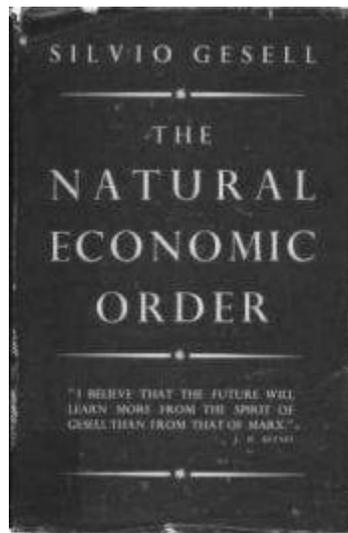


Distribution



PART I. DISTRIBUTION

INTRODUCTION

If employers of labour were offered money-capital at half the present rate of interest, the yield of every other class of capital would soon also fall to half. If, for example, interest on the money borrowed to build a house is less than the rent of a similar existing house, or if it is more profitable to bring a waste into cultivation than to rent similar farmland, competition must inevitably reduce house and farm rents to the level of the reduced interest on money. For the surest method of depreciating material capital (a house, a field) is obviously to create and operate additional material capital alongside it. But it is a law of economics that increased production increases the mass of available money-capital. This tends to raise wages and finally to reduce interest to zero.

Proudhon: What is Property ?

The abolition of unearned income, of so-called surplus-value also termed interest and rent, is the immediate economic aim of every socialistic movement. The method generally proposed for the attainment of this aim is communism in the shape of nationalisation or socialisation of production. I know of only one socialist - Pierre Joseph Proudhon - whose investigations into the nature of capital point to the possibility of another solution of the problem. The demand for nationalisation of production is advocated on the plea that the nature of the means of production necessitates it. It is usually asserted off-hand, as a truism, that ownership of the means of production must necessarily in all circumstances give the capitalist the upper hand when bargaining with the workers about wages - an advantage represented, and destined eternally to be represented, by "surplus-value" or capital-interest. No one, except Proudhon, was able to conceive that the preponderance now manifestly on the side of property can be shifted to the side of the dispossessed (the workers), simply by the construction of a new house beside every existing house, of a new factory beside every factory already established.

Proudhon showed socialists over fifty years ago that uninterrupted hard work is the only method of successfully attacking capital. But this truth is even further from their comprehension to-day than it was in Proudhon's time.

Proudhon, indeed, has not been entirely forgotten, but he has never been properly understood. If his advice had been understood and acted on, there would now be no such thing as capital. Because he was mistaken in his method (the exchange banks), his theory as a whole was discredited.

How was it that the Marxian theory of capital succeeded in ousting that of Proudhon and in giving sovereign sway to communistic socialism? How is it that Marx and his theory are spoken of by every newspaper in the world? Some have suggested as a reason the hopelessness, and the corresponding harmlessness, of the Marxian doctrine. "No capitalist is afraid of his theory, just as no capitalist is afraid of the Christian doctrine; it is therefore positively an advantage to capital to have Marx and Christ discussed as widely as possible, for Marx can never damage capital. But beware of Proudhon; better keep him out of sight and hearing! He is a dangerous fellow since there is no denying the truth of his contention that if the workers were allowed to remain at work without hindrance, disturbance or interruption, capital would soon be choked by an over-supply of capital (not to be confused with an over-production of goods). Proudhon's suggestion for attacking capital is a dangerous one, since it can be put into practice forth-with. The Marxian programme speaks of the tremendous productive capacity of the present-day trained worker equipped with modern machinery and tools, but Marx cannot put this tremendous productive capacity to use, whereas in the hands of Proudhon it becomes a deadly weapon against capital. Therefore talk away, harp on Marx, so that Proudhon may be forgotten."

This explanation is plausible. And is not the same true of Henry George's land-reform movement? The landowners soon discovered that this was a sheep in wolf's clothing; that the taxation of rent on land could not be carried out in an effective form and that the man and his reform were therefore harmless. The Press was allowed to advertise Henry George's Utopia, and land-reformers were everywhere received in the best society. Every German "agrarian" and speculator in corn-duties turned single-taxer. The lion was toothless, so it was safe to play with him, just as many persons of fashion are pleased to play with Christian principles.

Marx's examination of capital goes astray at the outset.

Marx succumbs to a popular fallacy and holds that capital consists of material goods. For Proudhon, on the contrary, interest is not the product of material goods, but of an economic situation, a condition of the market.

Marx regards surplus-value as spoil resulting from the abuse of a power conferred by ownership. For Proudhon surplus-value is subject to the law of demand and supply.

According to Marx, surplus-value must invariably be positive. For Proudhon the possibility of negative surplus-value must be taken into consideration. (Positive surplus-value is surplus-value on the side of supply, that is, of the capitalist, negative surplus-value is surplus-value on the side of labour).

Marx's remedy is the political supremacy of the dispossessed, to be achieved by means of organisation. Proudhon's remedy is the removal of the obstacles preventing us from the full development of our productive capacity.

For Marx, strikes and crises are welcome occurrences, and the final forcible expropriation of the

expropriators is the means to the end. Proudhon, on the contrary, says: On no account allow yourselves to be deterred from work, for the most powerful allies of capital are strikes, crises and unemployment; whereas nothing is more fatal to it than hard work.

Marx says: Strikes and crises will sweep you along towards your goal; the great collapse will land you in paradise. - No, says Proudhon, that is humbug, methods of that kind carry you away from your goal. With such tactics you will never filch as much as one per cent from interest.

To Marx private ownership means power and supremacy. Proudhon, on the contrary, recognises that this supremacy is rooted in money, and that under altered conditions the power of private ownership may be transformed into weakness.

If, as Marx affirms, capital consists of material goods, possession of which gives the capitalist his supremacy, any addition to these goods would necessarily strengthen capital. If a load of hay or a barrowful of economic literature weighs 100 lbs., two loads, two barrowfuls must weigh exactly 200 lbs. Similarly if a house yields \$1000 of surplus-value annually, ten houses added to it must always, and as a matter of course, yield ten times \$1000 - on the assumption that capital consists simply of material goods.

Now we all know that capital cannot be added up like material goods, since additional capital not infrequently diminishes the value of capital already existing. The truth of this can be tested by daily observation. Under certain circumstances the price of a ton of fish may be greater than the price of 100 tons. What price would air fetch, if it were not so plentiful ? As it is, we get it gratis.

Not long before the outbreak of the war landlords in the suburbs of Berlin were in despair about the decline of house-rents, that is, surplus-value, and the capitalistic press was clamorous in denunciation of the

"building fury of the workers and contractors",

of the

"building plague rife in the housing industry."

(Quoted from the German Press.)

Are not these expressions a revelation of the precarious nature of capital ? Capital, which Marxists hold in such awe, dies of the "building plague"; it decamps before the "building fury" of the workers! What would Proudhon and Marx have advised in such a situation ? "Stop building", Marx would have cried; "lament, go abegging, bemoan your unemployment, declare a strike! For every house you build adds to the power of the capitalists as sure as two and two make four. The power of capital is measured by surplus-value, in this case house-rent; so the greater the number of houses the more powerful, surely, is capital. Therefore let me advise you, limit your output, agitate for an eight-hour or even a six-hour day, since every house you build adds to house-rent and house-rent is surplus-value. Restrain, therefore, your building fury, for the less you build, the more cheaply you'll be housed!"

Probably Marx would have shrunk from uttering such nonsense. But the Marxian doctrine, which regards capital as a material commodity, misleads the workers into thinking and acting on these lines.

Now listen to Proudhon: "Full steam ahead ! Let's have the building fury, give us the building

plague! Workers and employers, on no account let the trowel be snatched from your hands. Down with all who attempt to interfere with your work; they are your deadly enemies! Who are these that prate of a building plague, of over-production in the housing industry, while house-rents still show a trace of surplus-value, of capital-interest ? Let capital die of the building plague! For some five years only have you been allowed to indulge in your building fury, and already capitalists feel the pinch, already they are lamenting the decline of surplus-value, rents have already dropped from 4 to 3 % - that is, by a quarter. Three times five years more of untrammelled labour, and you will be revelling in houses freed from surplus-value. Capital is dying, and it is you who are killing it by your labour."

Truth is as sluggish as a crocodile in the mud of the eternal Nile. It does not reckon of time; time measured by the span of human life means nothing to it, since it is everlasting. But truth has an agent which, mortal like man, is always hurried. For this agent, time is money; it is ever busy and excited, and its name is error. Error cannot afford to lie low and let the ages pass. It is constantly giving and receiving hard knocks. It is in the way of everyone and everyone is in its way. It is the true stumbling block.

Therefore it does not matter if Proudhon is taboo. His adversary Marx, with his errors, takes good care that the truth shall come to light. And in this sense we may say that Marx has become the agent of Proudhon. Proudhon in his grave is at peace. His words have everlasting worth. But Marx must keep restlessly moving. Some day, however, the truth will prevail and Marx's doctrines will be relegated to the museum of human errors.

Even if Proudhon had really been suppressed and forgotten, the nature of capital would still remain unchanged. The truth would be discovered by another; of the discoverer's name truth takes no account.

The author of this book was led into the path pursued by Proudhon and came to the same conclusions. Perhaps it was fortunate that he was ignorant of Proudhon's theory of capital, for he was thus enabled to set about his work the more independently, and independence is the best preparation for scientific inquiry.

The present author has been more fortunate than Proudhon. He discovered what Proudhon had discovered fifty years earlier, namely the nature of capital, but as well he discovered a practicable road to Proudhon's goal. And that, after all, is what matters.

Proudhon asked: Why are we short of houses, machinery and ships ? And he also gave the correct answer: Because money limits the building of them. Or, to use his own words: "Because money is a sentinel posted at the entrance to the markets, with orders to let no one pass. Money, you imagine, is the key that opens the gates of the market (by which term is meant the exchange of products), that is not true-money is the bolt that bars them."

Money simply will not suffer another house to be built in addition to every existing house. As soon as capital ceases to yield the traditional interest, money strikes and brings work to a standstill. Money, therefore, acts like a serum against the "building-plague" and the "working fury". It renders capital (houses, industrial plant, ships) immune from the menace of its own increase.

Having discovered the barring or blocking nature of money, Proudhon raised the slogan: Let us

combat the privilege of money by raising goods and labour to the level of money. For two privileges, if opposed, neutralise one another. By attaching to goods the surplus weight now on the side of money, we make the two weights balance.

Such was Proudhon's idea, and to put it into practice he founded the exchange banks. As everyone knows, they failed.

And yet the solution of the problem which eluded Proudhon is simple enough. All that is needed is to abandon the customary standpoint, the standpoint of the possessor of money, and to look at the problem from the standpoint of labour and of the possessor of goods. This shifting of the standpoint will let us grasp the solution directly. Goods, not money, are the real foundation of economic life. Goods and their compounds make up 99% of our wealth, money only 1%. Therefore let us treat goods as we treat foundations; let us not tamper with them. We must accept goods as they appear in the market. We cannot alter them. If they rot, break, perish, let them do so; it is their nature. However efficiently we may organise Proudhon's exchange banks, we cannot save the newspaper in the hands of the news vendor from being reduced, two hours later, to waste paper, if it fails to find a purchaser. Moreover we must remember that money is a universal medium of saving; all the money that serves commerce as a medium of exchange comes to the savings banks and lies there until it is enticed into circulation again by interest. And how can we ever raise goods to the level of ready money (gold) in the eyes of savers? How can we induce them, instead of saving money, to fill their chests or store-rooms with straw, books, bacon, oil, hides, guano, dynamite, porcelain?

And yet this is what Proudhon really aimed at in attempting to bring goods and money to a common level. Proudhon had overlooked the fact that money is not only a medium of exchange, but also a medium of saving, and that money and potatoes, money and lime, money and cloth can never in any circumstances be looked upon as things of equal worth in the chests of the savers. A youth saving against old age will prefer a single gold coin to the contents of the largest warehouse.

We cannot, therefore, tamper with goods, they are the primary factor to which everything else must be adapted. But let us look a little more closely at money, for here some alteration may prove feasible. Must money always remain what it is at present? Must money, as a commodity, be superior to the commodities which, as medium of exchange, it is meant to serve? In case of fire, flood, crisis, war, changes of fashion and so forth, is money alone to be immune from damage? Why must money be superior to the goods which it is to serve? And is not the superiority of money to goods the privilege which we found to be the cause of surplus-value, the privilege which Proudhon endeavoured to abolish? Let us, then, make an end of the privileges of money. Nobody, not even savers, speculators, or capitalists, must find money, as a commodity, preferable to the contents of the markets, shops, and warehouses. If money is not to hold sway over goods, it must deteriorate, as they do. Let it be attacked by moth and rust, let it sicken, let it run away; and when it comes to die let its possessor pay to have the carcass flayed and buried. Then, and not till then, shall we be able to say that money and goods are on an equal footing and perfect equivalents - as Proudhon aimed at making them.

Let us put this demand in terms of a commercial formula. We say: The possessor of goods, during the period of storage, invariably incurs a loss in quantity and quality. Moreover he has to pay the cost of storage (rent, insurance, caretaking and so on). What does all this amount to annually? Say 5% - which is more likely to be below than above the actual amount.

Now what depreciation has a banker, capitalist, or hoarder to debit to the money in his possession or on loan ? By how much was the war-chest in the Julius Tower at Spandau diminished in the course of the 44 years that it was stored there ? Not by one penny !

That being so, the answer to our question is clear, we must subject money to the loss to which goods are liable through the necessity of storage. Money is then no longer superior to goods; it makes no difference to anyone whether he possesses, or saves, money or goods. Money and goods are then perfect equivalents, Proudhon's problem is solved and the fetters that have prevented humanity from developing its full powers fall away.

1. AIM AND METHOD

As has been pointed out in the Introduction, the economic aim of every kind of socialism is to abolish unearned income, so-called surplus-value, sometimes termed rent and interest. To attain this end, nationalisation or socialisation of production with all its consequences is usually declared to be indispensable.

This claim of the dispossessed is supported by Karl Marx's scientific investigation into the nature of capital which attempts to prove that surplus-value is an inseparable concomitant of private enterprise and private ownership of the means of production.

The present writer proposes to demonstrate that this Marxian doctrine is based on untenable premises which we must abandon in order to arrive at the truth. My conclusions are to the effect that capital must not be looked upon as a material commodity, but as a condition of the market, determined solely by demand and supply. The French socialist Proudhon, the opponent of Marx, gave the workers the proof of this more than 50 years ago.

Guided by this corrected theory of capital we shall learn that the removal of certain artificial obstacles due to private ownership of land and our irrational monetary system, will enable our present economic order to realise fully its fundamentally sound principle. The removal of these obstacles will allow the workers by their own labour and in a short time (ten to twenty years) so to alter the market conditions for capital that surplus-value will disappear completely and the means of production will lose their capitalistic character. Private ownership of the means of production will then present no advantage beyond that which the owner of a savings-box derives from its possession: the savings-box does not yield him surplus-value or interest, but he can gradually use up its contents.

The savings or other money then invested in means of production (house, ship, factory) will be returned to the owners in the shape of sums annually written off their value in proportion to their natural wear and tear or consumption. Simply by means of untrammelled hard work fructified by the powerful modern instruments of production, the great admired and dreaded tyrant capital will be reduced to the harmless role of a child's porcelain savings-box. The savings-box yields no surplus-value, and to get at the contents its owner must break it.

The first and second parts of this book, dealing with land, show how agriculture and the building and mining industries can be carried on without surplus-value, yet without communism. The later parts of the book, dealing with the new theory of capital, show how, without nationalising the remaining means of production, we can entirely eliminate surplus-value from our economic order and establish the right to the whole proceeds of labour.

2. THE RIGHT TO THE WHOLE PROCEEDS OF LABOUR

A worker in this book means anyone living on the proceeds of his labour. By this definition farmers, employers, artisans, wage-earners, artists, priests, soldiers, officials, kings, are workers. The antithesis of a worker in our economic system is therefore the capitalist, the person in receipt of unearned income.

We distinguish between the product of labour, the yield of labour and the proceeds of labour. The product of labour is what is produced by labour. The yield of labour is the money received through the sale of the product of labour or as the result of the wage contract. The proceeds of labour mean what a worker, out of the yield of his labour, can buy and convey to the place of consumption.

The terms: wages, fee, salary are used instead of the term yield of labour when the product of labour is not a tangible object. Example: street-sweeping, writing poems, governing. If the product of labour is a tangible object, say a chair, and at the same time the property of the worker, the yield of labour is not called a wage or salary, but the price of the object sold. All these designations imply the same thing: the money-yield of the work done.

Manufacturers' and merchants' profits, after deduction of the capital interest or rent usually contained in them, are likewise to be classed as yield of labour. The manager of a mining company draws his salary exclusively for the work done by him. If the manager is also a shareholder, his income will be increased by the amount of the dividend received. He is then at once a worker and a capitalist. As a rule the income of farmers, merchants and employers is made up of the yield of their labour plus a certain quantity of rent or interest. A farmer working on rented land with borrowed capital lives exclusively on the proceeds of his labour. What is left to him of the product of his labour after payment of rent and interest, is the result of his activity and is subject to the general laws determining wages.

Between the product of labour (or service rendered) and the proceeds of labour lie the various bargains which we strike daily in buying the commodities we consume. These bargains greatly affect the proceeds of labour. It very commonly happens that two persons offering the same product of labour for sale obtain unequal proceeds of labour. The reason for this is that though equal as workers, they are unequal as dealers. Some persons excel at disposing of their product for a good price, and at making judicious choice when purchasing the commodities they need. In the case of goods produced for the market, the commercial disposal of them and the knowledge necessary for successful bargaining contribute as much to the success of labour as does technical efficiency. The exchange of the product must be considered as the final act of production. In so far every worker is also a dealer.

If the objects composing the product of labour and those composing the proceeds of labour had a common property by which they could be compared and measured, commerce, that is, the conversion of the product of labour into the proceeds of labour, might be dispensed with. Provided the measuring, counting or weighing were accurate, the proceeds of labour would always be equal to the product of labour (less interest and rent), and the proof that no sort of cheating had taken place could be supplied by examination of the objects of the proceeds of labour, just as one may ascertain by one's own scales whether the druggist's scales weigh correctly or not. Commodities have however no such common property. The exchange is always effected by bargaining, never by the use of any kind of measure. Nor does the use of money

exempt us from the necessity of bargaining to effect the exchange. The term "measure of value" sometimes applied to money in antiquated writings on economics, is misleading. No quality of a canary bird, a pill or an apple can be measured by a piece of money.

Hence a direct comparison between the product of labour and proceeds of labour will not furnish any valid and legal proof as to whether the labourer has received the whole proceeds of his labour. The right to the whole proceeds of labour, if by that phrase we mean the individual's right to the whole proceeds of his labour, must be relegated to the realm of imagination.

But it is very different with the common or collective right to the whole proceeds of labour. This only implies that the proceeds of labour should be divided exclusively among the workers. No proceeds of labour must be surrendered to the capitalist as interest or rent. This is the only condition imposed by the demand for the right to the common or collective whole proceeds of labour.

The right to the collective whole proceeds of labour does not imply that we should trouble about the proceeds of labour of the individual worker. For whatever one worker may fail to secure will be added to the remuneration of another worker. The apportioning of the workers' shares follows, as hitherto, the laws of competition, competition being keener, and the personal proceeds of labour being less, the easier and simpler the work. The workers who perform the most highly qualified work are most securely withdrawn from the competition of the masses, and are therefore able to obtain the highest price for the product of their labour. In certain cases some natural physical aptitude (such as singing, for example) may take the place of intelligence in eliminating the competition of the masses. Fortunate is he whose service liberates him from the dread of competition.

The realisation of the right to the whole proceeds of labour will benefit all individual workers in the form of an addition to the present proceeds of their labour, which may be doubled or trebled, but will not be levelled. Levelling the proceeds of labour is an aim of communism. Our aim, on the contrary, is the right to the whole proceeds of labour as apportioned by competition. As an accompanying effect of the reforms necessary to ensure the right to the whole common proceeds of labour, we may, indeed, expect the existing differences in the individual proceeds of labour which are sometimes, particularly in commerce, very great, to be reduced to more reasonable proportions; but that is only an accompanying effect. The right to the whole proceeds of labour, in our sense, does not imply any such levelling. Industrious, capable and efficient workers will, therefore, always secure larger proceeds of labour, proportionate to their higher efficiency. To this will be added the rise of wages in consequence of the disappearance of unearned income.

Summary

The product of labour, the yield of labour and the proceeds labour are not immediately comparable. There is no common measure for these quantities. The conversion of one into the other is not done by measuring but by contract, by a bargain.

It is impossible to say whether the proceeds of labour of in workers do or do not correspond to the whole proceeds of their labour.

The whole proceeds of labour can only be understood to the common or collective proceeds of labour.

The right to the whole collective proceeds of labour implies the total abolition of all unearned income, namely interest and rent.

When interest and rent are eliminated from economic life, proof is complete, that the right to

the whole proceeds of labour has been realised, and that the collective proceeds of labour are equal to the collective product of labour.

The suppression of unearned income raises the individual of labour - doubling or trebling them. There is no levelling to be expected, or only a partial one. Differences in the individual product of labour will be accurately translated into the individual proceeds of labour.

The general laws of competition determining the relative amounts of the individual proceeds of labour will remain in force. The most efficient worker will receive the highest proceeds of labour, to use as he pleases.

Today the proceeds of labour are curtailed by rent and interest, which are not, of course, determined arbitrarily, but by the conditions of the market, everyone taking as much as the conditions of the market allow him.

We shall now examine the manner in which these market conditions are created, beginning with rent on land.

3. REDUCTION OF THE PROCEEDS OF LABOUR THROUGH RENT ON LAND

A landowner has the choice of cultivating his land or allowing it to lie fallow. His possession of the land is independent of its cultivation. Land does not suffer from lying fallow; on the contrary, it improves; indeed, under certain systems of cultivation, to let the soil lie fallow is the only method of restoring its fertility.

A landowner, therefore, has no inducement to allow others to use his property (farm, building-site, oil or coal field, water-power, forest and so forth) without compensation. If the landowner is offered no compensation, no rent, for its use, he simply lets his land lie fallow. He is absolute master of his property.

Anyone needing land and applying to a landowner will obviously, therefore, have to make a disbursement called rent. Even if we could multiply the surface of the earth and its fertility, it would never occur to a landowner to let others use his land free of charge. If the worst came to the worst he might turn his property into a hunting ground or use it as a park. Rent is an inevitable condition of every tenancy, because the pressure of competition in the supply of land for letting can never be great enough to make the use of land gratuitous.

How much, then, will the landowner be able to demand? If the whole surface of the earth were needed for the sustenance of mankind; if no more free land were obtainable far or near; if the whole surface of the earth were in private possession and under cultivation, and if the employment of more labour, the application of so-called intensive cultivation, resulted in no increase of produce; then the dependence of those without property on their landlords would be as absolute as it was at the time of serfdom, and accordingly the landlords would raise their claims to the utmost limit of the attainable; they would claim for themselves the entire produce of labour, the entire harvest, and grant to the labourer, as to a common slave, only what sufficed for his subsistence and propagation. Under such conditions the so-called "iron law of wages" would hold good. Cultivators of the soil would be at the mercy of landowners, and rent would be equal to the yield of the land, less the cost of feeding the cultivator and his draught animals, and less capital-interest.

The conditions which would result in an "iron wage" do not, however, exist; for the earth is much larger and more fertile than is necessary for the support of its present population. Even

with present-day extensive cultivation, hardly one-third of its area is exploited, the remainder lying fallow or being unclaimed. If instead of extensive cultivation, intensive cultivation were generally introduced - one-tenth of the surface of the earth would perhaps suffice to provide mankind with the average amount of foodstuffs consumed by the workers at the present day. Nine-tenths of the earth's surface in this case, be left fallow. (Which, of course, does not mean that mankind would be satisfied with such a result. If everyone desired to eat his fill of something better than potatoes; if everyone wanted to have a saddle-horse, a court-yard with peacocks and pigeons, or a rose garden and a swimming-pool the earth might, even with intensive cultivation, be too small).

Intensive cultivation comprises: drainage of swamps, irrigation, mixture of soils, deep ploughing, blasting of rocks, marling, application of fertilisers; choice of plants for culture, improvements of plants and animals; destruction of pests in orchards and vineyards, destruction of locusts; saving of draught animals through railway, canal and motor transport; more economical use of foodstuffs and fodder through exchange; limitation of sheep-breeding through the cultivation of cotton; vegetarianism and so forth. Intensive cultivation requires much labour, extensive cultivation much land.

No one, then, is at present compelled, by complete lack of land, to appeal to the landowners, and because this compulsion does not exist (but solely for this reason) the dependence of those without land on the landowners is limited. But the landowners are in possession of the best land, and it would require a great deal of labour to bring into cultivation the only unclaimed land in settled neighbourhoods. Intensive cultivation, again, involves considerably more trouble, and not everyone is capable of emigrating and settling in the unclaimed lands of the wilderness; apart from the fact that emigration costs money, and that the produce of those lands can be brought to market only at great expense in transport-costs and import-duties.

The farmer knows all this, and the landowner likewise. So before the farmer makes up his mind to emigrate; before he sets about draining the neighbouring swamp; before he turns to market gardening, he will ask the landowner what rent he demands for his field. And before answering the question the landowner will think the matter over and calculate the difference between the proceeds of labour on his field and the proceeds of labour (* We again call attention to the difference between the product of labour and the proceeds of labour. The product of labour of the emigrant may be ten times larger, yet the proceeds of his labour the same.) on waste land, garden land, or unclaimed land in Africa, America, Asia, or Australia. For the landowner is determined to obtain this difference for himself; this is what he can claim as for his field. As a general rule, however, there is not much calculation. In these matters both parties are guided by experience. Some hardy young fellow emigrates and, if he reports favourably, others follow. In this way the supply of labour at home is reduced, the consequence being a general rise of wages. If emigration continues, wages will rise to a point at which the would-be emigrant becomes doubtful whether he had not better stay at home. This indicates that the proceeds of labour at home and in the new country are again equal. Sometimes an emigrant makes an estimate beforehand. So it may be worth while examining such a calculation.

An Emigrant's Estimate

Travelling expenses for himself and family \$1000

Accident and life insurance during the voyage 200

Health insurance for acclimatisation, that is, the slim which an insurance company would charge for the special risk due to the change of climate 200

Prospecting and fencing 600

We may assume that the same amount of working capital is required as in Germany, so it is not included in the estimate

Cost of emigrating and settling \$2000

These expenses, which the farmer in Germany does not incur, are added to the working capital. the interest on which is charged to working costs: 5% on \$2000 \$100

We assume that the settler, with the same amount of the same amount as on his native competition of which is here to be considered. We remember that the farmer, like any other producer, in the products of his labour but only in the goods for consumption which he can obtain for that is, in the proceeds of his labour. The settler must send his products to market and convert the money he obtains for them into the goods he needs for consumption. And he must pay for the conveyance of these goods to his new home. The market for the exchange of his products is, as a rule, distant; if we suppose it to be Germany, a country which is forced to import large quantities of agricultural produce, the emigrant will have to pay:

Freight-charges for cart, railway, ship and lighter 200

Import-duty in Germany 400

Freight-charges for fighter, ship, railway and cart for the goods received in exchange 200

Import-duty in the new country 100

\$1000

In the above estimate the conversion of the product of labour into the proceeds of labour, usually effected by way of commerce, the emigrant for freight, customs-duties and commercial profit the sum of \$1000, an expense which the cultivator of German soil avoids. If, therefore, the latter pays \$1000 in rent for a piece of land which yields the same product of labour as the emigrant's homestead, the proceeds of his labour are equal to those of the emigrant.

There is the same economic difference in favour of the above piece of land when compared with waste land brought under cultivation in Germany, but here instead of transport costs and customs-duties, we have to enter the interest on the capital employed for reclaiming the land (drainage of a swamp, mixture of the different layers of soil, liming and manuring). In the case of intensive cultivation the difference consists, not of interest and freight, but of the cost of cultivation.

Rent, then, tends to reduce the proceeds (not the produce) of labour to the same general level everywhere. Whatever agricultural advantages well-cultivated German farm land possesses over the Luneburg Heath or, through its proximity to the markets, over unappropriated land in Canada, are claimed by landlords as rent, or appear, if the land is sold, as its price, which is simply the rent capitalised. All differences in land as regards fertility, climate, access to the markets, customs-duties, freights and so forth are levelled by rent. (It should be noted that in this connection wages are not mentioned; the omission is intentional).

Economically speaking, rent on land reduces the globe for the farmer, manufacturer and capitalist (if he is not a landowner), to a perfectly uniform surface. As Flürscheim puts it: "Just as the inequalities of the ocean bed are transformed into a level surface by the water, so inequalities of land are levelled by rent". It is a remarkable fact that rent reduces the proceeds of labour of all cultivators of the soil to the yield which may be expected from unreclaimed land at home, or from unclaimed land in the far-off wilderness. The notions of fertile, barren, loamy,

sandy, swampy, rich, poor, well or badly situated, are rendered, economically speaking, meaningless by rent on land. Rent makes it a matter of indifference to a man whether he cultivates moorland in the Eiffel, or a market-garden at Berlin, or a vineyard on the Rhine.

4. INFLUENCE OF TRANSPORT COSTS ON RENT AND WAGES

The proceeds of labour on freeland, waste-land, marsh and moor determine how much the landowner must pay as wages or how much he can claim as rent. The farm-labourer will obviously claim a wage equal to the proceeds of labour on freeland, since he is free to take possession of and cultivate freeland (which term we shall soon define more closely). Nor is it necessary for every farm-labourer to threaten to emigrate when negotiating about his wages. Married men with many children, for instance, would gain nothing by such a threat, since the landowner knows that it cannot be carried into effect. But it suffices if the emigration of the younger men causes a general shortage of labour. Even although many labourers are unable to emigrate, the shortage of labour caused by the emigration of others supports them in their negotiations about wages as effectively as if they had already booked their passage.

(*How greatly wages are influenced by emigrants and migrating labour is illustrated by the following passage from a speech by President Wilson on May 20th, 1918: " When the American Secretary of Defence was in Italy, a member of the Italian Government enumerated to him the various reasons why Italy felt intimately connected with the United States. The Italian Minister remarked: -

'If you wish to make an interesting experiment go into any troop-train and ask the soldiers in English which of them have been in America. The rest you will see for yourself.'

Our Secretary of Defence did board a troop-train and asked the men how many of them had been in America. It seems that more than half of them rose to their feet."

The Italian receivers of rent had driven these men to America, and the American receivers of rent had driven them home again. Because they fared as badly in America as they had fared at home, the poor devils kept restlessly wandering to and from.

Wilson added: "There are American hearts in this Italian army!" But we know better; when these migrating workers left their country they cursed their fate, and they cursed their fate when they left America.)

On the other hand the tenant farmer must be allowed to keep for himself an amount equal to the proceeds of labour of the freeland emigrant and the farm-labourer, after deduction of farm-rent and the interest on his working capital. Thus farm-rent also, is determined by the proceeds of labour on freeland. The landowner when calculating the rent of a farm need not leave the tenant a margin greater than the proceeds of labour on freeland, and the tenant is not compelled to accept less.

If the proceeds of labour on freeland fluctuate, the fluctuation is transferred to wages and to farm-rent.

Among the circumstances influencing the proceeds of labour on freeland we must consider, in the first place, the distance between the unappropriated land and the place where the products are consumed. We may suppose this to be the place where the commodities taken in exchange

are made (manufacturing centre) or collected (trading centre). The importance of the distance from the market is best seen from the difference in the price of a field in the vicinity of the town and an equally fertile field farther from the market. The reason for the difference in price is simply the distance from the market.

In the Canadian wheat district, for example, where to this day good land can be obtained free by everyone, the wheat has to be carried on wagons, along unbeaten tracks, to the far-distant railroad by which it is conveyed to Duluth to be shipped on lake steamers. These carry the wheat to Montreal, where it is transferred to ocean steamers. From there the voyage continues to Europe, say to Rotterdam, where another transfer to the Rhine vessels is necessary. These go as far as Mannheim, and to reach the markets of Strasbourg, Stuttgart or Zürich, the wheat must here be loaded on railway trucks. And its price in these markets, after payment of import-duties, must be the same as the price of wheat grown on the spot. It is a long journey costing a great deal of money; yet the balance of the market price that remains after deducting import-duties, freight, insurance, brokerage, stamp-duties, interest on money advanced, sacks, etc. is still only the sum obtained by the sale of the product of labour, and not what is required by the settler in the wilderness of Saskatchewan. This sum has to be transformed into articles for use - salt, sugar, cloth, fire-arms, tools, books, coffee, furniture, etc. and it is only when all these objects have arrived at the settler's homestead, and the freight on them has been paid, that he can say: "These are the proceeds of my labour plus interest on my capital." (Whether the settler has borrowed the money necessary for emigration or is working with his own capital, he is bound to deduct interest on his capital from the product of his labour).

It is obvious, therefore, that the proceeds of labour on such freeland must depend to a great extent on transport costs. These costs have been steadily sinking, as is shown by the following table: (Taken from Mulhall's Dictionary of Statistics).

Freight-rates for one ton of grain from Chicago to Liverpool:-

1873 - \$17

1880 - 10

1884 - 6

That is, from Chicago to Liverpool alone, a saving of \$11 on freight for every ton of wheat; almost one sixth of the price in 1884, or one fourth of the present price (1911). But the distance from Chicago to Liverpool is only part of the distance from Saskatchewan to Mannheim; hence the \$11 are only part of the actual saving on transport costs.

There is the same saving of freight on the goods consumed by the settler. The grain was the product of labour; the price, \$63 in 1884, of a ton of wheat was the yield of labour; and the return shipment comprised the objects of the proceeds of labour, to obtain which the settler produced the wheat. For we must keep in mind that the industrial workers in Germany who eat Canadian wheat, must always pay for it with their own products which they send directly or indirectly to Canada and for which, therefore, freight has likewise to be paid. Thus the saving on cheaper freight is doubled, and the proceeds of labour on freeland, which determine the general wage in Germany, are augmented.

But it must not be supposed that the saving of a certain sum on freight is translated into an exactly corresponding increase in the proceeds of labour of the settler. In reality the proceeds of

his labour will increase by only about half the saving on freight; and the reason for this is that the rising proceeds of labour of the settler on freeland raise the wages of the agricultural workers in Germany. The rising wages of farm labourers and of settlers on freeland cause industrial workers to pass over to these pursuits. The relation existing between the production of agricultural and of industrial goods is modified, and in consequence their exchange ratio is also modified. The settler has to pay higher prices for the objects of the proceeds of his labour (industrial products). The quantity of these industrial products does not, therefore, increase in proportion to the increased yield of labour of the settler on freeland resulting from lower transport costs. The difference, according to the laws of competition, falls to the industrial workers. What happens here is what happens when improved technical methods, such as steam-power, reduce the cost of production. The producer and the consumer share the gain.

Here again it may be worth while to illustrate by means of figures the influence of a change of transport costs on the proceeds of labour of the settler on freeland, and consequently on rent and wages.

I. The proceeds of labour of a settler on freeland in Canada with a freight-rate of \$17 per ton in the year 1873.

Product of labour: 10 tons of wheat shipped to Mannheim and there sold at \$63 per ton \$630

Less 10 times \$17 for freight, etc. 170

Yield of labour ... \$460

This money-yield of labour is spent in Germany for the purchase of goods for use which, when shipped to Canada cause the same expense for packing, freight, import-duties, deterioration, etc. as the wheat on its voyage to Germany 170

The proceeds of labour of the settler therefore amount to \$290

II. The same calculation in the year 1884 with a freight-rate of \$6 per ton.

Product of labour: 10 tons of wheat at \$63 per ton \$630

Less 10 times \$6 for freight 60

Yield of labour \$570

This yield of labour, which is \$110 greater than in the first calculation, is now converted into the proceeds of labour, that is, into industrial products. For the reasons indicated above, the ratio of exchange between industrial and agricultural products has been modified in favour of industry. Let us suppose that this rise in the price of industrial commodities absorbs half the increased money-yield of labour, that is 55

\$515

From this we have to deduct the return freight which we must put a little higher, as the amount of the goods has increased by the amount economised on freight; instead of \$60 freight amounts to 61

The proceeds of labour of the settler now therefore amount to \$454

Thus the decrease in freight has raised the proceeds of labour of the settler on freeland from \$290 to \$454, so the wages demanded by the German farm labourer will automatically increase by the same amount, and tenant farmers will claim a correspondingly larger share of the product of labour for themselves. And rent on land will decrease in the same ratio.

If in Germany in 1873 the price of 10 tons of wheat was \$630

And the wages for producing it amounted to \$290

Then 10 tons of land (* A ton of land: a Danish land-measure denoting the amount of land that produces one ton of grain. A ton of land therefore indicates an area of land which varies according to the quality of the soil.) brought the landowner who worked or let them, rent amounting to \$340

But if in 1884 wages rise to \$454, the rent must fall to \$176

(that is \$340, less \$164 increase of wages).

What the settler on freeland has to pay in freight is therefore deducted from the proceeds of his labour; and the landowner in Germany may demand this amount as farm-rent if he lets his land, or deduct it as rent from the product of his farm-labourers if he works his land himself. In other words, what the freeland settler pays as freight is pocketed by the landowner as rent.

5. INFLUENCE OF SOCIAL CONDITIONS ON RENT AND WAGES

Rail and shipping costs are not of course the only factor influencing the proceeds of labour of the settler on freeland, and consequently the wages of the German farm-labourer. Man does not live by bread alone, so the proceeds of labour are not the sole cause of his decision for or against emigration. The national and social life of the country which the emigrant is to leave, and of the country he is going to, have often a strong and determining influence, and many a man is satisfied with smaller proceeds of labour at home, finding compensation for the loss in the possession of a laurel wreath for rabbit-breeding or in the song of the chaffinches, which in his opinion is nowhere so beautiful as in the home country. These attractive or repelling forces fluctuate, sometimes stimulating and sometimes restraining emigration. Many German farmers, for instance, are again emigrating from Russia, not in hope of higher proceeds of labour, but because conditions there are no longer quite to their taste. All these factors counteract to some extent the forces tending to level the purely material proceeds of labour of the emigrant and of the farm-labourer left behind. Let us suppose, for example, that we resolve to render life pleasanter for German workers, the means to be derived from the prohibition of alcoholic drink. Prohibition itself would enrich the lives of the workers, and especially those of their wives; and the millions which alcohol directly and indirectly costs the people might be employed for an effective endowment of motherhood in the shape of a monthly State subsidy to cover the expense of bringing up each child. Or for better schools, for public reading-rooms, theatres or churches, or free treats at pastry shops, popular festivals, assembly-rooms etc. The question whether a man was going to emigrate would not then be settled solely by an estimate of the material proceeds of his labour; many wives would induce their husbands to stay, and many emigrants would return. The effect on wages and rent is obvious. The landowners would raise their demands until the restraining influence of prohibition on the would-be emigrant had been compensated. The cakes given gratis to the women in the national pastry shops would be abstracted from their husband's wages in the form of an increase of rent.

Thus every advantage which Germany offers for professional, intellectual and social life is confiscated by rent on land. Rent is poetry, science, art and religion capitalised. Rent converts everything into hard cash: Cologne Cathedral, the brooks of the Eiffel, the twitter of birds among the beech-leaves. Rent levies a toll on Thomas à Kempis, on the relics at Kevelaar, on Goethe and Schiller, on the incorruptibility of our officials, on our dreams for a happier future, in a word, on anything and everything; a toll which it forces up to the point at which the worker asks himself: Shall I remain and pay - or shall I emigrate and renounce it all? The workers are always at the gold-point. (In foreign trade the gold-point is that state in the balance of payments at which merchants are uncertain whether it is more profitable to pay in bills of exchange or in

gold. The cost of transporting gold is the billbroker's "rent".) The more pleased a man is with his country and his fellow citizens, the higher the price charged by the landlord for this pleasure. The tears of the departing emigrant are pearls of great price for the landlord. For this reason city landlords often organise improvement societies and other institutions intended to render town life attractive, in order to restrain departure and stimulate arrival and so to raise the rents on their building sites. Homesickness is the tap-root of rent on land.

But if the German farm labourer does not live by bread alone, neither does the settler on freeland. The material proceeds of labour are only part of what man needs to make life worth living. The emigrant had to struggle to overcome the emotional forces binding him to his native land, and similarly in his new home he finds many things to attract or to repel him. The attractions tend to make the proceeds of labour appear sufficient to him (just as everyone is prepared to do agreeable work for a smaller remuneration), whereas the repellent features diminish them. If the repellent circumstances preponderate (climate, insecurity of life and property, vermin and so forth) the proceeds of labour must be correspondingly larger, if the emigrant is to stay on and encourage those who remained at home to follow his example. Everything that influences the life and happiness of the settler on freeland has a direct influence on the contentment of the German worker and affects his wage demands. This influence begins with the account of the journey. If the voyage passed off without sea-sickness, if life on board and the food were tolerable, those left behind will be encouraged. If the settler tells of liberty he is enjoying, of hunting and riding, of great hauls of salmon and herds of buffaloes, of his right of disposing freely of the riches of nature, of his being treated everywhere as a free citizen and not as a serf and beggar, the labourer at home will of course hold his head higher during the wage negotiations than if his brother writes of the inroads of Red Indians, of rattlesnakes, vermin and hard work.

All this is known to the landowners, so if a letter of lament arrives, the most is made of it; it is published in the Press which is given to understand that it must on the other hand carefully exclude any reports that might prove attractive and encouraging. The organisation which is set up to advertise the attractions of the home country is also entrusted with the task of reviling freeland. Every snake-bite, every scalp taken, every swarm of locusts, every shipwreck, by making the workers less likely to emigrate and more amenable, is converted into hard cash for the landowners.

6. MORE PRECISE DEFINITION OF FREELAND

When freeland is spoken of we first think of the vast tracts of uncultivated land in North and South America. This freeland is easily and comparatively cheaply reached. The climate is suitable for Europeans, the social conditions are to many people attractive; the security of life and property is fair. On his arrival the immigrant is accommodated for a week or two in a hostel for immigrants at the expense of the State, and in some countries he is given a free railway ticket to the farthest limit of settled land. Here he is free to settle immediately. He may pick out the site he likes best: pasture, ploughland or forest. The homestead that he has a right to claim is extensive enough to provide work for the largest family. As soon as the settler has driven in the boundary stakes and notified the land-office, he may start work. Nobody interferes with him or even inquires who allowed him to till the earth and reap the fruits of his industry. He is lord of the land between his four stakes.

Land of this kind we call freeland of the first class. Such freeland is not of course to be found in settled parts, but only where men are few and far between. Within the tracts already occupied

there are, however, large areas that are not cultivated, but which by some abuse of State-power have become the private property of individuals living in some far-off place. A few thousand persons living in Europe own between them hundreds of millions of acres of such land situated in America, Africa, Australia and Asia. Anyone wishing to occupy a piece of this land has to come to terms with the proprietors, but as a rule he may buy or rent what he desires for a nominal sum. Whether he does or does not pay a few pence an acre annually for the land he intends to cultivate can make no appreciable difference in the proceeds of his labour. Such conditionally freeland we call freeland of the second class.

Freeland of the first and the second classes is still to be found in abundance in every part of the world outside Europe. It is not always land of the best quality. Much of it is densely overgrown with forests needing a great deal of labour to clear. Large areas suffer from lack of water and can be made fertile only by expensive irrigation schemes. Other land again, often of the best quality, has to be drained; or being situated in remote valleys lacks means of communication without which exchange of the produce is impossible. Freeland of this kind can be taken up only by emigrants possessing capital or credit. For the theory of rent and of wages, however, it does not matter whether this freeland is brought under cultivation by a company of capitalists or by the emigrants directly. The distinction only affects capital and its interests. If the emigrant settles on land which has been opened up in this way, that is, with the help of capital, he has to pay the customary interest on the capital invested, and he must add this interest to his working expenses.

For individuals or companies themselves possessing the means necessary for land-reclamation on a larger scale half the world is still freeland. The best land in California and along the Rocky Mountains was until lately a desert; now it is a vast garden. The British have made Egypt habitable for millions of men by means of the Nile dams. The Zuider-Zee and many deserts such as Mesopotamia will also be brought into cultivation again by a similar expenditure of capital. Thus we may say that freeland of the second class will be at the disposal of mankind for an indefinite period to come.

7. FREELAND OF THE THIRD CLASS

The most important freeland, however, and that which is also of greatest significance for the theory of rent and wages is freeland of the third class, which is everywhere available close at hand. The conception of this freeland, however, is not so simple as that of the other two forms and calls for some reflection.

A few examples will serve to make the matter clear to everyone.

Example 1. In Berlin the building regulations do not allow houses to be built more than four storeys high. If the limit were two storeys the city would have to cover twice its present area to lodge the same population. Hence the land saved by the third and fourth storeys is to this day unoccupied building land. If the American manner of building were permitted in Berlin - that is, 40 storeys instead of four - one-tenth of the present building area of Berlin would suffice. The rest would form a surplus and would be offered to any builder at little more than the price of a potato patch. Freeland for building purposes is, therefore, available even in the centre of any large German city, in an unlimited quantity - from the fourth storey upwards towards the clouds.

Example 2. In the republic of "Agraria" the use of chemical fertilisers is prohibited by law,

nominally because it is alleged to be injurious to health, in reality in order to limit the output of grain and so to keep up its price. The landowners of Agraria believe that little and dear is better for them than much and cheap. In consequence of this prohibition and the resulting small crops and high prices, and because emigration, also, is prohibited, the people of Agraria have brought all wastes, swamps and moors under cultivation, and so contrived to make the crops meet the needs of the population. But in spite of this the people are discontented and clamour for repeal of the prohibition, it being generally expected that the use of chemical fertilisers would treble the produce of the soil, as it did in Germany.

What would be the result of repeal on rent and wages ? Would not the same thing happen in Agraria that happens in the city, when new building regulations allow the number of storeys to be trebled ? With the use of chemical fertilisers the soil of the republic would suddenly yield trebled harvests, harvests three times larger than the present population requires. The consequence would be that of every three acres two would be allowed to lie fallow at the disposal of future generations. In a republic where every inch of soil, every swamp is cultivated, the import of chemical fertilisers would suddenly create vast areas of freeland. And this freeland would, for the time being, be used only for hunting and would be leased for this purpose, for a nominal amount.

These examples from the building industry and agriculture show how new land, freeland of the third class, may be created and is being daily created as the result of scientific discovery. The nomad requires 100 acres to provide for his family, the farmer 10, the gardener one or less.

The whole agricultural area of Europe is as yet cultivated so superficially, and population, even in Germany, is still so sparse, that if garden culture were generally adopted, half the area at present under cultivation would have to be left fallow, first because we should lack purchasers for such quantities of foodstuffs, and secondly because we should lack the workers necessary for such an intensive cultivation of the soil.

We may therefore consider the whole of Germany as such freeland of the third class. With regard to the yield of the soil which the farmer working intensively reaps over and above the yield of the hunter, the nomad, and the farmer working extensively, all farm land may be considered as freeland, just as Americans may consider the space above the storeys already in existence, up to the clouds, as free building land.

Let us apply these examples to the theory of rent and wages. Germany, in the limited sense above described, is still freeland, and the farm-labourer may at any time take refuge on this freeland if dissatisfied with his wages. The wages of farm-labourers cannot fall permanently below the proceeds of labour on such freeland of the third class, any more than they can fall below the proceeds of labour on freeland of the first class. Here, then, is an unfailing support for the farm-labourer in his wage negotiations.

And now, how much can the labourer demand as wages ? How much the landowner as rent ?

8. INFLUENCE OF FREELAND OF THE THIRD CLASS ON RENT AND WAGES

Let us suppose that, with the usual extensive farming methods of the district, 12 men are needed to cultivate 100 acres of land, and that the harvest amounts to 600 tons, that is, 50 tons for every man and 6 tons per acre.

Let us further suppose that with intensive farming the same area requires 50 men to cultivate and yields 2000 tons, or 40 tons instead of 50 for each worker, and 20 instead of 6 tons per acre.

Thus the produce of intensive cultivation is augmented as compared to the area, but diminished as compared to the work.

With extensive cultivation:

Twelve men produce 50 tons each, that is 600 tons.

With intensive cultivation:

Twelve men produce 40 tons each, that is 480 tons.

So the difference of 120 tons is to be attributed to the larger area of 100 acres, which enabled these 12 men to adopt this extensive cultivation, that is, cultivation requiring less labour. They will of course prefer this method as long as the land necessary for it is at their disposal. But if the land is not at their disposal they are forced to have recourse to intensive cultivation and to be satisfied with the smaller product of labour. The disadvantage is so great that if anybody places the area necessary for extensive cultivation at their disposal they will consent to pay for the advantage resulting for them, or, in other words, the owner of this area will be able to levy an additional rent corresponding to the difference between the product of labour in extensive and intensive cultivation, the former being larger, as is proved by experience. In our example, then, the rent of 100 acres of land will be 120 tons.

Agriculture tends to extensive cultivation to save labour, but to intensive cultivation to save land. Out of the tension thus arising rent is born, and the degree of this tension (a matter of experience) determines the distribution of the farm produce between rent and wages.

We need not stop here to explain why extensive cultivation yields more produce for a given amount of labour and less produce for a given amount of land. That is a question of agricultural technique. For us it suffices to know that such is the case in agriculture, that it is founded in the nature of things. If it were otherwise, if extensive cultivation yielded 40 tons while intensive cultivation yielded 50 tons a head, the whole of agriculture would tend towards intensive cultivation. All the land that could not be stocked with labour would be left fallow, simply because any workers still available would reap larger harvests by a still more intensive tillage of the land already under cultivation than by cultivating fallow land.

(The theory of population which asserts that population corresponds to the food supply, is not inconsistent with the above proposition. Population grows with the augmentation of the food supply; it follows in the wake of intensive cultivation, it does not precede it.)

By extensive cultivation we mean that form of agriculture in which all the labour offering itself must be employed in order to cultivate the whole of the area available, no matter what the method of cultivation may be, hunting, cattle grazing, three-field system, marsh culture, or present-day comparatively well-developed farming.

By intensive cultivation we mean that form of agriculture which, if carried on on a large scale, must result in a general shortage of labour.

Intensive and extensive cultivation are therefore relative terms. The herdsman is an intensive worker as compared to the huntsman. Hence pastoral tribes must generally pay rent for the use of their land (hunting-grounds), and are able to do so.

Extensive cultivation yields the larger product of labour (wages and rent), whereas intensive cultivation yields the larger crop. The landowner would like to combine the two, and of course endeavours to practice intensive cultivation. He cannot, however, do so without withdrawing labour from among the extensive cultivators and so causing land to be left fallow (freeland of the third class). Now it stands to reason that the owners of this land are unwilling to let it lie fallow. They therefore try to attract labour to it by raising wages; and in doing so they are prepared to go close to the limit of profitableness (absorption of rent in wages), since a landowner will prefer to receive a dollar an acre rent rather than to receive nothing at all.

Freeland of the third class has thus the function of levelling wages and rent. Freeland of the third class makes arbitrary fixation of wages impossible. The landowner does not fix wages as low as he pleases, neither does the labourer demand as much as he chooses; the amount that falls to each is determined by economic laws.

9. INFLUENCE OF TECHNICAL IMPROVEMENTS ON RENT AND WAGES

Technical improvements increase the product of labour, and if they increase it equally in intensive and in extensive cultivation, wages and rent will also increase equally. The ratio of distribution then remains unchanged, the landlord deriving the same advantage as the workers from improvement of the means of production.

Technical improvements are rarely, however, of equal benefit to the two modes of cultivation, extensive and intensive. What, for instance, can the intensive farmer do with a ten-share motor plough, or with a seed distributor? Such machines can be used only for large areas; for intensive cultivation they are useless, just as lions are useless for catching mice.

For freeland of the third class the motor plough is quite useless, its realm being freeland of the first or second class, the vast plains of America, where a single motor plough (* The motor plough is sometimes the property of the agricultural co-operative society, but as a general rule it belongs to a contractor, the local blacksmith, who also keeps it in repair.) will plough the fields of 50 or more farmers, and plough them well and cheaply. The product of labour of these freeland-settlers is of course thereby increased enormously. But on the product of labour depend the proceeds of labour, and the proceeds of labour of the freeland-settler determine the wages of labour on rented land everywhere.

Now if all the circumstances connected with conversion of the product of labour into the proceeds of labour remained unchanged, wages in general would necessarily rise in the same proportion as the increase in the products of labour due to the motor plough. These circumstances do not, however, remain unchanged, and here again we see how necessary it was to distinguish from the outset, between the product of labour and the proceeds of labour. For it is the proceeds, and not the product of labour, that determine wages in general.

If the proceeds of labour of the freeland-settler increase, the immediate consequence is an increase of the proceeds of labour of industrial workers. If that were not so, industrial workers

would return to agricultural labour on freeland of the first, second or third class. This rise of wages in industry is brought about by a modification of the exchange ratio between the products of the freeland-settler and of industry. Instead of 10 sacks of wheat the settler has to give 12 for a gramophone, a rifle, a medicine-chest. In this way the settler, when transforming the product of his labour into the proceeds of labour, has to surrender part of his surplus product to the industrial worker. Thus the motor plough forces up wages all round.

What the wage-earners gain by the motor plough is, however, more than the surplus of products created by the plough. The motor plough may produce a surplus of 100 million tons, but this, if distributed among all the workers, would be a trifling sum, out of proportion to the increase of the labour-proceeds of the freeland-settler. The reason why the wage-earners gain more is as follows:

If there is a rise in the labour-proceeds of the freeland-settler of the first or second class, the wages of the workers on rented land in Europe rise likewise, even although there is no increase in the product of their labour. (The motor-plough not being employed, or being employed only to a limited extent.) The increase of wages here takes place at the expense of rent on land; the means for the rise of wages are derived only in a small part from the surplus produce of the freeland-settler.

We continue our examination of this situation, in which technical improvements benefit freeland farmers of the first and second classes, without benefiting intensive cultivation. We have seen that:

The product of labour of the freeland farmer of the first and second class increases by, say, 20% through introduction of more efficient agricultural machinery - after allowance for interest and for upkeep of the machines.

The Proceeds of labour of the freeland farmer increase by only 10% since, as we have already shown, the industrial worker demands and obtains more for the product of his labour.

The exchange relation between industrial and agricultural products shifts 10% in favour of industry. Thus of the 20% increase of the product, only half, or 10%, is transferred to the general rate of wages.

German landowners must draw on their rents to meet the increased demands of their labourers, since the product of German land has not increased.

But the landowner's loss is not confined to the decrease of his rent expressed in tons of agricultural produce - which are of as little use to him as are tons of agricultural produce to the freeland settler. For with the exchange of his tons of rent-products for industrial products he again loses, because of the shift in the ratio of exchange - his total loss being considerably more than 10%.

The smaller the rent in proportion to labour costs, the harder the landowner is hit by the rise of wages. But since landowners cannot, obviously, engage labourers at a loss, and since landowners practising extensive cultivation cannot have a greater profit than their colleagues practising intensive cultivation, there is a recession from intensive to extensive cultivation. Less labour is required, labourers are thrown out of employment, and these unemployed labourers depress

wages below their true level, namely the labour-proceeds of freeland-farmers of the first and second classes (which have risen 10%). Emigration then increases until equilibrium between wages at home and the proceeds of labour overseas is re-established.

When technical progress benefits extensive cultivation in the home country, without benefiting intensive cultivation, the larger share of the increased product falls to rent. In spite of the increased product, wages may then even fall below their former level.

Thus technical improvements affect very unequally the distribution of the products of the soil, much depending upon where the benefit falls, whether on freeland of the first and second classes, or on freeland of the third class, or on extensive cultivation.

The workers, in former times, were not always wrong when, to safeguard their interests, they clamoured for the destruction of machinery. It may happen that rent not only absorbs the whole of the surplus production from technical improvements, but also takes away part of the former wages.

10. INFLUENCE OF SCIENTIFIC DISCOVERIES ON RENT AND WAGES

Scientific discoveries were an even more powerful factor than machinery in trebling the yield of German land within the last decades. I shall only mention briefly the use of potash salts, basic slag, and nitrogen-collecting plants as manure; the artificial production of nitrogenous fertilisers, (calcium cyanamide), the prevention and cure of contagious diseases in plants and animals. (*By electrifying the soil the physicist Lodge obtained an increase of produce of 30-40%.)

These discoveries have not, however, fertilised all soils equally. By far the greatest gain from them so far has accrued to the peaty, marshy and sandy soils previously considered barren. Here the development meant more than trebling the produce; it meant the creation of new soil, for the sand and moor had not been previously cultivated at all. In Germany a small fraction of these waste-lands was formerly cultivated as burnt moor and yielded a scanty crop every fifteen years to those who were willing to undertake this arduous labour.

(*As lately as 30 years ago, more than half the province of Hanover was covered with heather. Every 15 years the heather was cut, piled and burnt, the ashes being spread on the land which was then ploughed and yielded a scanty crop of rye or buckwheat. The smoke from these fires was often observed at 500 miles distance from Hanover.)

These lands now yield rich harvests every year. Land which was always naturally fertile cannot, of course, treble its already rich yield. Such land provides the manure necessary for its own perennial rejuvenation if, as is the general rule, tillage is combined with cattle-breeding. That is why artificial fertilisers are much less important in such cases than when applied to lands naturally barren. And the influence of artificial fertilisers on the produce of freeland of the first and second class is still slighter. These virgin lands as a rule require no manuring at all. The cost of transporting artificial fertilisers to such land is, moreover, prohibitive.

Thus the effect of scientific discoveries on wages and rent varies according to the nature of the land to which they are applied. As in the case of machinery, it is impossible to state generally

whether they raise or depress rent or wages.

11. LEGISLATIVE INTERFERENCE WITH RENT AND WAGES

The influence of legislation on the distribution of the product of labour among rent-receivers and workers is manifold and far-reaching. It has often been said that politics consist, in the main, of attacks on wages and rent, and in the corresponding defensive measures. As a rule action is here dictated by instinct. The interplay of forces is not fully understood, or if it is understood it is politic to conceal the truth. The advocates of the measures proposed with so much passion are not greatly concerned about the scientific proof of their efficacy. Politics and science are uneasy bedfellows; very often indeed the aim of politics is to prevent, or at least retard, the recognition of some scientific discovery. What curious things have been said, for example, about wheat-duties ! "They protect and encourage agriculture", say those who pocket the immediate advantages; "they are bread-usury and theft", say those who become aware of the duty in the smallness of the loaf. "The duties are paid by the foreigner", say some, to which others retort that the duties are all borne by the consumers. Thus the wrangle proceeds, as it has proceeded for fifty years, over a purely human transaction open to all to see; and still the disputants are none the wiser. It is therefore well worth investigating the influence of legislation, for example the taxation of land, on the distribution of the product of labour.

When a merchant orders a shipment of tobacco knowing that at the frontier he will have to pay a duty of \$100 per bale, it will be admitted that the merchant must be assured of recouping this expenditure, plus the interest on the capital invested, and plus his own profit, in the price of the tobacco when sold. The import-duty is, for the merchant, an integral part of the merchandise, and is entered by him in his inventory on the credit side, just like any other item such as chests, sacks and bales: -

100 Tons Java tobacco	\$50000
Freight and import-duty	10000
<hr/>	
	60000
10% expected profit	6000
<hr/>	
Capital	\$66000

That is how the merchant deals with import-duties. Why cannot our landowner deal similarly with the sum which the State collects from him in the form of a tax on land ? It is often asserted that he does so. Landowners themselves will tell you that they intend to charge every tax, with interest and profit added, to the tenant, so that in the long run the land-tax will be deducted from the scanty wages of the farm-labourers. If such is the case, these landowners will argue, is it not preferable to convert the land-tax at once into a poll-tax, a wage-tax or an income-tax ? The labourers would then at least save the interest and profit that the landlord adds to the taxes.

In order to examine this problem more closely it is indispensable to answer a question raised by Ernst Frankfurth in his illuminating little book on unearned income, namely: What becomes of the proceeds of the land-tax ? For it surely cannot be immaterial for the fate of the land-tax whether the State employs the revenue from it to construct new roads through the landlord's estate, and to reduce the education rate for the children of his tenants, or, say, to pay an import

premium on foreign grain. If we do not know this we cannot determine who, ultimately, pays the land-tax. So says Ernst Frankfurth.

There are landowners who do not wait for the State to tax them and with the proceeds to build the roads necessary for exploitation of their estates. They construct the roads themselves. The costs form a capital investment, like clearing, draining, and so forth. The landowners expect advantages from the roads which will balance the interest on the capital to be invested. If, nevertheless, it is, as a rule, the State that constructs the roads, while taxing the landlords for the expenditure, this is simply because the roads usually cross the land of many owners with conflicting interests and therefore necessitate powers of expropriation which are exclusively the domain of the State. But even if the State builds the roads, the land-tax levied for the purpose is a capital investment, the interest on which the landlord expects to recover to the last farthing. And this is the real nature of almost every tax. If the State levies a tax to protect the frontier from the inroads of barbarians, the landlord saves the amount of this tax from the insurance which would otherwise be necessary against the invasion of Cossacks and Yankees (Russian and American wheat!).

So if the State employs the revenue from the land-taxes for the benefit of the landlords, these taxes must be looked upon as capital investments. They are the remuneration of the State for services rendered. The landowner may enter these taxes where he enters the wages of his labourers. If he leases the land to tenants he will add the tax to the farm rent, recovering it if the State works cheaply and well, and even making a profit if the State displays the shrewdness of a clever contractor.

But what if the State taxes the landowners in order to relieve the tenant or the labourers, say from the education-rate ? Is it still possible for the landlord to consider the land-tax as a profitable investment ? Let us suppose that such is not the case, that the landlord cannot charge the tenant with the amount of the education-rate saved by the latter nor reduce the wages of the labourers. Tenant and labourers would then have their labour-proceeds increased by the amount of the education-rate remitted. But why should the landlord raise the labour-proceeds of the tenants and labourers? Because he is himself taxed? That is no reason since the labour-proceeds of the tenant and labourer are determined by the labour-proceeds on freeland of the first, second and third classes. If the revenue from the land-tax is employed to benefit the freeland-farmer of the third class likewise, say also in the shape of a reduction of the education-rate, then, indeed, the equilibrium between the labour-proceeds of the wage-earners and tenants and those of the freeland-farmers is not disturbed, and it is impossible for the landowner to transfer the burden of the land-tax to his tenants and labourers. Otherwise he says to the tenant: "To the other advantages which my farm offers you, free education for your children is added. Rich loamy soil, a healthy climate, a fine view of the lake, a situation close to the market, free schools - sum total - you have got to pay me \$10 an acre". And to his farm labourer the landowner says: "If you do not consent to a reduction of wages you may go. Calculate whether with the wages I offer you, together with free schools for your children, and other social institutions, you are not as well off as if you decide to cultivate freeland of the first, second or third class. Think it over before you go".

It is clear that the whole burden of the land-tax is transferable as long as its yield does not benefit freeland farmers, more particularly those of the third class. If, on the other hand, the revenue of the land-tax is made to benefit, in some form or other, intensive cultivation, the increase of the labour-proceeds of freeland-farmers of the third class is passed on to the farm

labourers engaged in extensive cultivation, and the land-tax, in this case, far from being transferable, hits farm rents doubly, first by the full amount of the tax and secondly in the form of higher wages demanded by the farm-labourers.

This shows how right Frankfurth was to enquire first about what is done with the yield of the tax, and how futile it is to attempt to answer the question as to whether the burden of the land-tax can be shifted or not, without first establishing the necessary premises. It also leads us to suspect how often the measures proposed by social reformers must fail, or have the opposite to the desired effect. And it shows us how greatly the distribution of the labour-product is influenced by the power of the State.

12. PROTECTIVE-DUTIES, RENT AND WAGES

By the above reasoning we see that a land-tax levied for the benefit of freeland-farmers, say in the form of a premium on imported wheat, would hit rent doubly, first by the amount of the tax, and secondly by the increased wages of farm labourers. Many readers will now be inclined to suppose that a protective-duty, being the opposite to an import premium, must raise rents in a two-fold manner, in the first place directly, by the amount of the special rise, corresponding to the duty, of prices of farm produce, and in the second place through depression of wages resulting from reduction of the labour-proceeds of freeland-farmers of the first and second classes.

Let us see if that is true.

To begin with, let it be understood that a protective tariff differs fundamentally from other revenue duties and taxes in that the interest of the landowners in the tariff is much greater than that of the State which levies the duty. For every 100 millions which the State raises out of the import of wheat, the landowners will levy 1000 millions (* The exact amount for any country can be calculated from the ratio of imports to home production.) from the consumers of bread in the form of higher prices. That is why the thing is called a protective-duty: it is designed to protect and augment the rents of the landowners, and to give better security to their mortgages. When import-duties are purely fiscal, as in the case of tobacco, the tax is imposed not only on the imported goods but also on those produced in the country. Anyone having more than one tobacco plant in his garden in Germany must inform the revenue authorities, and in Spain the culture of tobacco is, or was, prohibited for fiscal reasons. But if the import-duty on wheat is of secondary importance as revenue, Frankfurth's query as to the use made of the tax is likewise of secondary importance for what we have set out to demonstrate. We shall therefore leave out of account the wheat duties themselves, and concentrate our attention on the farm rents placed under their protection.

There is nothing arbitrary in the distribution of the product between landowner and farm worker; everything proceeds according to inherent laws. Any artificial interference with this distribution must be in accordance with these laws, not in opposition to them, otherwise it will come to nothing. But even if the attempted interference does come to nothing, some time is usually required for the disturbed equilibrium to be restored, and meanwhile the play of forces may resemble the swing of a pendulum that has been set in motion by a push: distribution will oscillate for some time between rent and wages until the former state of matters is re-established.

So if protective-duties for the purpose of raising rents at the expense of wages are in conflict

with the economic laws governing the distribution of the product between rent and wages, they must either fail entirely or succeed only temporarily, that is, until the equilibrium of forces disturbed by legislative interference has been restored.

It is not our purpose to investigate these matters further than to obtain a general picture of the economic processes resulting from import-duties. If we wished to arrive at conclusions applicable in all possible circumstances to individual cases, such as, for example the question as to how much an import-duty of 33% on wheat would raise the price of a certain estate, we should be obliged to carry the investigation far beyond the scope of this book.

Our first concern with regard to import-duties is their influence on the proceeds of labour of freeland-farmers of the first and second classes, on which farm wages on the tariff-protected land depend. Of the proceeds of labour of the freeland-farmers of the third class, whose product of labour is also protected by the tariff, we shall speak afterwards.

Freeland-farmers of the first and second class rightly consider import-duties as a burden, like any other charge which renders the conversion of the product of their labour into proceeds of labour more expensive. Whether this increased expense results from higher freights, from higher prices of sacks, from piracy, from fraud, or from import-duties, makes no difference to them. What the consumer pays for the product of his labour (wheat) the freeland-farmer considers as the yield of his labour, and this yield is diminished by import-duties and freight. The proceeds of his labour are therefore correspondingly smaller. If the loss caused by freight hitherto amounted to 30% of the price of his product, this loss may be increased to 50 - 60% by the tariff.

The freight from the Argentine seaports to Hamburg is usually about \$4 a ton. To this is added the cost of railway transport from the farm to the harbour, which is more than twice as much; in all, therefore, about \$13. The duty in Germany is \$14 a ton. The total is thus \$27 in a price of about \$60.

The immediate effect of the duties is, therefore, to reduce the proceeds of labour of the freeland-farmers of the first and second classes, and as these labour proceeds determine the wages of the workers on tariff-protected land, there is here, too, a reduction of wages, though at first perhaps only in the form of increased prices for foodstuffs, in connection with stationary money wages. The duty, then, allows the landowner to demand higher prices for his agricultural produce without having to pay out this surplus in the form of higher wages to his labourers, or in higher prices for industrial products for his own consumption. For a rise of industrial wages - which would mean a shifting of the burden of the import-duties from industrial workers - is impossible, since these wages are, as we have seen, also determined by the labour-proceeds of freeland-farmers of the first and second classes. Industrial workers are consequently no more able to shift the burden of the import duties than are farm-labourers and freeland-farmers of the first and second classes. So until the reactions to be described later begin to make themselves felt, the whole amount of the import-duty is a free gift to the landowner. And by import-duty we mean not only the sums received by the public treasury, but also the sums levied on the consumer in the form of higher prices paid for native products in the home markets in consequence of the tariff barrier. This means that every loaf of bread, every egg, every ham, every potato pays a tribute which goes into the pockets of the landlords. (If the land is let, the duty is immediately transferred to the rent; if it is sold, the duty is capitalised, that is, multiplied by 20 or 25, and added to the usual price.)

The duty, say the politicians, is paid by the foreigner. And that is perfectly true. For the relatively unimportant sum collected as State revenue at the frontier is, no doubt, paid by the freeland-farmer settled abroad, from the proceeds of his labour. But can anyone seriously attempt to make wheat-duties palatable to the German workman by telling him that it is the freeland-farmer who pays the amount collected by the State at the frontier ? This is cold comfort for the German worker whose wages are determined by the proceeds of labour of the freeland-farmer - cold comfort for the man who must pay out of his own pocket the higher price of food, increased by German landowners by the full amount of the tariffs.

The belief, the hope, the bold assertion, that capital-interest win bear part of the wheat-duties is, as we shall show presently, erroneous. Interest, especially in the case of new capital seeking investment, cannot be taxed. It is free and independent of tariffs.

The import-duty will, however, produce certain counter-effects that will slowly but surely make themselves felt, somewhat as follows: The freeland-farmer in Manitoba, Manchuria, or Argentina writes to his friend in Berlin: " I lose in freight and import-duties more than half of what you pay for my wheat in Berlin, and you also lose in freight and import-duties half or more of what I pay here for your goods (tools, books, medicines and so forth). If we were neighbours we should save these costs and both you and I would find the proceeds of our labour doubled. I cannot convey my fields to where you are, but you can transfer your workshop, your factory here. Come, then, and I will supply you with whatever food you may require at half the price you have now to pay, while you will supply me with your products at half the price I have to pay at present."

This calculation is correct, though the obstacles to the execution of the proposal are many. Industry can, as a rule, prosper only in centres where there are many other industries, since almost all branches of industry are to some extent inter-dependent. The emigration of industries must therefore proceed gradually; it begins with the trades that are naturally most independent: brickyards, saw-mills, flour-mills, printing houses, furniture and glass factories, etc., and at first, of course, it affects only commodities upon which freight-charges and import-duties are especially high. Nevertheless, the emigration of individual industries depends on a calculation, and it is import-duty which, added to freight-charges, very frequently calls for a decision in favour of emigration. The higher the duty on wheat, the more often will it pay to pack up tools and re-establish the workshop in the vicinity of the freeland-farmer. And with every new industry established in the neighbourhood of the freeland-farmer the proceeds of his labour increase, and this increase reacts, as we know, on wages in the protected country.

The advantages of the tariff to the landowner are therefore sooner or later absorbed in rising wages. Landowners who realise this will act accordingly: they will sell their land before the counter-effects make themselves felt, and leave their successors to go clamouring to Parliament for relief, when the inevitable reaction involves agriculture in difficulties. (* "Die Not der Landwirtschaft": "The plight of agriculture" was the political slogan of the Prussian protectionists. Here "agriculture" was a euphemism for rent. It would not be difficult to find an English or American parallel.) (The reduction of rent in consequence of the rise of wages is inevitable, although it may not always be expressed in figures. For it may happen that the development here described may synchronise with one of those frequently occurring currency inflations caused by gold discoveries or over-issues of paper-money. Currency inflation such as occurred in the period of 1890 to 1914 restores to the landowner what he loses in rent. But this

applies only to mortgaged landed property, and the landowner has also to reckon with the reverse possibility, namely a gradual fall of prices, as in the years 1873-1890.)

But the reactions set up by a protective tariff are not confined to the behaviour of freeland-farmers of the first and second classes. We must also find out what happens to the freeland-farmer of the third class. The effect on him is the exact reverse of the effect on freeland-farmers of the first and second classes, who pay the duty out of their pockets, whereas he is under the protection of the tariff as regards the products he brings to market after satisfying his own personal needs. So he participates in the blessings of the protective tariff, that is, in the looting of consumers. Instead of six marks he now gets 8 marks for a rabbit, and he sells his honey for 1.35 marks instead of 1.10 marks: in short, he obtains higher prices for everything he sells, without having to pay higher prices for what he has to buy. That is to say, the labour-proceeds of the freeland-farmer of the third class increase, whereas the wage workers complain of a decrease in the proceeds of their labour. Thus the labour-proceeds of the freeland-farmer of the third class increase in a twofold manner, absolutely on account of the rise of prices, and relatively in comparison with the decrease of wages. Nevertheless the labour proceeds of the freeland-farmer of the third class determine the general rate of wages. Evidently, therefore, the disproportion cannot long continue. Word goes round that a rabbit can be sold for eight marks, honey for 1.35 marks, potatoes for 5 marks, and goat's milk for 20 pfennigs, so the wage-earners are up in arms with demands for increased wages. Pointing to the increased labour-proceeds of the freeland-farmer of the third class they, too, claim higher wages, threatening to move to the heath, to the marsh, to the waste, if their demands are not granted.

Hence the wage-increase proceeds from freeland of the third class, as well as from freeland of the first and second classes, and it continues until it has completely compensated the effect of the wheat duties.

It must be remembered, further, that the special rise of prices of all farm produce, brought about by the import-duties, and the consequent increase of rents, must call for new efforts in the direction of intensive cultivation, and that if the duty raises the labour-proceeds of intensive farmers, wages, and through them rent, must be still further affected.

The effect of the tariff is to raise the gross proceeds of intensive farmers and, as the tariff does not at first affect the prices of industrial products, to increase also the net proceeds of their labour.

But if the labour-proceeds of intensive farmers increase, wages must also rise, for the labour-proceeds of intensive farmers determine wages in general.

The general conclusion of our examination is consequently that a protective tariff, through its influence on the proceeds of labour of the freeland-farmer, is bound sooner or later to counteract itself; so that the protection obtained can never be other than temporary.

For those who have to pay the tariff charges "temporarily", it may be a consolation, and for those who enjoy the advantages of the tariff it may be disquieting, to become aware of their transitory nature. But it is a very serious matter if the transitory rise of the rent is accepted as permanent by the farmer when buying land or dividing an inheritance. For what does the farmer know of theories of rent and wages? He is guided simply by experience. He sees the harvest, he knows the prices of farm produce and the wages paid farm-labourers - his calculation is finished and

the bargain luck. The customary sum is paid in ready money, and the rest is covered by a mortgage. But this mortgage is not a temporary matter: it is sure to outlast the transient effect of the tariff upon wages, and it does not decrease when the labourers, regardless of the stationary selling prices of farm produce approach the farmer with demands for increased wages. The farmer then begins to complain, once more, about the plight of agriculture".

13. THE ENTIRE WAGE-SCALE UP TO THE HIGHEST SALARIES IS BASED ON THE LABOUR-PROCEEDS OF CULTIVATORS OF FREELAND

If the landowner is able to squeeze \$1000 rent out of his land, he will not be satisfied with less than this amount if he chooses to hire labourers and to farm the land himself. If the land, after deducting cost of wages, did not yield at least \$1000, the landowner would dismiss the labourers and let it for \$1000.

In no circumstances, therefore, will a day-labourer earn higher proceeds of labour than the tenant or the settler on unclaimed land; for otherwise the tenant (or settler) would prefer to work as a day-labourer.

On the other hand the day-labourer will not consent to work for a wage which is less than what he might earn as a tenant or settler, for otherwise he would rent a piece of land or emigrate. It is true that he often lacks the money necessary to run a farm or to emigrate; but whether he has the money or is forced to borrow it, he must charge interest on it in his calculation, and deduct this interest from the product of his labour. For it is only what is left to the settler after paying the interest on his capital that belongs to him as a worker.

If the gross proceeds of the labour of the settler on freeland are \$250 and the interest on his working capital is \$50 then the net proceeds of his labour are \$200 and the general rate of wages must oscillate about this point. The wages of the day-labourer cannot rise higher, for otherwise settlers would turn day-labourers; and they cannot sink lower, for otherwise day-labourers would turn settlers.

The wages of industrial labourers are also, obviously, dominated by this general rate of wages. For if the proceeds of labour in industry were larger than the proceeds of labour on unclaimed land, agricultural labourers would turn to industry, with the result that agricultural produce would become scarce and rise in price, whereas industrial products, being super-abundant, would fall in price. The rise of prices in agriculture and the fall of prices in industry would bring about a re-arrangement of the wage scale, until wages had again been equitably adjusted. And this readjustment would certainly be rapid, considering the great number of migrating labourers who are indifferent whether they grow sugar-beet or shovel coal.

Thus it is incontestable that if the proceeds of labour on freeland determine the labour proceeds of the agricultural labourer they also determine labour proceeds in general.

Wages cannot rise above the proceeds of labour on freeland, since freeland is the only support of the farm-labourer in his wage-negotiations, or of the tenant in his rent-negotiations, with the landowner. If the farm-labourer or tenant is deprived of this support (say by suppression of his freedom of movement) he is at the mercy of the landowner. But since freeland is the only support, it is also true that no other circumstances can depress wages below these proceeds.

The proceeds of labour on freeland are, therefore, at once the maximum and the minimum of wages in general.

The existing great differences in the individual proceeds of labour are by no means inconsistent with this general rule. When the division of the product of labour between landowners and workers has once been determined, the share that falls to the workers is distributed automatically on a perfectly natural basis. The varying remuneration is not arbitrary, but is adjusted entirely by the laws of competition, of supply and demand. The more difficult or disagreeable the work, the higher is the wage. For how is a man to be induced to choose the more difficult or disagreeable of two tasks? Only by the prospect of higher labour-proceeds (which may, of course, consist of advantages and privileges other than money). Thus if the workers need a teacher, a pastor or a forester, their only course is to open their purses and grant salaries for these offices which may greatly exceed their own proceeds of labour. Only in this way can they induce someone to undertake the expense of having his sons educated for these professions. If the supply of teachers and pastors is still insufficient, the salaries must again be raised. If the workers have overshot the mark so that the supply exceeds the demand, salaries will be reduced. And it is the same with all trades requiring special training. The opposite happens when the workers need a shepherd, a goose-girl or a boy to scare crows. If they were to offer for such leisurely pursuits their own full proceeds of labour gained by hard work, every townsman, teacher, pastor and farmer would apply for these posts. So a minimum wage is offered for the herding of the geese, and this minimum is increased until someone is willing to accept the job. The workers also need a merchant to buy their products and to sell them whatever goods they want. This worker (merchant) must also be granted a wage, in the shape of commercial profit, sufficient to induce someone to devote himself to this harassing profession.

Thus the basis for the adjustment of all wages is always the proceeds of labour on freeland. Upon this basis is built the whole structure of fine gradations in the proceeds of labour up to the highest-paid occupations. Every change in the basis is therefore transmitted to the whole superstructure, just as an earthquake makes itself felt up to the weather-cock on the steeple.

Our proof that the doctrine of the "iron wage" is unsound is not yet, indeed, complete, for the "iron wage", though not caused by private ownership of land, might still be caused by capital. That capital does not possess this power is obvious, however, from the frequent fluctuations of wages (a really "iron" wage could not fluctuate). Why capital does not possess this power we shall demonstrate later (see Part V, The Free-Money Theory of Interest). If capital had power to reduce the proceeds of labour on freeland to a minimum corresponding to the "iron wage", the yield of capital, as expressed in the rate of interest, would necessarily share the fluctuations to which the product of labour on freeland is obviously subject. But this is not the case, for, as we shall show later, pure interest, which is here in question, is a remarkably stable quantity, so remarkably stable, indeed, that we are fully justified in speaking of an "iron" return on capital. So if besides this fixed quantity of interest, wages were also a fixed quantity, where - if rent moves on independent lines - would be the reservoir to collect the fluctuations of the product of labour?

14. INFLUENCE OF CAPITAL-INTEREST ON RENT AND WAGES

In making up his accounts, the settler on freeland must enter a charge for interest on his working capital. Interest must be separated from the proceeds of his labour, no matter whether

the capital is his own or borrowed. For interest has nothing in common with labour; it is governed by entirely different laws.

And the working landowner must also make this separation of capital-interest from the proceeds of his labour.

If both settlers on freeland and farmers on rented land have to pay the same rate of interest for the necessary capital, it might be imagined that the rate of interest had no effect on rent. But that is an error. With labour and means of production any amount of new land can be created, often in close proximity to cities. And the lower the rate of interest, the easier it is to reclaim waste tracts. The employer demands from the reclaimed land only an amount of interest equal to the rent of a field bought for the same capital outlay. With freeland of the first and second classes freight sometimes swallows up the larger part of the product of labour, but with reclaimed freeland it is capital-interest that absorbs the expected rent. Whatever the nature of the proposed reclamation, whether it is the drainage of the Zuider Zee, recently decided upon, or the cultivation of moorland, or the clearing of virgin forests, or the irrigation of deserts, or the blasting and removal of rocks, the first question is always the amount of interest on the capital required, which is then compared with the rent demanded for land of the same quality. If the rate of interest is high, the comparison will be discouraging, and the moor will be left uncultivated. If, on the other hand, the rate of interest is low, the undertaking will promise success. If the rate of interest fell from 4 to 1%, for example, many land improvements which cannot be undertaken today would become profitable.

With interest at 1% it would pay to turn the water of the Nile into the Arabian desert, to dam off the Baltic and pump it dry, to put the Luneburg Heath under glass for the culture of cocoa and pepper. With interest at 1% the farmer could also plant orchards where today he cannot do so because of the interest he would have to pay for 5 or 10 years on the capital invested while waiting for the future harvests. In a word, at 1 % it would be possible and profitable to bring all deserts, swamps and moors into cultivation. All the above proposals are not, of course, to be taken literally.)

A fall of the rate of interest would not only enlarge the area under cultivation, it would also enable men to extract double or treble the amount of produce from the present area through extended use of machinery, construction of roads, replacing of hedges by fences, construction of pumping stations for irrigation, drainage of the soil, planting of orchards, provision of appliances to protect the fields from frost and a thousand similar improvements. This, again, would necessitate a reduction of the cultivated area, and make freeland, the great menace to rent, more accessible.

A reduction of the rate of interest would, further, allow transport-facilities for wheat from abroad, (seaports, canals, ocean steamers, railways, silos) to be run more cheaply, which would lower the freight charges on the produce of freeland. And every dollar saved here means a dollar less for rent. Now the interest on the money invested in means of transport constitutes a very considerable part of freight charges. For the European railways in 1888, with an average rate of interest of 3.8%, the ratio between working costs (upkeep of the permanent way, salaries and wages, coal, etc.) and interest was 135:115. Interest, therefore, very nearly, equalled the running costs, so that a reduction of the rate of interest from 4 to 3% would have allowed a reduction of the freight charges of nearly one eighth.

Running costs = 4, interest on capital = 4, freight charges = 8

" = 4, " = 3, " = 7

" = 4, " = 2, " = 6

" = 4, " = 1, " = 5

" = 4, " = 0, " = 4

That is to say, with interest at 0% railway freights might be reduced by one half. With ocean freights the ratio of 9 costs to interest is not the same, although here, too, interest plays an important part: ships, working capital, harbours, canals (Panama, Suez), coaling stations, equipment of coal mines etc. - all this demands the regular rate of interest, and this interest is a component of freights, a charge on the labour-proceeds of freeland-settlers of the first and second classes, which are of such decisive importance for wages and rent.

Thus the reduction or elimination of interest would reduce freights by one half, and in this manner freeland would, economically speaking, be brought 50% nearer, the competition of foreign wheat becoming correspondingly keener.

But what would happen to rent if the arable area close at hand were multiplied in this manner beyond the need for it? What would happen to rent if freeland, which determines wages, could be increased at pleasure, and that too, close at hand, so that the difference between the product of labour of the freeland-farmer and the proceeds of his labour became less and less? Why emigrate to far-off Canada, to Manitoba, and from there ship wheat burdened with freight costs, to Holland, if we are able to grow the wheat on the soil of our own Zuider Zee? If the rate of interest falls to 3, 2, 1 or 0%, every country will be able to provide bread for its population. The limit to intensive cultivation is set by interest. The lower the rate of interest, the more intensive is the cultivation of the soil.

We can here observe the close alliance that exists between interest and rent. So long as there are wastes, marshes and deserts to reclaim, so long as land can be technically improved, a high rate of interest, the ideal of the capitalist, is at the same time the bulwark of the landowner. If the rate of interest fell to zero, rent would not, indeed, disappear completely, but it would be dealt a staggering blow.

of a fall of interest on the rent of building land is complex. Interest on the building capital is a far larger component of house-rent than is the ground-rent (in the country and in small towns the ground-rent is often less than 5 % of the rent of a house, whereas interest on the building capital in such cases forms 90% of the total rent). A fall of interest to 1 % or 0 % would therefore mean a great reduction of house-rent, and this of course would react on the amount of accommodation claimed by the individual families. The masses which today, because of high house-rents resulting from interest, must content themselves with very inadequate housing accommodation, would demand, and be able to pay for, roomier dwellings. But roomier dwellings mean larger building sites and therefore increased ground-rents. On the other hand a fall in the rate of interest would reduce railway and train fares, and the consequent shifting of the population to the suburbs would tend to counteract the rise of ground-rents in the city).

15. SUMMARY OF RESULTS ATTAINED SO FAR

The wage of the average worker is equal to the proceeds of labour of the average cultivator of freeland and is entirely determined by these proceeds. Every modification in the proceeds of labour of the cultivator of freeland is transmitted to wages, no matter whether such

modifications are brought about by technical improvements, by scientific discoveries, or by legislation.

The so-called "iron law" of wages is therefore an illusion. For the individual, the wage oscillates about the amount mentioned under 1. It may rise above this amount in the case of specially efficient work, but it may also fall short of it, just as it may even fall short of the minimum standard of existence.

The whole wage-scale for skilled work up to the highest levels is based on the labour-proceeds of the cultivator of freeland.

Rent on land is what remains of the produce of the land after deducting wages (and capital interest). As the amount of this deduction (wage) is determined by the proceeds of labour on land, rent is also determined by the proceeds of labour of the freeland-farmer.

Interest is the close ally of rent.

It cannot be asserted without qualification that technical progress always benefits rent. The contrary is often true. Progress and poverty are not necessarily coupled. Progress and growing general prosperity as often go hand in hand.

Nor can it be definitely stated whether the burden of a tax on land can, or cannot be shifted. The question can be definitely answered only when the destination of the revenue from the land-tax is indicated. The land-tax may hit rent twice (first, through the tax itself, secondly, through the increase of wages) or it may benefit rent by more than its amount.

If the yield of the tax on rent is employed for the benefit of the cultivators of freeland, for instance as a premium on imported grain or as a subsidy for the cultivation of waste land, the State, if it wishes, can confiscate rent completely. The burden of a tax on rent, when the yield of the tax is so employed, cannot be shifted.



Figure 1. The price of Agricultural land.

The price of land increases: With increase of quality and agricultural prices. With decrease of wage-rates and rate of interest.

16. RENT OF RAW MATERIALS AND BUILDING SITES, AND ITS RELATION TO THE GENERAL LAW OF WAGES

Whether wheat comes from Canada, from Argentina, from Siberia, or from a neighbouring farm, whether it be the duty-burdened wheat of a toiling German emigrant or duty-protected wheat of a wealthy Pomeranian squire, does not concern the miller. If the quality is the same, so also is the price.

This is true of all commodities. Nobody inquires about the cost of production of the goods offered for sale; everybody is indifferent about their origin. It makes no difference whether one man has been enriched by them and another ruined; if the quality is the same, so is the price. This is clearly seen in the case of coins. Nobody inquires where, when, or how the gold of the individual coins was obtained. One coin may have been bloodstained plunder, another the product of a toil-worn gold digger, but they circulate indifferently side by side.

Whatever the difference in the costs of production of the individual competing commodities - the price remains the same. This is known to everyone who uses raw materials, and it is known also to the owner of the land on which the raw materials can be raised. If, for example, a city

needs paving stones for a new street, the proprietor of the nearest quarry will at once estimate, the distance from the street to the nearest free quarry of equally good paving stones. He will then calculate the cost of carrying the stones from there to the street where they are needed, and the price is made. This price the city will have to pay, because only from this price upwards can competition come into play, and competition determines price. (The wages in both quarries are assumed to be the same, and may therefore be here left out of account).

If, however, direct competition is entirely lacking, if there is no free quarry within reachable distance, and the proprietor in consequence demands excessive prices for his paving stones, competition will be sustained by substitutes, in this case, say, wood-pavement, macadam, gravel, asphalt, or a railway; or the construction of the street may be abandoned. In the latter case the advantage expected by the city from the construction of the street would be the only competition which the proprietor of the quarry need take into account.

The same is true of all other raw materials without exception. If someone requires lime for a cement factory, clay for a brickyard, bark for a tannery, coal, iron ore, wood, water, building stones, sand, oil, mineral water, wind for his windmill, sun for his sanatorium, shade for his summer-house, warmth for his grapes, frost for his skating rink, the landowner who happens to be in possession of these gifts of nature will exact payment for them, just as does the quarry-owner for his paving stones, and always on exactly the same principle. The circumstances may be different in each separate case; competition of substitutes may limit the greed of the landowner to a greater or less degree; but always the same law holds good: the landowner exploits the advantages which the products, the situation or the nature of his property offer, in such a manner as to leave the purchaser for his labour only what he would have obtained if he had been forced to procure his raw material from waste land, from the desert, or from freeland.

From these considerations we deduce a proposition which is of great importance for the general law of wages:

The product of the poorest, remotest and therefore often ownerless sources of raw materials, loaded with freight charges and with the wages paid to work the more favoured sources of similar materials, forms the basis of the price of these materials. Whatever the owners of the favoured sources save in the cost of production, is rent.

The consumer has to pay for all the products of the earth, for all raw materials, as if they had been produced on waste land at great expense, or conveyed at great expense from ownerless land.

If the product of a man's work on the poorest soil were equal to the minimum of what man needs to subsist, the private ownership of land would make the "iron law of wages" a reality; but as we have seen, such is not the case. For this reason, but only for this reason, can wages rise above the minimum of existence.

The ground-rent of cities, which in our industrial age very nearly equals the total rent on agricultural land, is determined on exactly the same principle, though in somewhat different circumstances.

The value of the land upon which Berlin is built was estimated in 1901 at 2911 million marks which, with interest at 4% corresponds to a rent of 116 millions. This sum alone, distributed over

the 4 million hectares of the province of Brandenburg, is equal to a rent of 30 marks a hectare. With the ground-rent of the other towns of the province added, the urban rent may amount to about 40 marks a hectare, a sum which, considering the poverty of the soil and the large areas of water, swamp and forest, possibly exceeds the rent on agricultural land. The position of the province of Brandenburg, a region with poor soil yet containing the capital of the German Empire is, indeed, exceptional; nevertheless these figures show the great importance of urban ground-rent at the present day.

These figures are likely to surprise many readers; but, as someone has justly remarked: it is becoming doubtful whether, measured by the rental, our great landed estates are not to be looked for in Berlin rather than, as hitherto, in Silesia.

How is this curious phenomenon to be accounted for; what determines the rent of building land, and what is its relation to the general law of wages ?

In the first place we must explain why men congregate in cities in spite of the high ground-rent; why do they not spread all over the country ? Calculated by the above figures the average ground-rent for every inhabitant of Berlin is 58 marks, that is, for families of 5 persons 290 marks yearly; an expense which is entirely avoided in the country, for the ground-rent of the average country cottage is so trifling that it could be paid with the contents of its earth-closet. And the hygienic advantages of life in the country contrast strikingly with the miserable housing conditions in towns. There must, therefore, be other weighty reasons to make people prefer the town.

If we assume that the social advantages of the town are cancelled by its disadvantages (bad air, dust, noise and numerous other offences to our senses), all that is left to balance the expense of urban life is the economic advantage of living in a town. The interdependence and co-operation of the city industries must afford advantages over isolated industry in the country which in the case of Berlin counterbalance the 116 millions of ground-rent. If it were not so, the growth of cities would be quite unaccountable.

No industry can be established in the country which, from its seasonal character, occupies many workers today, and few or none tomorrow; for the worker must work all the year round. In the city the varying demand for labour in the different industries is more or less levelled, so that workmen dismissed by one manufacturer are engaged by another. In this way a workman has greater security against unemployment in a town than in the country.

In the country the manufacturer lacks opportunity for the exchange of ideas, the stimulus given by intercourse with other businessmen. Workmen trained in different factories and acquainted with various methods are also a considerable asset to the city manufacturer as compared with his competitor in the country. Thrown entirely on his own resources, and compelled to employ workmen deprived of intercourse with workmen from other industries and other countries, the country manufacturer is apt to lag behind in the adoption of improvements. He also often lacks the facilities afforded by the city for the sale of his products. Purchasers from all parts of the country and from other countries flock to the city where they find everything they need, collected in one place. The city manufacturer is visited by foreign customers who draw attention to the consumers' wishes, and moreover give him valuable information about market conditions, prices, and so forth. The country manufacturer is deprived of all this. Instead of being visited by his customers he must sacrifice time and money in travelling to visit them. He must collect his

information about prices of raw materials, market conditions abroad and the solvency of his customers in round-about ways that are often anything but reliable.

Furthermore he is forced to lay in much larger stocks of raw material than his competitor in town who is able to procure everything immediately when needed; and if through some oversight the country manufacturer runs short of some article, perhaps only a screw, the whole factory is brought to a standstill until the missing part has been sent from "town". Or if a machine breaks down, a mechanic may have to be summoned from town, and until he arrives the factory is again idle.

In short, the disadvantages connected with the factory itself, with the workmen, the purchase of raw materials and the sale of finished goods, are so many that the country manufacturer forced to compete with a rival in town cannot possibly pay the same wages as the latter. Thus all that he and his workmen save in ground-rent is deducted from the proceeds of their labour.

Hence the only industries that can develop in the country are those which require so much space that all disadvantages are counter-balanced by the saving on ground-rent; or those which cannot be carried on in towns (saw-mills, brickyards, rolling mills) or are forbidden by the police for hygienic reasons (lime-kilns, powder-mills, tanneries, etc.); or those which, having a simple technical organisation, allow the manager to establish his commercial headquarters in town. In every other case the town is preferred.

We know therefore where the money to pay the 116 millions of marks ground-rent of the city of Berlin comes from, and we also know what sets the limit to the growth of cities. The advantages of combined work have been calculated in money and pocketed as ground-rent by the landlords.

If the city grows, its economic advantages grow, and ground-rents grow also. And if ground-rents grow out of proportion to the advantages of the city, its growth is interrupted.

If you wish to enjoy the advantages afforded by the city for your trade, you must pay the landlords for these advantages; otherwise you are free to establish your factory, shop, or dancing hall in the woods and fields. Calculate what is more advantageous, and act accordingly. Nobody prevents you from settling outside the city gates. If you can induce your customers to tramp out to you through rain and snow, dust and mud, and there to pay the same price as in the centre of the city, so much the better for you. If you think it unlikely, then pay the ground-rent and establish yourself in town. You have indeed another possibility, you can try selling your goods cheaper outside the city. Some customers will be attracted by the cheaper prices; but where is the advantage? What you save on rent, you lose in the price of the goods sold.

Ground-rents are thus determined by precisely the same law that governs the rents of agricultural land and raw materials. All the advantages of the city (among which we should mention the division of labour), are reaped by the ground-landlord. Just as German wheat is sold for the price it would have fetched if it had been grown in Siberia and taxed at the frontier, so the goods produced in a city must be exchanged at the prices they would have fetched if loaded with all the disadvantages of goods produced far away from industrial centres.

Agricultural rent captures all the advantages of situation and nature, leaving waste-land and wilderness for the cultivator; city ground-rent claims for itself all the advantages of society, of mutual aid, of organisation, of education, and reduces the proceeds of those engaged in city

industry and commerce to the level of producers isolated in the country.

17. FIRST GENERAL OUTLINE OF THE LAW OF WAGES

The products that remain after deduction of rent and capital-interest, form the wage-fund to be shared among all workers (day-labourers, clergymen, merchants, physicians, servants, kings, craftsmen, artists). When everyone is free to choose his trade, the division is made according to the personal capacity of each, by demand and supply. If choice of occupation were completely free (it is not, but might be) everyone would actually obtain the "largest" share in the distribution. For everyone tries to obtain the largest share, and the size of the share is determined by demand and supply or, ultimately, by the choice of occupation.

Thus the relative amount of the wage depends on the choice of occupation, that is, on the individual. The absolute amount of the wage on the contrary, is quite independent of the individual, and is determined by the amount of the wage-fund. The larger the contributions of the individual workers to the wage-fund, the larger will be the share for each. The number of workers is irrelevant; if there are more workers, the absolute size of the wage-fund grows, but the number of those entitled to a share grows likewise.

We now know the amount contributed by the different categories of workers to the wage-fund:

The contribution of agricultural workers is equal to the sum of products which an equal number of agricultural workers could grow on freeland - less freight, interest and import-duties, which we have to conceive as being reckoned in produce.

The contribution of other producers of raw materials is equal to the sum of products which they could bring to market from the poorest, remotest, and therefore ownerless sources - less interest.

The contribution of industrial workers, merchants, physicians, artists, is equal to the sum of products which they could produce without the advantages of mutuality and organisation, and isolated from populous centres - less interest.

If we pool all these products and distribute them according to the present-day wage-scale, everyone gets exactly the products which he can actually procure in the shops and markets with his present wages.

The difference between this amount and the total produce of the aggregate work performed goes to make up rent and capital-interest.

What, then, can the workers (always in the broadest sense of the term) do to enlarge the wage-fund, to obtain a real all-round increase of wages, which cannot be neutralised by an increase in the cost of living ?

The answer is simple: they must keep closer watch on their wage-fund; they must protect it from parasites. The workers must defend their wage-fund as bees and marmots defend theirs. The whole product of labour, with no deduction for rent and interest, must go into the wage-fund and be distributed to the last crumb among its creators. And this can be achieved by two reforms which we have named "Free-Land" and "Free-Money".