expended in the first mode.

Thus interest springs from the power of increase which the reproductive forces of nature, and the in effect analogous capacity for exchange, give to capital. It is not an arbitrary, but a natural thing; it is not the result of a particular social organization, but of laws of the universe which underlie society. It is, therefore, just.

They who talk about abolishing interest fall into an error similar to that previously pointed out as giving its plausibility to the doctrine that wages are drawn from capital. When they thus think of interest, they think only of that which is paid by the user of capital to the owner of capital. But, manifestly, this is not all interest, but only some interest. Whoever uses capital and obtains the increase it is capable of giving receives interest. If I plant and care for a tree until it comes to maturity, I receive, in its fruit, interest upon the capital I have thus accumulated—that is, the labor I have expended. If I raise a cow, the milk which she yields me, morning and evening, is not merely the reward of the labor then exerted; but interest upon the capital which my labor, expended in raising her, has accumulated in the cow. And so, if I use my own capital in directly aiding production, as by machinery, or in indirectly aiding production, in exchange, I receive a special and distinguishable advantage from the reproductive character of capital, which is as real, though perhaps not as clear, as though I had lent my capital to another and he had paid me interest.

CHAPTER IV

OF SPURIOUS CAPITAL AND OF PROFITS OFTEN MISTAKEN FOR INTEREST

The belief that interest is the robbery of industry is, I am persuaded, in large part due to a failure to discriminate between what is really capital and what is not, and between profits which are properly interest and profits which arise from other sources than the use of capital. In the speech and literature of the day every one is styled a capitalist who possesses what, independent of his labor, will yield him a return, while whatever is thus received is spoken of as the earnings or takings of capital, and we everywhere hear of the conflict of labor and capital. Whether there is, in reality, any conflict between labor and capital, I do not yet ask the reader to make up his mind; but it will be well here to clear away some misapprehensions which confuse the judgment.

Attention has already been called to the fact that land values, which constitute such an enormous part of what is commonly called capital, are not capital at all; and that rent, which is as commonly included in the receipts of capital, and which takes an ever-increasing portion of the produce of an advancing community, is not the earnings of capital, and must be carefully separated from interest. It is not necessary now to dwell further upon this point. Attention has likewise been called to the fact that the stocks, bonds, etc., which constitute another great part of what is commonly called capital, are not capital at all; but, in some of their shapes, these evidences of indebtedness so closely resemble capital and in some cases actually perform, or seem to perform, the functions of capital, while they yield a return to their owners which is not only spoken of as interest, but has every semblance of interest, that it is worth while, before attempting to clear the idea of interest from some other ambiguities that beset it, to speak again of these at greater length.

Nothing can be capital, let it always be remembered, that is not wealth—that is to say, nothing can be capital that does not consist of actual, tangible things, not the spontaneous offerings of nature, which have in themselves, and not by proxy, the power of directly or indirectly ministering to human desire.

Thus, a government bond is not capital, nor yet is it the representative of capital. The capital that was once received for it by the government has been consumed unproductively—blown away from the mouths of cannon, used up in war ships, expended in keeping men marching and drilling, killing and destroying. The bond cannot represent capital that has been destroyed. It does not represent capital at all. It is simply a solemn declaration that the government will, some time or other, take by taxation from the then existing stock of the people, so much wealth, which it will turn over to the holder of the bond; and that, in the meanwhile, it will, from time to time, take, in the same way, enough to make up to the holder the increase which so much capital as it some day promises to give him would yield him were it actually in his possession. The immense sums which are thus taken from the produce of every modern country to pay interest on public debts are not the earnings or increase of capital—are not really interest in the strict sense of the term, but are taxes levied on the produce of labor and capital, leaving so much less for wages and so much less for real interest.

But, supposing the bonds have been issued for the deepening of a river bed, the construction of lighthouses, or the erection of a public market; or supposing, to embody the same idea while changing the illustration, they have been issued by a railroad company. Here they do represent capital, existing and applied to productive uses, and like stock in a dividend paying company may be considered as evidences of the ownership of capital. But they can be so considered only in so far as they actually represent capital, and not as they have been issued in excess of the capital used. Nearly all our railroad companies and other incorporations are loaded down in this way. Where one dollar's worth of capital has been really used, certificates for two, three, four, five, or even ten, have been issued, and upon this fictitious amount interest or dividends are paid with more or less regularity. Now, what, in excess of the amount due as interest to the real capital invested, is thus earned by these companies and thus paid out, as well as the large sums absorbed by managing rings and never accounted for, is evidently not taken from the aggregate produce of the community on account of the services rendered by capital—it is not interest. If we are restricted to the terminology of economic writers who decompose profits into interest, insurance, and wages of superintendence, it must fall into the category of wages of superintendence.

But while wages of superintendence clearly enough include the income derived from such personal qualities as skill, tact, enterprise, organizing ability, inventive power, character, etc., to the profits we are speaking of there is another contributing element, which can only arbitrarily be classed with these—the element of monopoly.

When James I granted to his minion the exclusive privilege of making gold and silver thread, and prohibited, under severe penalties, every one else from making such thread, the income which Buckingham enjoyed in consequence did not arise from the interest upon the capital invested in the manufacture, nor from the skill, etc., of those who really conducted the operations, but from what he got from the king—viz., the exclusive privilege—in reality the power to levy a tax for his own purposes upon all the users of such thread. From a similar source comes a large part of the profits which are commonly confounded with the earnings of capital. Receipts from the patents granted for a limited term of years for the purpose of encouraging invention are clearly attributable to this source, as are the returns derived from monopolies created by protective tariffs under the pretense of encouraging home industry. But there is another far more insidious and far more general form of monopoly. In the aggregation of large masses of capital under a common control there is developed a new and essentially different power from that power of increase which is a general characteristic of capital and which gives rise to interest. While the latter is, so to speak, constructive in its nature, the power which, as aggregation proceeds, rises upon it is destructive. It is a power of the same kind as that which James granted to Buckingham, and it is often exercised with as reckless a disregard, not only of the industrial, but of the personal rights of individuals. A railroad company approaches a small town as a highwayman approaches his victim. The threat, "If you do not accede to our terms we will leave your town two or three miles to one side!" is as efficacious as the "Stand and deliver," when backed by a cocked pistol. For the threat of the railroad company is not merely to deprive the town of the benefits which the railroad might give; it is to put it in a far worse position than if no railroad had been built. Or if, where there is water communication, an opposition boat is put on; rates are reduced until she is forced off, and then the public are compelled to pay the cost of the operation, just as the Rohillas were obliged to pay the forty lacs with which Surajah Dowlah hired of Warren Hastings an English force to assist him in desolating their country and decimating their people. And just as robbers unite to plunder in concert and divide the spoil, so do the trunk lines of railroad unite to raise rates and pool their earnings, or the Pacific roads form a combination with the Pacific Mail Steamship Company by which toll gates are virtually established on land and ocean. And just as Buckingham's creatures, under authority of the gold thread patent, searched private houses, and seized papers and persons for purposes of lust and extortion, so does the great telegraph company which, by the power of associated capital, deprives the people of the United States of the full benefits of a beneficent invention, tamper with correspondence and crush out newspapers which offend it.

It is necessary only to allude to these things, not to dwell on them. Every one knows the tyranny and rapacity with which capital when concentrated in large amounts is frequently wielded to corrupt, to rob, and to destroy. What I wish to call the reader's attention to is that profits thus derived are not to be confounded with the legitimate returns of capital as an agent of production. They are for the most part to be attributed to a maladjustment of forces in the legislative department of government and to a blind adherence to ancient barbarisms and the superstitious reverence for the technicalities of a narrow profession in the administration of law; while the general cause which in advancing communities tends, with the concentration of wealth, to the concentration of power, is the solution of the great problem we are seeking for, but have not yet found.

Any analysis will show that much of the profits which are, in common thought, confounded with interest are in reality due, not to the power of capital, but to the power of concentrated capital, or of concentrated capital acting upon bad social adjustments. And it will also show that what are clearly and properly wages of superintendence are very frequently confounded with the earnings of capital.

And, so, profits properly due to the elements of risk are frequently confounded with interest. Some people acquire wealth by taking chances which to the majority of people must necessarily bring loss. Such are many forms of speculation, and especially that mode of gambling known as stock dealing. Nerve, judgment, the possession of capital, skill in what in lower forms of gambling are known as the arts of the confidence man and blackleg, give advantage to the individual; but, just as at a gaming table, whatever one gains some one else must lose.

Now, taking the great fortunes that are so often referred to as exemplifying the accumulative power of capital—the Dukes of Westminster and Marquises of Bute, the Rothschilds, Astors, Stewarts, Vanderbilts, Goulds, Stanfords, and Floods—it is upon examination readily seen that they have been built up, in greater or less part, not by interest, but by elements such as we have been reviewing.

How necessary it is to note the distinctions to which I have been calling attention is shown in current discussions, where the shield seems alternately white or black as the standpoint is shifted from one side to the other. On the one hand we are called upon to see, in the existence of deep poverty side by side with vast accumulations of wealth, the aggressions of capital on labor, and in reply it is pointed out that capital aids labor, and hence we are asked to conclude that there is nothing unjust or unnatural in the wide gulf between rich and poor; that wealth is but the reward of industry, intelligence, and thrift; and poverty but the punishment of indolence, ignorance, and imprudence.

CHAPTER V

THE LAW OF INTEREST

Let us turn now to the law of interest, keeping in mind two things to which attention has heretofore been called—viz:

First—That it is not capital which employs labor, but labor which employs capital.

Second—That capital is not a fixed quantity, but can always be increased or decreased, (1) by the greater or less application of labor to the production of capital, and (2) by the conversion of wealth into capital, or capital into wealth, for capital being but wealth applied in a certain way, wealth is the larger and inclusive term.

It is manifest that under conditions of freedom the maximum that can be given for the use of capital will be the increase it will bring, and the minimum or zero will be the replacement of capital; for above the one point the borrowing of capital would involve a loss, and below the other, capital could not be maintained.

Observe, again: It is not, as is carelessly stated by some writers, the increased efficiency given to labor by the adaptation of capital to any special form or use which fixes this maximum, but the average power of increase which belongs to capital generally. The power of applying itself in advantageous forms is a power of labor, which capital as capital cannot claim nor share. A bow and arrows will enable an Indian to kill, let us say, a buffalo every day, while with sticks and stones he could hardly kill one in a week; but the weapon maker of the tribe could not claim from the hunter six out of every seven buffaloes killed as a return for the use of a bow and arrows; nor will capital invested in a woolen factory yield to the capitalist the difference between the produce of the factory and what the same amount of labor could have obtained with the spinning-wheel and handloom. William when he borrows a plane from James does not in that obtain the advantage of the increased efficiency of labor when using a plane for the smoothing of boards over what it has when smoothing them with a shell or flint. The progress of knowledge has made the advantage involved in the use of planes a common property and power of labor. What he gets from James is merely such advantage as the element of a year's time will give to the possession of so much capital as is represented by the plane.

Now, if the vital forces of nature which give an advantage to the element of time be the cause of interest, it would seem to follow that this maximum rate of interest would be determined by the strength of these forces and the extent to which they are engaged in production. But while the reproductive force of nature seems to vary enormously, as, for instance, between the salmon, which spawns thousands of eggs, and the whale, which brings forth a single calf at intervals of years; between the rabbit and the elephant, the thistle and the gigantic redwood, it appears from the way the natural balance is maintained that there is an equation between the reproductive and destructive forces of nature, which in effect brings the principle of increase to a uniform point. This natural balance man has within narrow limits the power to disturb, and by the modification of natural conditions may avail himself at will of the varying strength of the reproductive force in nature. But when he does so, there arises from the wide scope of his desires another principle which brings about in the increase of wealth a similar equation and balance to that which is effected in nature between the different forms of life. This equation exhibits itself through values. If, in a country adapted to both, I go to raising rabbits and you to raising horses, my rabbits may, until the natural limit is reached, increase faster than your horses. But my capital will not increase faster, for the effect of the varying rates of increase will be to lower the value of rabbits as compared with horses, and to increase the value of horses as compared with rabbits.

Though the varying strength of the vital forces of nature is thus brought to uniformity, there may be a difference in the different stages of social development as to the proportionate extent to which, in the aggregate production of wealth, these vital forces are enlisted. But as to this, there are two remarks to be made. In the first place, although in such a country as England the part taken by manufactures in the aggregate wealth production has very much increased as compared with the part taken by agriculture, yet it is to be noticed that to a very great extent this is true only of the political or geographical division, and not of the industrial community. For industrial communities are not limited by political divisions, or bounded by seas or mountains. They are limited only by the scope of their exchanges, and the proportion which in the industrial economy of England agriculture and stock-raising bear to manufactures is averaged with Iowa and Illinois, with Texas and California, with Canada and India, with Queensland and the Baltic—in short, with every country to which the world-wide exchanges of England extend. In the next place, it is to be remarked that although in the progress of civilization the tendency is to the relative increase of manufactures, as compared with agriculture, and consequently to a proportionately less reliance upon the reproductive forces of nature, yet this is accompanied by a corresponding extension of exchanges, and hence a greater calling in of the power of increase which thus arises. So these tendencies, to a great extent, and, probably, so far as we have yet gone, completely, balance each other, and preserve the equilibrium which fixes the average increase of capital, or the normal rate of interest.

Now, this normal point of interest, which lies between the necessary maximum and the necessary minimum of the return to capital, must, wherever it rests, be such that all things (such as the feeling of security, desire for accumulation, etc.) considered, the reward of capital and the reward of labor will be equal—that is to say, will give an equally attractive result for the exertion or sacrifice involved. It is impossible, perhaps, to formulate this point, as wages are habitually estimated in quantity, and interest in a ratio; but if we suppose a given quantity of wealth to be the produce of a given amount of labor, co-operating for a stated time with a certain amount of capital, the proportion in which the produce would be divided between the labor and the capital would afford a comparison. There must be such a point at, or rather, about, which the rate of interest must tend to settle; since, unless such an equilibrium were effected, labor would not accept the use of capital, or capital would not be placed at the disposal of labor. For labor and capital are but different forms of the same thing—human exertion. Capital is produced by labor; it is, in fact, but labor impressed upon matter—labor stored up in matter, to be released again as needed, as the heat of the sun stored up in coal is released in the furnace. The use of capital in production is, therefore, but a mode of labor. As capital can be used only by being consumed, its use is the expenditure of labor, and for the maintenance of capital, its production by labor must be commensurate with its consumption in aid of labor. Hence the principle that, under circumstances which permit free competition, operates to bring wages to a common standard and profits to a substantial equality—the principle that men will seek to gratify their desires with the least exertion—operates to establish and maintain this equilibrium between wages and interest.

This natural relation between interest and wages—this equilibrium at which both will represent equal returns to equal exertions—may be stated in a form which suggests a relation of opposition; but this opposition is only apparent. In a partnership between Dick and Harry, the statement that Dick receives a certain proportion of the profits implies that the portion of Harry is less or greater as Dick's is greater or less; but where, as in this case, each gets only what he adds to the common fund, the increase of the portion of the one does not decrease what the other receives.

And this relation fixed, it is evident that interest and wages must rise and fall together, and that interest cannot be increased without increasing wages; nor wages lowered without depressing interest. For if wages fall, interest must also fall in proportion, else it becomes more profitable to turn labor into capital than to apply it directly; while, if interest falls, wages must likewise proportionately fall, or else the increment of capital would be checked.

We are, of course, not speaking of particular wages and particular interest, but of the general rate of wages and the general rate of interest, meaning always by interest the return which capital can secure, less insurance and wages of superintendence. In a particular case, or a particular employment, the tendency of wages and interest to an equilibrium may be impeded; but between the general rate of wages and the general rate of interest, this tendency must be prompt to act. For though in a particular branch of production the line may be clearly drawn between those who furnish labor and those who furnish capital, yet even in communities where there is the sharpest distinction between the general class laborers and the general class capitalists, these two classes shade off into each other by imperceptible gradations, and on the extremes where the two classes meet in the same persons, the interaction which restores equilibrium, or rather prevents its disturbance, can go on without obstruction, whatever obstacles may exist where the separation is complete. And, furthermore, it must be remembered, as has before been stated, that capital is but a portion of wealth, distinguished from wealth generally only by the purpose to which it is applied, and, hence, the whole body of wealth has upon the relations of capital and labor the same equalizing effect that a fly-wheel has upon the motion of machinery, taking up capital when it is in excess and giving it out again when there is a deficiency, just as a jeweler may give his wife diamonds to wear when he has a superabundant stock, and put them in his showcase again when his stock becomes reduced. Thus any tendency on the part of interest to rise above the equilibrium with wages must immediately beget not only a tendency to direct labor to the production of capital, but also the application of wealth to the uses of capital; while any tendency of wages to rise above the equilibrium with interest must in like manner beget not only a tendency to turn labor from the production of capital, but also to lessen the proportion of capital by diverting from a productive to a non-productive use some of the articles of wealth of which capital is composed.

To recapitulate: There is a certain relation or ratio between wages and interest, fixed by causes, which, if not absolutely permanent, slowly change, at which enough labor will be turned into capital to supply the capital which, in the degree of knowledge, state of the arts, density of population, character of occupations, variety, extent and rapidity of exchanges, will be demanded for production, and this relation or ratio the interaction of labor and capital constantly maintains; hence interest must rise and fall with the rise and fall of wages.

To illustrate: The price of flour is determined by the price of wheat and cost of milling. The cost of milling varies slowly and but little, the difference being, even at long intervals, hardly perceptible; while the price of wheat varies frequently and largely. Hence we correctly say that the price of flour is governed by the price of wheat. Or, to put the proposition in the same form as the preceding: There is a certain relation or ratio between the value of wheat and the value of flour, fixed by the cost of milling, which relation or ratio the interaction between the demand for flour and the supply of wheat constantly maintains; hence the price of flour must rise and fall with the rise and fall of the price of wheat.

Or, as, leaving the connecting link, the price of wheat, to inference, we say that the price of flour depends upon the character of the seasons, wars, etc., so may we put the law of interest in a form which directly connects it with the law of rent, by saying that the general rate of interest will be determined by the return to capital upon the poorest land to which capital is freely applied —that is to say, upon the best land open to it without the payment of rent. Thus we bring the law of interest into a form which shows it to be a corollary of the law of rent.

We may prove this conclusion in another way: For that interest must decrease as rent increases, we can plainly see if we eliminate wages. To do this, we must, to be sure, imagine a universe organized on totally different principles. Nevertheless, we may imagine what Carlyle would call a fool's paradise, where the production of wealth went on without the aid of labor, and solely by the reproductive force of capital—where sheep bore ready-made clothing on their backs, cows presented butter and cheese, and oxen, when they got to the proper point of fatness, carved themselves into beefsteaks and roasting ribs; where houses grew from the seed, and a jackknife thrown upon the ground would take root and in due time bear a crop of assorted cutlery. Imagine certain capitalists transported, with their capital in appropriate forms, to such a place. Manifestly, they would get, as the return for their capital, the whole amount of wealth it produced only so long as none of its produce was demanded as rent. When rent arose, it would come out of the produce of capital, and as it increased, the return to the owners of capital must necessarily diminish. If we imagine the place where capital possessed this power of producing wealth without the aid of labor to be of limited extent, say an island, we shall see that as soon as capital had increased to the limit of the island to support it, the return to capital must fall to a trifle above its minimum of mere replacement, and the land owners would receive nearly the whole produce as rent, for the only alternative capitalists would have would be to throw their capital into the sea. Or, if we imagine such an island to be in communication with the rest of the world, the return to capital would settle at the rate of return in other places. Interest there would be neither higher nor lower than anywhere else. Rent would obtain the whole of the superior advantage, and the land of such an island would have a great value.

To sum up, the law of interest is this:

The relation between wages and interest is determined by the average power of increase which attaches to capital from its use in reproductive modes. As rent arises, interest will fall as wages fall, or will be determined by the margin of cultivation.

I have endeavored at this length to trace out and illustrate the law of interest more in deference to the existing terminology and modes of thought than from the real necessities of our inquiry, were it unembarrassed by befogging discussions. In truth, the primary division of wealth in distribution is dual, not tripartite. Capital is but a form of labor, and its distinction from labor is in reality but a subdivision, just as the division of labor into skilled and unskilled would be. In our examination we have reached the same point as would have been attained had we simply treated capital as a form of labor, and sought the law which divides the produce between rent and wages; that is to say, between the possessors of the two factors, natural substances and powers, and human exertion—which two factors by their union produce all wealth.

CHAPTER VI

WAGES AND THE LAW OF WAGES

We have by inference already obtained the law of wages. But to verify the deduction and to strip the subject of all ambiguities, let us seek the law from an independent starting point.

There is, of course, no such thing as a common rate of wages, in the sense that there is at any given time and place a common rate of interest. Wages, which include all returns received from labor, not only vary with the differing powers of individuals, but, as the organization of society becomes elaborate, vary largely as between occupations. Nevertheless, there is a certain general relation between all wages, so that we express a clear and well-understood idea when we say that wages are higher or lower in one time or place than in another. In their degrees, wages rise and fall in obedience to a common law. What is this law?

The fundamental principle of human action—the law that is to political economy what the law of gravitation is to physics—is that men seek to gratify their desires with the least exertion. Evidently, this principle must bring to an equality, through the competition it induces, the reward gained by equal exertions under similar circumstances. When men work for themselves, this equalization will be largely effected by the equation of prices; and between those who work for themselves and those who work for others, the same tendency to equalization will operate. Now, under this principle, what, in conditions of freedom, will be the terms at which one man can hire others to work for him? Evidently, they will be fixed by what the men could make if laboring for themselves. The principle which will prevent him from having to give anything above this, except what is necessary to induce the change, will also prevent them from taking less. Did they demand more, the competition of others would prevent them from getting employment. Did he offer less, none would accept the terms, as they could obtain greater results by working for themselves. Thus, although the employer wishes to pay as little as possible, and the employee to receive as much as possible, wages will be fixed by the value or produce of such labor to the laborers themselves. If wages are temporarily carried either above or below this line, a tendency to carry them back at once arises.

But the result, or the earnings of labor, as is readily seen in those primary and fundamental occupations in which labor first engages, and which, even in the most highly developed condition of society, still form the base of production, does not depend merely upon the intensity or quality of the labor itself. Wealth is the product of two factors, land and labor, and what a given amount of labor will yield will vary with the powers of the natural opportunities to which it is applied. This being the case, the principle that men seek to gratify their desires with the least exertion will fix wages at the produce of such labor at the point of highest natural productiveness open to it. Now, by virtue of the same principle, the highest point of natural productiveness open to labor under existing conditions will be the lowest point at which production continues, for men, impelled by a supreme law of the human mind to seek the satisfaction of their desires with the least exertion, will not expend labor at a lower point of productiveness while a higher is open to them. Thus the wages which an employer must pay will be measured by the lowest point of natural productiveness to which production extends, and wages will rise or fall as this point rises or falls.

To illustrate: In a simple state of society, each man, as is the primitive mode, works for himself—some in hunting, let us say, some in fishing, some in cultivating the ground. Cultivation, we will suppose, has just begun, and the land in use is all of the same quality, yielding a similar return to similar exertions. Wages, therefore—for, though there is neither employer nor employed, there are yet wages—will be the full produce of labor, and, making allowance for the difference of agreeableness, risk, etc., in the three pursuits, they will be on the average equal in each—that is to say, equal exertions will yield equal results. Now, if one of their number wishes to employ some of his fellows to work for him instead of for themselves, he must pay wages fixed by this full, average produce of labor.

Let a period of time elapse. Cultivation has extended, and, instead of land of the same quality, embraces lands of different qualities. Wages, now, will not be as before, the average produce of labor. They will be the average produce of labor at the margin of cultivation, or the point of lowest return. For, as men seek to satisfy their desires with the least possible exertion, the point of lowest return in cultivation must yield to labor a return equivalent to the average return in hunting and fishing.* Labor will no longer yield equal returns to equal exertions, but those who expend their labor on the superior land will obtain a greater produce for the same exertion than those who cultivate the inferior land. Wages, however, will still be equal, for this

* This equalization will be effected by the equation of prices.

excess which the cultivators of the superior land receive is in reality rent, and if land has been subjected to individual ownership will give it a value. Now, if, under these changed circumstances, one member of this community wishes to hire others to work for him, he will have to pay only what the labor yields at the lowest point of cultivation. If thereafter the margin of cultivation sinks to points of lower and lower productiveness, so must wages sink; if, on the contrary, it rises, so also must wages rise; for, just as a free body tends to take the shortest route to the earth's center, so do men seek the easiest mode to the gratification of their desires.

Here, then, we have the law of wages, as a deduction from a principle most obvious and most universal. That wages depend upon the margin of cultivation—that they will be greater or less as the produce which labor can obtain from the highest natural opportunities open to it is greater or less, flows from the principle that men will seek to satisfy their wants with the least exertion.

Now, if we turn from simple social states to the complex phenomena of highly civilized societies, we shall find upon examination that they also fall under this law.

In such societies, wages differ widely, but they still bear a more or less definite and obvious relation to each other. This relation is not invariable, as at one time a philosopher of repute may earn by his lectures many fold the wages of the best mechanic, and at another can hardly hope for the pay of a footman; as in a great city occupations may yield relatively high wages, which in a new settlement would yield relatively low wages; yet these variations between wages may, under all conditions, and in spite of arbitrary divergences caused by custom, law, etc., be traced to certain circumstances. In one of his most interesting chapters Adam Smith thus enumerates the principal circumstances "which make up for a small pecuniary gain in some employments and counter-balance a great one in others: First, the agreeableness or disagreeableness of the employments themselves. Secondly, the easiness and cheapness, or the difficulty and expense of learning them. Thirdly, the constancy or inconstancy of employment in them. Fourthly, the small or great trust which must be reposed in them. Fifthly, the probability or improbability of success in them." * It is not necessary to dwell in detail on these causes of variation in wages between different employments. They have been admirably explained and illustrated by Adam Smith and the economists who have followed him, who have well worked out the details, even if they have failed to apprehend the main law.

The effect of all the circumstances which give rise to the differences between wages in different occupations may be included as supply and demand, and it is perfectly correct to say that the wages in different occupations will vary relatively according to differences in the supply and demand of labor—meaning by demand the call which the community as a whole makes for services of the particular kind, and by supply the relative amount of labor which, under the existing conditions, can be determined to the performance of those particular services. But though this is true as to the relative differences of wages, when it is said, as is commonly said, that the general rate of wages is determined by supply and demand, the words are meaningless. For supply and demand are but relative terms. The supply of labor can only mean labor offered in exchange for labor or the produce of labor, and the demand for labor can only mean labor or the produce of labor offered in exchange for labor. Supply is thus demand, and demand supply,

* This last, which is analogous to the element of risk in profits, accounts for the high wages of successful lawyers, physicians, contractors, actors, etc.

and, in the whole community, one must be co-extensive with the other. This is clearly apprehended by the current political economy in relation to sales, and the reasoning of Ricardo, Mill, and others, which proves that alterations in supply and demand cannot produce a general rise or fall of values, though they may cause a rise or fall in the value of a particular thing, is as applicable to labor. What conceals the absurdity of speaking generally of supply and demand in reference to labor is the habit of considering the demand for labor as springing from capital and as something distinct from labor; but the analysis to which this idea has been heretofore subjected has sufficiently shown its fallacy. It is indeed evident from the mere statement, that wages can never permanently exceed the produce of labor, and hence that there is no fund from which wages can for any time be drawn, save that which labor constantly creates.

But, though all the circumstances which produce the differences in wages between occupations may be considered as operating through supply and demand, they, or rather, their effects, for sometimes the same cause operates in both ways, may be separated into two classes, according as they tend only to raise apparent wages or as they tend to raise real wages—that is, to increase the average reward for equal exertion. The high wages of some occupations much resemble what Adam Smith compares them to, the prizes of a lottery, in which the great gain of one is made up from the losses of many others. This is not only true of the professions by means of which Dr. Smith illustrates the principle, but is largely true of the wages of superintendence in mercantile pursuits, as shown by the fact that over ninety per cent. of the mercantile firms that commence business ultimately fail. The higher wages of those occupations which can be prosecuted only in certain states of the weather, or are otherwise intermittent and uncertain, are also of this class; while differences that arise from hardship, discredit, unhealthiness, etc., imply differences of sacrifice, the increased compensation for which only preserves the level of equal returns for equal exertions. All these differences are, in fact, equalizations, arising from circumstances which, to use the words of Adam Smith, "make up for a small pecuniary gain in some employments and counterbalance a great one in others." But, besides these merely apparent differences, there are real differences in wages between occupations, which are caused by the greater or less rarity of the qualities required —greater abilities or skill, whether natural or acquired, commanding on the average greater wages. Now, these qualities, whether natural or acquired, are essentially analogous to differences in strength and quickness in manual labor, and as in manual labor the higher wages paid the man who can do more would be based upon wages paid to those who can do only the average amount, so wages in the occupations requiring superior abilities and skill must depend upon the common wages paid for ordinary abilities and skill.

It is, indeed, evident from observation, as it must be from theory, that whatever be the circumstances which produce the differences of wages in different occupations, and although they frequently vary in relation to each other, producing, as between time and time, and place and place, greater or less relative differences, yet the rate of wages in one occupation is always dependent on the rate in another, and so on, down, until the lowest and widest stratum of wages is reached, in occupations where the demand is more nearly uniform and in which there is the greatest freedom to engage.

For, although barriers of greater or less difficulty may exist, the amount of labor which can be determined to any particular pursuit is nowhere absolutely fixed. All mechanics could act as laborers, and many laborers could readily become mechanics; all storekeepers could act as shopmen, and many shopmen could easily become storekeepers; many farmers would, upon inducement, become hunters or miners, fishermen or sailors, and many hunters, miners, fishermen, and sailors know enough of farming to turn their hands to it on demand. In each occupation there are men who unite it with others, or who alternate between occupations, while the young men who are constantly coming in to fill up the ranks of labor are drawn in the direction of the strongest inducements and least resistances. And further than this, all the gradations of wages shade into each other by imperceptible degrees, instead of being separated by clearly defined gulfs. The wages, even of the poorer paid mechanics, are generally higher than the wages of simple laborers, but there are always some mechanics who do not, on the whole, make as much as some laborers; the best paid lawyers receive much higher wages than the best paid clerks, but the best paid clerks make more than some lawyers, and in fact the worst paid clerks make more than the worst paid lawyers. Thus, on the verge of each occupation, stand those to whom the inducements between one occupation and another are so nicely balanced that the slightest change is sufficient to determine their labor in one direction or another. Thus, any increase or decrease in the demand for labor of a certain kind cannot, except temporarily, raise wages in that occupation above, nor depress them below, the relative level with wages in other occupations, which is determined by the circumstances previously adverted to, such as relative agreeableness or continuity of employment, etc. Even, as experience shows, where artificial barriers are imposed to this interaction, such as limiting laws, guild regulations, the establishment of caste, etc., they may interfere with, but cannot prevent, the maintenance of this equilibrium. They operate only as dams, which pile up the water of a stream above its natural level, but cannot prevent its overflow.

Thus, although they may from time to time alter in relation to each other, as the circumstances which determine relative levels change, yet it is evident that wages in all strata must ultimately depend upon wages in the lowest and widest stratum—the general rate of wages rising or falling as these rise or fall.

Now, the primary and fundamental occupations, upon which, so to speak, all others are built up, are evidently those which procure wealth directly from nature; hence the law of wages in them must be the general law of wages. And, as wages in such occupations clearly depend upon what labor can produce at the lowest point of natural productiveness to which it is habitually applied; therefore, wages generally depend upon the margin of cultivation, or, to put it more exactly, upon the highest point of natural productiveness to which labor is free to apply itself without the payment of rent.

So obvious is this law that it is often apprehended without being recognized. It is frequently said of such countries as California and Nevada that cheap labor would enormously aid their development, as it would enable the working of the poorer but most extensive deposits of ore. A relation between low wages and a low point of production is perceived by those who talk in this way, but they invert cause and effect. It is not low wages which will cause the working of low-grade ore, but the extension of production to the lower point which will diminish wages. If wages could be arbitrarily forced down, as has sometimes been attempted by statute, the poorer mines would not be worked so long as richer mines could be worked. But if the margin of production were arbitrarily forced down, as it might be, were the superior natural opportunities in the ownership of those who chose rather to wait for future increase of value than to permit them to be used now, wages would necessarily fall.

The demonstration is complete. The law of wages we have thus obtained is that which we previously obtained as the corollary of the law of rent, and it completely harmonizes with the law of interest. It is, that:

Wages depend upon the margin of production, or upon the produce which labor can obtain at the highest point of natural productiveness open to it without the payment of rent.

This law of wages accords with and explains universal facts that without its apprehension seem unrelated and contradictory. It shows that:

Where land is free and labor is unassisted by capital, the whole produce will go to labor as wages.

Where land is free and labor is assisted by capital, wages will consist of the whole produce, less that part necessary to induce the storing up of labor as capital.

Where land is subject to ownership and rent arises, wages will be fixed by what labor could secure from the highest natural opportunities open to it without the payment of rent.

Where natural opportunities are all monopolized, wages may be forced by the competition among laborers to the minimum at which laborers will consent to reproduce.

This necessary minimum of wages (which by Smith and Ricardo is denominated the point of "natural wages," and by Mill supposed to regulate wages, which will be higher or lower as the working classes consent to reproduce at a higher or lower standard of comfort) is, however, included in the law of wages as previously stated, as it is evident that the margin of production cannot fall below that point at which enough will be left as wages to secure the maintenance of labor.

Like Ricardo's law of rent, of which it is the corollary, this law of wages carries with it its own proof and becomes self-evident by mere statement. For it is but an application of the central truth that is the foundation of economic reasoning—that men will seek to satisfy their desires with the least exertion. The average man will not work for an employer for less, all things considered, than he can earn by working for himself; nor yet will he work for himself for less than he can earn by working for an employer, and hence the return which labor can secure from such natural opportunities as are free to it must fix the wages which labor everywhere gets. That is to say, the line of rent is the necessary measure of the line of wages. In fact, the accepted law of rent depends for its recognition upon a previous, though in many cases it seems to be an unconscious, acceptance of this law of wages. What makes it evident that land of a particular quality will yield as rent the surplus of its produce over that of the least productive land in use, is the apprehension of the fact that the owner of the higher quality of land can procure the labor to work his land by the payment of what that labor could produce if exerted upon land of the poorer quality.

In its simpler manifestations, this law of wages is recognized by people who do not trouble themselves about political economy, just as the fact that a heavy body would fall to the earth was long recognized by those who never thought of the law of gravitation. It does not require a philosopher to see that if in any country natural opportunities were thrown open which would enable laborers to make for themselves wages higher than the lowest now paid, the general rate of wages would rise; while the most ignorant and stupid of the placer miners of early California knew that as the placers gave out or were monopolized, wages must fall. It requires no fine-spun theory to explain why wages are so high relatively to production in new countries where land is yet unmonopolized. The cause is on the surface. One man will not work for another for less than his labor will really yield, when he can go upon the next quarter section and take up a farm for himself. It is only as land becomes monopolized and these natural opportunities are shut off from labor, that laborers are obliged to compete with each other for employment, and it becomes possible for the farmer to hire hands to do his work while he maintains himself on the difference between what their labor produces and what he pays them for it.

Adam Smith himself saw the cause of high wages where land was yet open to settlement, though he failed to appreciate the importance and connection of the fact. In treating of the Causes of the Prosperity of New Colonies (Chapter VII, Book IV, "Wealth of Nations") he says:

> "Every colonist gets more land than he can possibly cultivate. He has no rent and scarce any taxes to pay. * * He is eager, therefore, to collect laborers from every quarter and to pay them the most liberal wages. But these liberal wages, joined to the plenty and cheapness of land, soon make these laborers leave him in order to become landlords themselves, and to reward with equal liberality other laborers who soon leave them for the same reason they left their first masters."

This chapter contains numerous expressions which, like the opening sentence in the chapter on The Wages of Labor, show that Adam Smith failed to appreciate the true laws of the distribution of wealth only because he turned away from the more primitive forms of society to look for first principles amid complex social manifestations, where he was blinded by a pre-accepted theory of the functions of capital, and, as it seems to me, by a vague acceptance of the doctrine which, two years after his death, was formulated by Malthus. And it is impossible to read the works of the economists who since the time of Smith have endeavored to build up and elucidate the science of political economy without seeing how, over and over again, they stumble over the law of wages without once recognizing it. Yet, "if it were a dog it would bite them!" Indeed, it is difficult to resist the impression that some of them really saw this law of wages, but, fearful of the practical conclusions to which it would lead, preferred to ignore and cover it up, rather than use it as the key to problems which without it are so perplexing. A great truth to an age which has rejected and trampled on it, is not a word of peace, but a sword!

Perhaps it may be well to remind the reader, before closing this chapter, of what has been before stated—that I am using the word wages not in the sense of a quantity, but in the sense of a proportion. When I say that wages fall as rent rises, I do not mean that the quantity of wealth obtained by laborers as wages is necessarily less, but that the proportion which it bears to the whole produce is necessarily less. The proportion may diminish while the quantity remains the same or even increases. If the margin of cultivation descends from the productive point which we will call 25, to the productive point we will call 20, the rent of all lands that before paid rent will increase by this difference, and the proportion of the whole produce which goes to laborers as wages will to the same extent diminish; but if, in the meantime, the advance of the arts or the economies that become possible with greater population have so increased the productive power of labor that at 20 the same exertion will produce as much wealth as before at 25, laborers will get as wages as great a quantity as before, and the relative fall of wages will not be noticeable in any diminution of the necessaries or comforts of the laborer, but only in the increased value of land and the greater incomes and more lavish expenditure of the rent-receiving class.

CHAPTER VII

THE CORRELATION AND CO-ORDINATION OF THESE LAWS

The conclusions we have reached as to the laws which govern the distribution of wealth recast a large and most important part of the science of political economy, as at present taught, overthrowing some of its most highly elaborated theories and shedding a new light on some of its most important problems. Yet, in doing this, no disputable ground has been occupied; not a single fundamental principle advanced that is not already recognized.

The law of interest and the law of wages which we have substituted for those now taught are necessary deductions from the great law which alone makes any science of political economy possible—the all-compelling law that is as inseparable from the human mind as attraction is inseparable from matter, and without which it would be impossible to previse or calculate upon any human action, the most trivial or the most important. This fundamental law, that men seek to gratify their desires with the least exertion, becomes, when viewed in its relation to one of the factors of production, the law of rent; in relation to another, the law of interest; and in relation to a third, the law of wages. And in accepting the law of rent, which, since the time of Ricardo, has been accepted by every economist of standing, and which, like a geometrical axiom, has but to be understood to compel assent, the law of interest and law of wages, as I have stated them, are inferentially accepted, as its necessary sequences. In fact, it is only relatively that they can be called sequences, as in the recognition of the law of rent they too must be recognized. For on what depends the recognition of the law of rent? Evidently upon the recognition of the fact that the effect of competition is to prevent the return to labor and capital being anywhere greater than upon the poorest land in use. It is in seeing this that we see that the owner of land will be able to claim as rent all of its produce which exceeds what would be yielded to an equal application of labor and capital on the poorest land in use.

The harmony and correlation of the laws of distribution as we have now apprehended them are in striking contrast with the want of harmony which characterizes these laws as presented by the current political economy. Let us state them side by side:

The Current Statement	*The True Statement*
RENT depends on the margin of cultivation, rising as it falls and falling as it rises.	RENT depends on the margin of cultivation, rising as it falls and falling as it rises.
WAGES depend upon the ratio between the number of laborers and the amount of capital devoted to their employment.	WAGES depend on the margin of cultivation, falling as it falls and rising as it rises.
INTEREST depends upon the equation between the supply of and demand for capital; or, as is stated of profits, upon wages (or the cost of labor), rising as wages fall, and falling as wages rise.	INTEREST (its ratio with wages being fixed by the net power of increase which attaches to capital) depends on the margin of cultivation, falling as it falls and rising as it rises.

In the current statement the laws of distribution have no common center, no mutual relation; they are not the correlating divisions of a whole, but measures of different qualities. In the statement we have given, they spring from one point, support and supplement each other, and form the correlating divisions of a complete whole.

CHAPTER VIII

THE STATICS OF THE PROBLEM THUS EXPLAINED

We have now obtained a clear, simple, and consistent theory of the distribution of wealth, which accords with first principles and existing facts, and which, when understood, will commend itself as self-evident.

Before working out this theory, I have deemed it necessary to show conclusively the insufficiency of current theories; for, in thought, as in action, the majority of men do but follow their leaders, and a theory of wages which has not merely the support of the highest names, but is firmly rooted in common opinions and prejudices, will, until it has been proved untenable, prevent any other theory from being even considered, just as the theory that the earth was the center of the universe prevented any consideration of the theory that it revolves on its own axis and circles round the sun, until it was clearly shown that the apparent movements of the heavenly bodies could not be explained in accordance with the theory of the fixity of the earth.

There is in truth a marked resemblance between the science of political economy, as at present taught, and the science of astronomy, as taught previous to the recognition of the Copernican theory. The devices by which the current political economy endeavors to explain the social phenomena that are now forcing themselves upon the attention of the civilized world may well be compared to the elaborate system of cycles and epicycles constructed by the learned to explain the celestial phenomena in a manner according with the dogmas of authority and the rude impressions and prejudices of the unlearned. And, just as the observations which showed that this theory of cycles and epicycles could not explain all the phenomena of the heavens cleared the way for the consideration of the simpler theory that supplanted it, so will a recognition of the inadequacy of the current theories to account for social phenomena clear the way for the consideration of a theory that will give to political economy all the simplicity and harmony which the Copernican theory gave to the science of astronomy.

But at this point the parallel ceases. That "the fixed and steadfast earth" should be really whirling through space with inconceivable velocity is repugnant to the first apprehensions of men in every state and situation; but the truth I wish to make clear is naturally perceived, and has been recognized in the infancy of every people, being obscured only by the complexities of the civilized state, the warpings of selfish interests, and the false direction which the speculations of the learned have taken. To recognize it, we have but to come back to first principles and heed simple perceptions. Nothing can be clearer than the proposition that the failure of wages to increase with increasing productive power is due to the increase of rent.

Three things unite to production—labor, capital, and land.

Three parties divide the produce—the laborer, the capitalist, and the land owner.

If, with an increase of production the laborer gets no more and the capitalist no more, it is a necessary inference that the land owner reaps the whole gain.

And the facts agree with the inference. Though neither wages nor interest anywhere increase as material progress goes on, yet the invariable accompaniment and mark of material progress is the increase of rent—the rise of land values.

The increase of rent explains why wages and interest do not increase. The cause which gives to the land holder is the cause which denies to the laborer and capitalist. That wages and interest are higher in new than in old countries is not, as the standard economists say, because nature makes a greater return to the application of labor and capital, but because land is cheaper, and, therefore, as a smaller proportion of the return is taken by rent, labor and capital can keep for their share a larger proportion of what nature does return. It is not the total produce, but the net produce, after rent has been taken from it, that determines what can be divided as wages and interest. Hence, the rate of wages and interest is everywhere fixed, not so much by the productiveness of labor as by the value of land. Wherever the value of land is relatively low, wages and interest are relatively high; wherever land is relatively high, wages and interest are relatively low.

If production had not passed the simple stage in which all labor is directly applied to the land and all wages are paid in its produce, the fact that when the land owner takes a larger portion the laborer must put up with a smaller portion could not be lost sight of.

But the complexities of production in the civilized state, in which so great a part is borne by exchange, and so much labor is bestowed upon materials after they have been separated from the land, though they may to the unthinking disguise, do not alter the fact that all production is still the union of the two factors, land and labor, and that rent (the share of the land holder) cannot be increased except at the expense of wages (the share of the laborer) and interest (the share of capital). Just as the portion of the crop, which in the simpler forms of industrial organization the owner of agricultural land receives at the end of the harvest as his rent, lessens the amount left to the cultivator as wages and interest, so does the rental of land on which a manufacturing or commercial city is built lessen the amount which can be divided as wages and interest between the laborer and capital there engaged in the production and exchange of wealth.

In short, the value of land depending wholly upon the power which its ownership gives of appropriating wealth created by labor, the increase of land values is always at the expense of the value of labor. And, hence, that the increase of productive power does not increase wages, is because it does increase the value of land. Rent swallows up the whole gain and pauperism accompanies progress.

It is unnecessary to refer to facts. They will suggest themselves to the reader. It is the general fact, observable everywhere, that as the value of land increases, so does the contrast between wealth and want appear. It is the universal fact, that where the value of land is highest, civilization exhibits the greatest luxury side by side with the most piteous destitution. To see human beings in the most abject, the most helpless and hopeless condition, you must go, not to the unfenced prairies and the log cabins of new clearings in the backwoods, where man single-handed is commencing the struggle with nature, and land is yet worth nothing, but to the great cities, where the ownership of a little patch of ground is a fortune.