

## CHAPTER V

### THE EFFECTS OF PROTECTION ON THE DISTRIBUTION OF NATIONAL WEALTH AMONG ECONOMIC CLASSES AND TERRITORIAL SECTIONS

#### § 1

#### *Effect of Protection on the Rate of Interest and Therefore on Wages*

IN discussing the effects of a protective tariff on the distribution of wealth and income among economic classes, it is important that we have in mind some idea of the laws according to which wealth and income are divided. The benefits, or the wealth and income, resulting from production are said to be divided among capitalists, laborers, and land owners. Capitalists receive interest; laborers receive wages; land owners receive rent.

Interest arises, in large part, from the surplus productivity of indirect or roundabout production, over direct.<sup>1</sup> Men can produce consumers' wealth and income by applying labor with the aid of existing machinery, or they can devote time to increasing the amount of machinery in order to get, later, larger results. The second method is more indirect or roundabout. It

<sup>1</sup> It is not claimed that the theory of interest as here briefly stated is complete, or anything but a working theory sufficient, perhaps, for the requirements of this chapter. The subject of interest is so interwoven with other economics, that it cannot be satisfactorily treated in a few paragraphs. The critical reader is referred to the writer's article in the *Quarterly Journal of Economics*, August, 1913, entitled "The Marginal Productivity versus the Impatience Theory of Interest," and to a later article in *The American Economic Review*, June, 1914, on "The Discount versus the Cost of Production Theory of Capital Valuation."

yields, in general,<sup>1</sup> a surplus product over what can be secured by the more direct method. But roundabout production, *i.e.* production by first making tools, machinery, etc., yields a smaller surplus the further it is extended. The more tools, machinery, and other capital equipment we have (after a certain point is reached), the less desirable is it further to increase this equipment. The gain or surplus from so doing becomes smaller and smaller, yet for a long time, perhaps indefinitely, remains a gain.

But thus to extend the roundaboutness of production requires a supply of goods for the present maintenance of those occupied in constructing the necessary capital, since they, being engaged in roundabout production, cannot secure this present maintenance from their present labor. Possession of goods which may serve as means of maintenance for laborers during the roundabout production process, enables production to be carried on thus indirectly with the consequent larger product. For this reason, a surplus in future goods will be paid for a given amount of present goods; \$100 to-day may buy \$105 next year, for \$100 to-day makes it possible to turn away from production for immediate needs and to produce, by the usually larger yielding indirect method, for the future. For the use of the present consumable goods which make indirect production possible, a premium will be paid by those desiring control of the present goods; and this premium will depend on the gain which indirect production yields. The possessors of command over present goods, on the other hand, will not trade them for future goods except for a premium,

<sup>1</sup> Not necessarily, but unless the indirect process is expected to yield more, it will not be adopted.

because these present goods can be used in support of themselves and those they hire and so can make it possible for them to engage in roundabout production and reap the surplus. To dispose of their command over present goods is, in so far, to give up this possibility, and they will not give it up without compensation. The rate of interest, then, is determined, on both the supply and demand sides of the market, — the side of those who want and that of those who have command over present goods, — by the rate of surplus productivity<sup>1</sup> of roundabout over more direct production.

To recapitulate, the more largely production is roundabout or capitalistic, the larger is the total amount of wealth and income yielded; the more largely production is capitalistic, the less additional gain is realized by the further extension of roundabout production; the greater the accumulations of society, and the further indirect production is extended, the lower (other things equal) is the rate of interest. Large accumulations and great extension of roundabout production make social wealth greater, the rate of interest lower, the rate of wages higher. We saw, in the last chapter, that a protective tariff tends to decrease the productive efficiency of a country which applies it. Such a tariff makes more difficult the process of accumulation. It tends somewhat to lessen the degree of roundaboutness in production, to lessen the extent to which production is capitalistic. Protection, therefore, because it lessens national wealth through turning industry into less profitable channels, may lessen national wealth further by making production less capitalistic. If it does this, it will tend to raise the rate of interest, though not necessarily the total amounts

<sup>1</sup> At the margin of indirect production.

received as interest since the higher rate will be on smaller capital; while it will tend to reduce wages both by giving to capitalists a larger proportion of the results of roundabout production and by making production, on the whole, less roundabout and, therefore, less efficient. This indirect effect which a protective tariff may have on wages, through its effect on accumulation and the rate of interest, is without doubt very much less important than the more direct effect to be next discussed, but its operation, so far as it does affect wages, is unfavorable.

## § 2

*Brief Statement of Laws of Wages and Land Rent*

The general level of wages is determined, like other prices, by supply and demand. The wages which will equalize supply of and demand for labor will be higher or lower according as labor is more or less productive. Should the productivity of labor double, wages would double. For if labor would produce twice as much as before and wages did not rise correspondingly, the profit to be realized in hiring labor would be very great. This would increase the demand for labor until, if wages did not rise, demand would exceed supply. Hence, wages must rise and must rise in proportion. We have reference here to real, as distinguished from money, wages; that is, to the necessities, comforts, and luxuries which wage earners receive, rather than to the mere number of dollars.

If all land were equally fertile and all sites equally good, and if desired land and space were unlimited, wages would equal the whole product of labor except interest. Those who advanced the means required to make pro-

duction more roundabout, would enjoy interest; beyond this, labor would get the entire product of industry. But all land is not equally fertile; all sites are not equally satisfactory; land and space are not unlimited; and there is to be reckoned with, the great law of diminishing returns. Whether in agriculture, manufacturing, or other work, an increase of labor upon any given space or area will not, beyond a certain point, result in a proportionate increase of the product. Two men, on a 100-acre farm, may secure twice or more than twice as great a result as can one. But it is pretty certain that two hundred men, working on that farm, will not secure 100 times as large a product as can two men. So, in manufacturing, a point of maximum economy is reached, beyond which it does not pay to crowd men together on a limited area or to build story upon story, but beyond which larger production requires more land. Since all land is not equally good, this means that larger production requires the use of less productive land and sites than would otherwise have to be used.

To illustrate the bearing of these facts upon the theory of wages and rent, let us consider the case of a 100-acre farm. Upon it, two men might be able to produce wheat at the rate of 3120 bushels a year or an average of 60 bushels a week, three men an average of 85 bushels a week, four men 105 bushels, five men 120 bushels. Then the third man adds 25 bushels to the product which would result from two men's work; the fourth man would add 20 bushels; the fifth, 15 bushels. Suppose that wheat is \$1 a bushel. Then, if wages are not more than \$25 a week but are enough less to pay interest on the wages advanced, the owner of the land will hire three men to cultivate it. He will not hire a fourth, since a fourth will

add but 20 bushels, worth \$20, to the product. If, however, wages are slightly less than \$20 a week, he will hire four men; and if they are slightly less than \$15, he will employ five. The higher wages are, the fewer men he will employ. The lower wages are, the more men he will employ. This is true of all employers. Some land is so poor that no one can afford to work it or hire others to work it, if wages are high. If wages are low, this land can be worked profitably. In general, the lower wages are, the greater is the demand for labor. More men are desired on the more productive sites and men are desired for the utilization of sites that otherwise would stand undeveloped. At any level of wages, employers will hire men up to the point where the last man hired just produces his wages or just produces his wages plus interest.

To the extent that industry is carried on under nearly constant cost, a great amount of labor can be employed at wages almost as high per man as would be paid to a smaller number of laborers. Very little reduction of wages is required to increase, greatly, the demand for labor, since many employees can be hired before the worth of the last man (the marginal product of labor), becomes less than his wages. If, on the other hand, industry is carried on under conditions of sharply increasing labor cost (diminishing returns), any considerable increase in the demand for labor (other things equal), will not take place except at greatly reduced wages. If, therefore, the industry of a country is forced into a line of sharply increasing labor cost, real wages must become lower; though it is likewise true that if industry is forced into a line of constant labor cost into which it would not naturally go, real wages will probably become lower.<sup>1</sup>

<sup>1</sup> See § 5 of this chapter (V of Part II).

Ignoring interest, the law of which we have already stated, the surplus of production above the amounts paid as wages constitutes land rent and goes to the owners of land. In our illustration, at wages of \$20 a week or slightly less, not more than four men would be employed on the given farm. No one of them would be employed at more than \$20 wages, because no one of the four adds more than 20 bushels or \$20 to what the product would be without him. The weekly wages of all four will not, therefore, exceed \$80. The total product, however, with four men working, is 105 bushels or \$105 worth. This leaves \$25 a week as land rent to the owner of the farm. If wages were lower, not only would more men be employed, but rent would be higher. If wages were higher, fewer men would be employed and rent would be lower. Some land will yield higher rent; some is so poor as to yield no rent.

When protection turns the industry of a country into a line which it otherwise would not follow, the rents of lands or sites required in this line tend to rise, and the owners of these lands and sites become more prosperous. On the other hand, the rents of lands or sites which were used in the lines from which industry has been turned, tend to fall, and the owners of these lands and sites become less prosperous. Our task is to inquire what, in general, is the effect of protection on the total rent payments and on the general level of real wages in the protectionist country.

## § 3

*The Effect of Protection on Wages when Protected and Unprotected Goods are Produced in the Protectionist Country, under Conditions of Substantially Constant Cost*

Let us, to begin with, consider the effect of protection on wages, when both protected and unprotected goods are produced, in the protectionist country, under conditions of substantially constant cost. Under these conditions, a tariff will not greatly affect land rent. The first effect of protection is, as we have seen,<sup>1</sup> to raise the prices of protected goods by not more than the amount of the tariff, without affecting money wages. The secondary effect of protection, resulting from the inflow of money (so far as protection occasions such an inflow), is to raise prices of unprotected goods and money wages, and to further raise the prices of protected goods. Canada's protective tariff on linen has, as its first effect, a 43 cents or a 43 per cent rise in price per yard, wages remaining the same, viz. about \$20 a week (a week's labor producing 20 bushels of wheat worth \$1 a bushel). The second effect may be to raise everything 10 per cent. If, under conditions of constant cost in all lines, there is such a general rise of prices due to money inflow, we must suppose that, until this rise reaches 10 per cent, there will be *some* Canadian goods still sufficiently in demand elsewhere to maintain the inflow of gold, though wheat, because of competition from other sources, may not be such a good. Assuming such an average secondary rise of 10 per cent, and that all goods are produced under conditions of constant cost, this rise must affect any one kind of goods, e.g. wheat. Otherwise, those producing

<sup>1</sup> See Ch. IV (of Part II), §§ 1 and 2.



that kind of goods will turn to some other line. If wheat cannot be exported at the higher price, only enough will be produced for home consumption, and the other wheat producers will become linen producers, etc. Then the total increase of wheat in price is 10 per cent, and of money wages 10 per cent, but of linen 57 per cent (43 per cent and 10 per cent more added to the new price of \$1.43 makes \$1.57). Obviously, the average wage earner's condition is worse because of the tariff, even though his money wages are somewhat higher than otherwise they would be. If the protectionist country has an inconvertible money system unrelated to foreign systems, money wages and unprotected goods will remain the same in price as before, while protected goods rise in price. Wage earners will be worse off. With a common money standard, gold, for the countries trading, prices in the protectionist country, even of unprotected goods, rise, and wages rise in the same proportion; but since wages rise in no greater proportion, and since protected goods do rise in price by a greater proportion, real wages are lower.<sup>1</sup>

Our conclusion as to money wages is only that a high tariff will tend to make them higher in a given country

<sup>1</sup> A restrictive duty on the export of wheat would cause an outflow of gold and a fall in the general level of prices but would likewise reduce real wages. The decreased market for wheat would lower its price in Canada and would lower in the same degree (assuming it to be produced under conditions of constant cost) the money wages of producers. But the price of linen, into the production of which Canadian labor might in considerable degree be eventually forced, could not, since Canada is at a relative disadvantage in its production, fall, to the same extent, below the price at which it was previously imported. At that price, outflow of money for linen would cease. Under the conditions of production assumed, Canadians could better afford to produce wheat even for but 70 cents a bushel than to produce linen for appreciably less than \$1 a yard. Twenty bushels at 70 cents a bushel or 14 yards at \$1 a yard would alike yield but \$10 a week. A week's wages would buy as much wheat as before but less linen. Hence, real wages would be lower because of such a tax.

than they would be in that same country in the absence of the tariff. It does not follow that money wages will be, necessarily, higher in a protectionist country than in a free trade country. In a prosperous country, money wages as well as real wages will be, other things equal, higher than in a country not prosperous. In the United States, for example, average money wages, as well as average real wages, are higher than in Europe. This is due to the fact that in many lines we have great natural resources without having too dense a population. We are productive in many lines of agriculture, particularly perhaps in the raising of wheat, corn, and cotton. We are also productive in certain lines of manufacture, having, for example, in Pennsylvania and in Alabama, great advantages for the manufacture of steel and steel products. In these various lines of effort, the United States is so productive that, even with reasonably low prices received for the goods, the daily wages of labor in these lines are high compared with European standards. Since we are, in these lines of activity, so productive, those in all other lines of industry must get equally high wages or they will go into these. That is, assuming open competition, the national prosperity cannot be confined to any one occupation. Thus, since our wheat raisers and steel producers are prosperous, our bricklayers, carpenters, plumbers, etc., need to be well rewarded to keep them in their work. Therefore, the prices of houses and of other goods which cannot be imported, and in producing which this country does not have the superiority that it has in cotton, wheat, steel, etc., will be high.

From these considerations it would appear that if wheat, cotton, steel, and some other lines of industry are, in the United States, exceptionally productive, it is the

most economical policy for us to import other products which we can obtain more cheaply abroad, rather than to employ our own high-priced labor in relatively unproductive effort. The prosperous country ought to have higher money wages, but not higher prices of importable commodities except as transportation and distributing costs make them higher. The fact that we have great natural resources in comparison to population, and that our labor is in some lines very productive, should make us immensely more prosperous than the older and more crowded countries whose resources in comparison with their populations are much less than ours, and should make real wages markedly higher here. For decades we have had a tariff policy admirably adapted to raise the cost of living and decrease our prosperity. If we have been prosperous and if our wages have been high, it has been in spite of and not because of the tariff. Comparing two European countries, England and Germany, the former the stock example of free trade, the latter a protectionist country, we find prices some 18 per cent higher in Germany and money wages lower.<sup>1</sup>

<sup>1</sup> See "A Comparative Study of Railway Wages and the Cost of Living in the United States, the United Kingdom, and the Principal Countries of Continental Europe," Bureau of Railway Economics, Bulletin No. 34, Washington, D.C., 1912, pp. 11, 35, and 67. In the same Bulletin (p. 11), it is shown that railway wages in the United States in 1900-1910 averaged \$1.23 per day as compared with wages in England and Wales for 1910 of \$1.067. It is also shown (p. 67) that prices in the United States for goods in workmen's budgets in 1900 were 38 per cent higher than in England and Wales. It appears, therefore, that despite the tariff, naturally favoring conditions have kept American real wages somewhat higher than English wages, but not so much higher as a comparison of money wages alone might lead us to suppose. Comparative railway wages are probably as good an index of comparative wages in general as is available.

## § 4

*The Effect of Protection on Wages and Rent when the Protected Goods are Produced under Conditions of Sharply Increasing Cost*

Still assuming the unprotected product, wheat, to be produced in Canada at so nearly constant cost that the withdrawal of some labor into linen making will not appreciably lower the price of wheat, let us suppose the conditions to be such that linen manufacturing, in Canada, can be extended only at increasing cost. We may suppose, for instance, that there are a very few sites favorably located near sources of cheap power and on transportation lines, and that upon these sites linen can be produced, even in Canada, for \$1 a yard, or, at worst, for less than \$1.43. But most of the desired supply, in the absence of protection, is obtained from Ireland. Protection, by shutting out the supply from abroad, encourages the use of the poorer sites in Canada, since the better sites, by our hypothesis, cannot produce enough to satisfy the demand. To remunerate producers on the poorer sites, the price must be higher, say \$1.43 a yard. If it is not, producers on the poorer sites cannot pay the prevailing rate of wages. If it is, producers on the better sites have a surplus or rent, since production costs them, in wages, less money per yard than it costs producers on the poorer sites.

Otherwise expressing the matter, we may say that a week's labor in Canada will produce 20 yards of linen on the better sites, but only 14 on the poorer sites. If the poorer sites are to be used, wages cannot be more than 14 yards a week or the money equivalent of 14 yards. But the owners of the better sites have a surplus, after

paying these wages, of 6 yards or the money equivalent of 6 yards.

So far, then, as Canada supplies itself, after the protective policy is adopted, with Canadian linen manufactured on the most favorable sites, there is no national loss. Wages, that is, real wages, are lower. The rents of the favorable factory sites are higher. Money wages are not lower, but linen is higher in price, and the rise goes to increase the incomes of land owners. So far as Canada supplies itself with linen from the less advantageously located factories, the higher price means a loss to wage earners with no corresponding gain to the owners of land. Under the conditions of production here assumed (production of linen under conditions of increasing cost and of wheat at nearly constant cost), the protective tariff would indeed decrease the net wealth and income of the protectionist country, but the land owning class would gain.<sup>1</sup> Rents of lands required for the protected industry (assumed to be of increasing cost) would rise to a greater degree than rents of lands required for unprotected industries (assumed to be, within limits, of nearly constant cost) would fall. The total national loss in yearly income would therefore be less than the loss of the wage earning class alone. Part of the loss of the wage earning class would be absolute national loss; the rest would be loss balanced by land owners' gain.

No essential corrections need to be made in these conclusions because of the inflow of money resulting from

<sup>1</sup> A similar result, except that there would be an outflow of money and a fall of money prices, would follow, under our assumptions, from a restrictive export duty on wheat. Such a duty would prevent production of wheat for export, drive some Canadian labor into other lines, e.g. the manufacture of linen, even though for small returns, reduce real wages, and raise the rents of land and sites required in the newly expanded lines of industry.

protection. Under the assumed conditions, the secondary rise of prices so caused would affect rents, wages, and nearly all prices, alike.

Duties of the special kind here criticised, we have had in plenty in our own various protective tariff acts. Our protective tax on coal, compelling resort to the poorest native mines in preference to securing some coal from abroad, has doubtless tended to increase the value of native mines and the profits of mine owners, but has done this only at the greater expense of the wage earning public. The protection accorded to raw wool by the much criticised schedule K of the Payne-Aldrich tariff bill, certainly tended to encourage the production of wool in the United States on lands which, otherwise, it would not have paid to use for that purpose. The owners of lands used for sheep raising were doubtless in many cases able to realize larger profits or higher rents, but only at the greater expense of others, largely the wage earners.

In estimating the relative costs of production of raw wool in different countries and in different parts of the United States, the Tariff Board subtracted the receipts to sheep raisers from other things than the wool, chiefly from mutton. There was left, in their reckoning, a cost which the wool must cover. This surplus cost they found to be nothing in New Zealand and on the favorably situated runs of Australia, a very few cents a pound for Australasia in general, 4 or 5 cents a pound for South America,  $9\frac{1}{2}$  cents a pound for the United States, 11 cents for the "fine" and "fine medium" wools of the American west, and 19 cents for the fine wools of Ohio and the contiguous territory.<sup>1</sup> The effect of protection

<sup>1</sup> Report of the Tariff Board on Schedule K of the Tariff Law, 1912, Vol. I, Part I, pp. 10, 11.

(now, fortunately, removed from raw wool) has been to shut out very largely the lower priced foreign wool, to compel the use of the high-priced American wool, to make wool production profitable on lands relatively unsuited for it, to make the rental value of these lands higher, and to make real wages lower. In the opinion of the tariff board, the highest production cost in the world, of the merino wools largely required by American mills, is in the state of Ohio and near-by surrounding territory;<sup>1</sup> yet a high protective tariff on raw wool so shut off the supply from abroad as to cause large production of it in that region. That the general effect of this protection to raw wool, accorded by the Payne-Aldrich tariff bill, must have been to lower wages while probably raising the rents of land owners, hardly seems open to serious question.

## § 5

*The Effect of Protection on Wages and Rent when Unprotected Goods are Produced under Conditions of Sharply Increasing Cost*

We may now consider a third possibility as to costs of production, viz. that the protected goods, e.g. linen, are produced under conditions of nearly constant cost, while the unprotected goods, e.g. wheat, are produced under conditions of increasing cost. Under these circumstances, not much labor can be turned into linen manufacturing without lowering the marginal labor cost of producing wheat. For as labor is diverted from wheat to linen production, the poorer wheat lands are deserted, and on the better lands a week's labor can produce more than 20 bushels. If, therefore, Canada's

<sup>1</sup> Report of the Tariff Board on Schedule K of the Tariff Law, 1912, Vol. I, Part I, pp. 10, 11.

tariff effectively excludes foreign linen, either Canadian linen will sell for more than \$1.43 a yard or Canadian wheat for less than \$1 a bushel or both such changes will occur. Otherwise no one will desert any but the very worst wheat lands in order to produce linen. Competition of wheat raisers who would rather sell wheat for less than \$1 a bushel than linen for only \$1.43 a yard will tend to keep wheat prices down. Reluctance of such persons to produce linen will tend to keep linen prices up. The ratio of the value of a bushel of wheat to the value of a yard of linen must lie at such a point that returns to marginal producers (*i.e.* producers having the least favorable situations, but whose goods are nevertheless demanded), shall be about equal in both lines. Hence, it will take more than 20 bushels of wheat to equal in value 14 yards of linen. If Canada were financially isolated and the quantity of money in Canada remained unchanged, we should expect that the changed conditions of cost would be accompanied by both a rise of linen and a fall of wheat prices. Unless there was an increased quantity of currency in Canada, a rise of the price of linen above \$1.43 a yard could hardly take place (other things equal) without a fall in the price of wheat below \$1; and unless there was a decreased supply of currency, wheat could hardly fall below \$1 without there being a rise in the price of linen above \$1.43.

But with Canada maintaining a gold standard, the common standard of most of the commercial world, and having a foreign market for her wheat, the price of the wheat cannot greatly fall. Any tendency of the price to fall, in Canada, would be counteracted by exportation and sale abroad at world market prices. Any change in relative values will be through a rise in price of linen



above \$1.43, rather than through a fall in price of wheat below \$1. Since importations of goods into Canada are interfered with, there must be for a time a net money inflow, and there must be a money inflow for wheat if and so long as it sells for much less than \$1 a bushel. This inflow of money into Canada tends to raise average prices in the proportion of the money inflow. Were the wheat produced under conditions of approximately constant cost, the inflow of money must necessarily tend to raise its price in the same proportion. For, since it raises prices generally in that proportion, the industry of wheat raising must yield correspondingly larger money returns or it would be less profitable than others. But under conditions of increasing cost, the circumstances are different. On the better lands, the profits of wheat raising, even with the higher money cost of production and at a price little if at all higher than before the tariff was laid, will be sufficient to keep those lands under cultivation.<sup>1</sup> Rather than turn to the protected industries, such as linen manufacture, until Canada only produces enough wheat for her own use and has none for export, and until wheat has risen in price in the same ratio that money has increased, Canadian farmers on the better lands will prefer to remain producers of wheat. This will result in a supply sufficient to keep the price from rising very much above the former price. In fact, if we assume wheat production to be the line of industry in which Canada is relatively the most efficient and wheat to be Canada's chief or only export, we must conclude that Canadian wheat cannot rise to a much higher price than before, despite the inflow of money. For wheat can be secured in large quantities from many other sources of

<sup>1</sup> Though less intensively than before.

production, and if Canadian wheat rises greatly in price, foreign demand for Canadian wheat will decrease, Canadian producers on the poorer lands will give up wheat production, and Canadian producers on the better lands will accept world wheat market prices rather than abandon wheat production. The sale abroad of Canadian wheat and of nothing else cannot, by causing an inflow of gold, raise the price of Canadian wheat very much above this world market price, since, before it does so, foreign purchase of Canadian wheat will cease, the inflow of gold will cease, and the rise of prices will cease.<sup>1</sup>

Assume that, as a result of protection, Canadian money increases by 10 per cent. We have seen that average prices will tend to rise by 10 per cent, in addition to the original 43 per cent rise of the protected linen. We have seen that, under our supposed conditions, wheat prices will remain substantially unchanged. Since wheat remains at about \$1 a bushel, linen will rise to more than \$1.57 a yard and wages will rise to more than \$22 a week.<sup>2</sup> It follows that there is a possibility of gain, for wage earners, from a limited application of protection; though, as we shall see, the probability of this gain being realized in practice is remote. So far as they are consumers of protected goods, wage earners lose because of the rise in prices of these goods, occasioned by the tariff. But so far as wage earners are able to buy at substantially the former prices, goods produced under conditions of increasing cost, while having money wages

<sup>1</sup> Canadian prices cannot rise indefinitely in relation to foreign prices unless Canada is such a centre of gold production that prices rise without export of goods and unless, also, all imports are forbidden, and so outflow of this gold is prevented.

<sup>2</sup> That is, by more than 10 per cent on \$ 20.

greater by more than the average rise of prices, with which to buy these goods, they are gainers.

On the other hand, owners of land — in this case, farming land — are losers. And they lose more than wage earners gain. Land which it previously paid to cultivate can no longer be cultivated with profit. Land which previously yielded a large surplus, after wages were paid, now yields a smaller surplus. Since the wheat land owners (and that means, in large part, the farmers), get practically no higher prices for their wheat, the higher money wages which they have to pay are to them an unbalanced loss. So are the higher prices they must pay for protected and other goods. Their loss through having to pay higher wages to those they employ is not cancelled for the nation as a whole by a corresponding gain to their employees, since the latter have to pay higher prices for linen. Neither are the higher prices which farmers and other land owners must pay for linen balanced by the higher money wages paid to linen makers, for these wages are higher only by virtue of the secondary rise resulting from the inflow of gold (the original 43 cents rise directly due to the tariff merely making it possible to get the *same* wages in linen making as were previously given in wheat producing); while both the original rise which does not raise wages and the secondary rise which does, must be borne by farmers desiring to purchase linen. It seems fair to conclude, therefore, that if wage earners ever do gain by a protective tariff, they gain at the greater expense of farmers or some other class. As shown in the previous chapter, average wealth is decreased.

The conclusion that a protective tariff establishing an industry of relatively constant cost, and decreasing the ex-

tent of an industry of increasing cost, might raise wages at the expense of land rent, applies equally if we suppose the protectionist country to have an inconvertible paper money which will not be increased by an inflow of gold. Suppose Canada to have such a currency. Then, as we have seen,<sup>1</sup> the original rise of linen to \$1.43 is not followed by the 10 per cent further rise in the average of prices. But the value relation of foreign money to Canadian money will change,<sup>2</sup> so that it takes more foreign money than before to buy a given amount of Canadian money, and therefore of Canadian goods. To tempt wheat producers away from any but the worst lands will require a rise of linen above \$1.43. On the other hand, the price of wheat will fall below \$1 a bushel, since it can be produced more cheaply on the better lands and since the greater value of Canadian money compared to foreign money will prevent the export of any wheat except at less than \$1 a bushel. Money wages will remain about the same, \$20 a week. Wheat will be cheaper. Wage earners may be better off, but, if so, only at the expense of even greater loss to agricultural land owners.<sup>3</sup>

The possible gain of wage earners and loss to agricultural land owners and farmers, can perhaps be most clearly shown if we omit reference to money and money prices. When the Canadian tariff shuts out linen from abroad, the value of linen, in Canada, will rise in terms

<sup>1</sup> Chapter IV (of Part II), § 3.

<sup>2</sup> See, for example, Part I, Ch. VI, §§ 6, 7, 8, 9, and Part II, Ch. IV, § 3.

<sup>3</sup> A restrictive export tax on wheat might have a like result on the relative interests of economic classes, though having an opposite result on the general price level. Such a tax would cause prices to fall and would drive industry from wheat raising into other lines. But it might, conceivably, by preventing production of wheat for export and forcing out of cultivation the poorer lands, reduce wheat prices, in Canada, more than it reduced prices in general or money wages.

of wheat until it becomes profitable for men to leave off cultivating the less fertile and less desirably situated lands, in order to manufacture linen. Instead of 20 bushels buying 20 yards, as before, when the linen was purchased abroad, 20 bushels will buy less than 14 yards and 14 yards will buy more than 20 bushels. For if 14 yards of linen would buy but 20 bushels of wheat, only those on the very worst lands, if even those, would find it profitable to change from wheat to linen production. If, when a new equilibrium is reached, the worst lands still cultivated, and the marginal labor on all wheat lands, yield 25 bushels a week per cultivator,<sup>1</sup> while it requires a week's labor to make 14 yards of linen, then 25 bushels will exchange for 14 yards. Since considerable labor is diverted into linen manufacture at a wage of not more than 14 yards (or its equivalent in other form), a week's wages in wheat production will be not more than and not much less than 25 bushels a week (or the equivalent in other form). At any appreciably less wage, demand for labor would exceed supply, because at any less wage it would pay to hire more men, to cultivate land more intensively, and to cultivate worse land, while at any less wage, labor could not so easily be kept from the linen factories and at work on the farms. Wages in terms of linen are less (14 yards instead of 20) because of the tariff. Wages in terms of wheat are greater (25 bushels instead of 20) because of the tariff. If the wage earner has occasion to consume much wheat and to use little linen, his real wages, in this very hypothetical case, will be higher.<sup>2</sup> Owners of

<sup>1</sup> That is, if the last man hired adds that much to the total product. See § 2 of this chapter (V of Part II).

<sup>2</sup> Cf. Loria in the *Journal of the Royal Statistical Society*, Vol. L, on "Effects of Import Duties in New and Old Countries," 1887, pp. 408-410; Patten,

wheat lands, including farmers, will lose what the wage earners they hire gain, and will lose, besides, from the higher price of linen in terms of wheat. The wheat-producing wage earners will not gain in real wages what the farmers who pay them lose, for it will take more wheat than before to buy 14 yards of linen. Neither will the linen-making workmen gain as much from the higher price of linen in terms of wheat, as the wheat producers and owners of wheat lands lose, for the linen makers gain what the wheat raisers and land owners lose, only to the extent that they trade their linen wages for wheat. So far as they themselves have some use for linen, they also lose.

We are brought back, then, by another route, to the conclusion that a protective tariff will only add to the wealth or income of one person or class by taking a larger amount of wealth or income away from some other person or class.<sup>1</sup> It is conceivable, though, as we shall

*Economic Basis of Protection*, Philadelphia (J. B. Lippincott Co.), 1895, Ch. V; and Bastable, *The Theory of International Trade*, fourth edition, London (Macmillan), 1903, p. 105.

<sup>1</sup>A number of economists (e.g. Sidgwick, Edgeworth, Carver) have apparently been led to the opinion that protection might not only raise wages but might even increase the total national wealth by drawing labor out of lines of increasing cost; or that the removal of protection to manufactures and other industries of relatively constant cost might decrease national productiveness as well as reduce wages. Sidgwick, for instance, imagined a protectionist country of limited natural resources suddenly becoming a free trade country, and its manufacturing population, previously protected, being thereupon undersold by foreigners and driven out of business and being unable to obtain employment in agriculture (*The Principles of Political Economy*, London, Macmillan, 1887, pp. 496-498). But if agricultural resources were in such a country so limited as to give little or no employment to the former manufacturing population, then this population would remain chiefly or entirely in manufacturing, accepting the lower wages required for competition with the imported goods. This, however, could not possibly decrease the national wealth (except as the reduced wages might affect efficiency) for the land owners would gain as much as the wage earners would lose. Employment, at some level of wages, would continue, and production would continue. If, with removal of protection, it proved possible

see, far from probable,<sup>1</sup> that wage earners may be the gainers and land owners the losers by such a policy.

Let no one welcome this conceivable consequence of a carefully devised tariff system, on the ground that the situation or fertility rent secured by the owners of superior land, is unearned. Assuming that it is unearned (and it is no part of the function of this book to discuss at length whether or not land rent is unearned), a change in the taxing system securing to the public its full rights to any such unearned wealth or income would be more sensible than a partial loss of such wealth or income

to employ more productively in agriculture even a few of those previously engaged in manufacturing, the total national wealth would be increased even though wages might fall. The discussions on this phase of protection between Professors Bastable and Edgeworth, in the *Economic Journal* (Vol. X, 1900, pp. 389-393 and Vol. XI, 1901, pp. 226-229 and 382-500) seem to the present writer not to bring out clearly this distinction between the effect on national wealth and the effect on wages. (See also Bastable, *The Theory of International Trade*, pp. 187-197.)

Carver (Publications of the American Economic Association, Third Series, Vol. III, pp. 176-182) uses a different illustration to establish what seems to be the same conclusion as that of Sidgwick. He supposes a piece of land which, in the absence of protection or some form of legal discrimination, will allow the employment of one man in sheep raising, while it might otherwise employ 20 men in wheat production. The total product, he assumes, would be greater in the latter case; but the land owners' rent, if trade were thus interfered with, would be lower. Removal of restrictions might throw 20 men out of work. In criticism of this view it is to be said that there are two extreme possibilities. Either the 20 men have a preferable alternative, under the free trade régime, to wheat raising, or they have not. If they have not, they will accept low enough wages, rather than be unemployed and have nothing, so that the land owner can realize as much rent for his land (or more) as if he used it for a sheep run. Unless their efficiency is thus impaired, they will then produce as much wheat as if they were protected. The effect of freedom from restriction may be seen in lower wages and higher rent, but not in decreased national wealth. If, however, they have a preferable alternative, these 20 men will not raise wheat but will occupy themselves otherwise at higher wages than wheat raising under free trade would yield them, while the land owner will at the same time realize the higher rent assumed to result from using his land as a sheep run. Free trade would then, also, raise rent more than it would lower wages.

<sup>1</sup> Shown in remainder of this section (5).

because of restrictions on trade. At any rate, those who support protection with the argument that it can be made to benefit wage earners at the expense of land rent, should be the last to oppose direct taxation of rent.

In practice, the likelihood of devising a tariff which shall benefit wage workers at the expense of farmers is extremely small. Such a tariff must, in the first place, turn enough labor from agriculture into other lines to raise, appreciably, the margin of cultivation. That is, so much of the poorer land previously cultivated must be left uncultivated, that the poorest land remaining in use is appreciably better than the poorest land which was in use. Otherwise, wages in terms of wheat cannot be appreciably higher, for owners of the poorer lands cannot pay higher wages, and, unless labor is so strongly drawn into other lines that they have to, owners of the better lands will not. To have any appreciable favorable effect on wages, protection must, therefore, set up large industries or many industries, giving employment to many men.

But if protection is to be of benefit to wage earners, it must be levied on goods consumed not at all or only to a very limited extent by them, and on no other goods,<sup>1</sup> so that any rise of money wages which may take place, shall not be more than offset by higher prices of goods workmen have to buy.<sup>2</sup> The problem of drawing a large amount of labor away from agriculture (usually regarded as an industry of increasing cost, though it is by no means always an industry of rapidly increasing

<sup>1</sup> Or, at least, only slightly on other goods.

<sup>2</sup> This loss to wage earners is borne not the less if they buy goods made by machinery which has been raised in price by protection, or transportation from railway companies, etc., which have to charge more because of expensive materials.



cost) into industries (*e.g.* many kinds of manufacturing) of relatively constant cost, and selecting, as industries into which to draw this labor, only those producing goods little used by the masses, is indeed a problem hard to solve and a problem which, in the exigencies of practical politics, is unlikely ever to be solved.

As a matter of fact, few men in practical politics would dare advocate such protection, frankly stating its intended result and how the result was to be attained; for most men in politics would quickly realize that such an advocacy would be likely to array against them the opposition at the polls of nearly all the farmers. Our own (United States) protective tariff has been levied on raw wool, woollen cloth, cotton cloth, sugar, fruit, potatoes, shoes, coal, etc. It has been very far from being a tariff which would raise wages at the greater expense of rent. Rather has it been a general grab in which as many interests as possible have tried to get something at the expense of the general interest. It requires no argument to show that our protection has not been designed to avoid the things that the masses of working people have to consume. Nor has it by any means avoided goods produced under conditions of increasing cost, protection of which is likely to raise land rents, to the greater loss of wage earners. From the log rolling of actual political struggle, there is likely to issue a hodge-podge of tariff rates, causing loss to nearly all. The general average of American wages might be made higher by shutting out the immigrant laborers who enter this country as competitors of those already here; but the average American real wages are distinctly not raised by shutting out and, therefore, making scarce and dear, the goods which wage workers desire to consume.

## § 6

*How Protection May Benefit One Section of a Country at the Expense of Other Sections*

A protective tariff may benefit absolutely one section of a country, including manufacturers, wage earners, and farmers; but if so, only at the greater expense of some other section or sections. Protection to manufacturers of woolen cloth, in certain sections of New England, may benefit people in those sections, who are unwilling to move elsewhere, by making purchasers of cloth in other parts of the United States pay tribute to them. It may conceivably even work a benefit to farmers and farm land owners in the immediate vicinity of the protected mills, since the protected mill owners and mill workers, though gaining something at the expense of the rest of the nation, would have to share these gains with local dairymen and truck farmers in order to get the latter's services, just as they would have to share these gains with local building contractors, bricklayers, and so forth.<sup>1</sup> The gain, if there is a gain, is not equivalent to the loss of other sections, for the people of the locality benefited have the option of seeking better opportunities in these other sections, even if they do not care to carry on other industries where they are. If other sections have greater resources, then artificially to prevent migration into them is to diminish national prosperity, is to decrease wealth production in the naturally favored sections more than it is increased in the less favored. And, in any case, to turn industry into a line it would not otherwise follow, is, presumably, to diminish national prosperity. The policy, when all sections are considered, brings a net loss.

<sup>1</sup> Cf. Tausig, *Principles of Economics*, New York (Macmillan), 1911, Vol. I p. 511.

While there is reasonable ground for the opinion that no large section of the United States has really gained by the long continued maintenance of protective duties, or could gain more than it would lose, in the general compromise of protective tariff making, yet certain parts of the country have felt themselves particularly injured. This has been the feeling in most of the Southern states, and is one explanation for the phenomenon of a "solid South." The cotton-raising states have realized that their staple product must be in part exported, and that a protective tariff could not appreciably, if at all, raise its price. And they have known full well that the prices of many things they have had to buy have been very considerably raised in price by the tariff. The wheat-producing areas of the middle West and, doubtless, certain manufacturing centres of the East, have been in a similar situation.

It is probably such facts as these, which have apparently produced in the minds of some of our public men the feeling that a protective tariff is, in spirit, unconstitutional, a feeling which found recent expression in the National Democratic platform of 1912. The Federal Constitution has given to Congress and the President the right to levy import duties and the right to regulate commerce with foreign nations. The passing of a protective tariff law has always been regarded as but an exercise of these powers. There is little reason to suppose that any Federal court would set aside a tariff law as unconstitutional merely because it was protective. A court would not be likely to go behind the professed intent of Congress and the letter of the Constitution, in order to raise questions regarding the ultimate economic effects of the laws passed. Such questions would be

assumed to be questions for the legislature and not the judiciary to decide. Therefore, Congress and the President must themselves decide upon the constitutional justification of a protective tariff. But the contention that to use either the tax-levying power or the power to regulate commerce, in such a way as to compel the people of some states to pay tribute to producers in other states, is contrary to the real spirit of a constitution framed as the basis for a federation of states, is a contention not without a degree of plausibility.

### § 7

#### *Protection as an Encouragement to Monopoly*

In its practical results, the tariff is likely to operate in taxing the entire nation, not for the benefit of all the people in any one section, but for the protection of monopoly profits. Though a tariff schedule may not be at first devised for this purpose, — and of course it would not, at least openly, be so devised, — it comes to have this effect if it encourages combination. This the tariff is likely to do. For it protects producers against foreign competition and so suggests to them the hope that, by combining among themselves, they may realize monopoly profits. A protective tariff which has only this effect cannot be said to benefit the masses of the people in any section. It certainly has no effect on real wages other than to lower them, if, as is usually the case, the goods produced are goods largely consumed, directly or indirectly, by working people. For the only way the tariff can possibly create or maintain monopoly profits, is to create or maintain monopoly prices; and that means that it takes money from the masses of the people, in order to give it to monopolists.

## § 8

*Summary*

We have now to summarize the conclusions we have reached regarding the effect of protection on classes and sections. Because protection tends to diminish national wealth, it has a tendency to restrict the extent of round-about production, to make the *rate* of interest higher (though not necessarily the total *amount* of interest), and to make wages lower. This is an indirect effect. But there is a more obvious direct action. When both protected and unprotected goods are produced, in the protectionist country, under conditions of approximately constant cost, the effect of protection is to reduce real wages. If the protectionist country and those trading with it have a common monetary standard, then money wages in the former will rise and money prices will rise in the same proportion, except that there will be a special rise of the protected goods, in addition, so that real wages will be lower. Assuming the protected industry to be one of increasing cost, while the unprotected industries are of relatively constant cost, it appears that protection may benefit land owners by raising land rents, but that the gain of land owners must be less than the loss of wage earners.

On the other hand, there is a conceivable case in which wage earners gain at the greater expense of land owners, viz. when the protected goods are produced under conditions of relatively constant cost and unprotected goods under conditions of increasing, perhaps sharply increasing, cost, and when wage earners are chiefly concerned, as consumers, with unprotected goods. Given these conditions, real wages will be higher because of protection,

and the rents of land (in our illustration, the profits of farmers) will be lower. But the owners of land lose more than the wage earners gain. Assuming the usual international monetary relations, money wages will rise; money prices of protected goods will rise more; money prices of the unprotected goods produced under conditions of increasing cost will rise little or not at all.

It appeared, however, that the mere devising of a tariff to have this result would be difficult, since it would be almost impossible to divert much labor from the industry or industries of increasing cost and so to make possible, in that industry or those industries, higher wages, without protecting the production of and raising the prices of, goods largely consumed by wage workers. The practical difficulties in the way of passing such a tariff act appeared to be no less great. The conflict of various interests is not likely to, and presumably never did, result in a tariff act which would raise wages at the expense of land rent. Even supposing such an act to be practically possible, and assuming that most or all of land rent is an unearned income belonging properly to the whole people, we must conclude that direct taxation of such rent would secure the larger general welfare and the less waste, as compared with the indirect and very partial appropriation of it and partial waste of it, involved in the protective tariff policy.

Protection can, it was shown, benefit a considerable territory within the protected group at the greater expense of another section of the same nation. In the United States, the South has usually felt itself to be a sufferer by the policy. Protection may also build up and secure against foreign competition, monopolies, and so injure the general public for the benefit of a comparatively few.