BOOK FIRST

PRODUCTION

It is obvious that when man was first created, there existed nothing but this earth, with its various substances, their qualities and relations; and man, with his various physical, intellectual, and moral powers. The difference between the *present state* of man and of the universe around him, and the *original state*, consists in this: that the qualities and relations of things have now been discovered, and rendered available to the service of man; and the intellect of man has been cultivated, and his skill improved, so that he is able, more successfully, to mil himself of these qualities and relations. And it is also obvious, that this change in the external world has been produced by the physical and intellectual faculties of man; that is, by human industry. The whole wealth of the world has been created by the union of human industry with the materials which God had originally spread around us. Hence, all that is necessary to the creation of wealth, is capital and industry. But, it is also obvious, that the application of industry to the materials around us, that is, to capital, has not been at all times either equally strenuous, or equally successful. There must, therefore, exist some rules, by which this application of industry to capital is governed, and some conditions under which it is more successfully exerted, than under others.

The subject of Production is, therefore, naturally divided into three parts. 1st. *Capital*. 2d. *Industry*. 3d. *The principles by which the application of industry to capital is governed.*

CHAPTER FIRST

OF CAPITAL

FIRST. *The nature of Capital*. The word *capital* is used in two senses.

When used in relation to product, it means any substance on which industry *is to be exerted*. After that industry *has been exerted*, it then becomes product. Thus, leather is the *capital* of the shoemaker, and shoe's are his *product*.

When used in relation to industry, however, it has a much wider signification. It then signifies the material on which industry is *about* to confer value, that on which it *has conferred* value, and the *instruments* which are used for the conferring of value, as well as the *means of sustenance*, by which the being is supported whilst he is engaged in performing the operation. The capital of an individual, if it be examined, will be found to be composed of all these. Thus, also, the capital of a nation is composed of raw material, of articles ready to be consumed, of buildings, ships, manufactories, and also of the various substances, by which human life is prolonged and rendered desirable.

SECOND. *The forms of Capital*. Hence it must be seen that the forms of capital must be as various as the various employments of man.

The *Farmer* possesses seed, manure, breeding animals, &c.

The *Manufacturer* possesses cotton, wool, flax, iron, leather, wood, and, in general, all the material on which, according to his particular calling, he desires, to exert his industry.

The *Merchant* possesses sugar, tea, coffee, iron, &c. or the various substances to which, by transportation, he has added, or to which he intends to add, value.

2. But, in order to effect this intended creation of value, it is found that intermediate agents must, in all these cases, be employed. A farmer could not reap with his fingers, nor a miner dig with his hands, nor a manufacturer labor without tools. All these *instruments* the use of which is necessary to the creation of value, are, therefore, also termed capital

Thus, the ploughs, harrows, spades, carts, and working animals of the farmer, are a part of his capital. To the same class also, perhaps, belongs his land.

The axes, planes, hammers, of the mechanic, and the buildings and machinery of the manufacturer, are their capital.

Under this division of capital may also be included the ship of the merchant, the wagon of the teamster, and the railroad and locomotive of the proprietor.

3. But, besides all this, these several persons must be fed and clothed, whilst they are exerting the industry by which value is given to these various products. Hence, under the head of Capital, must be comprehended all the various kinds of food, the clothing, and houses, which are necessary, in order to give *sustenance* to a human being. These are generally the same, in all kinds of industry.

4. And, lastly, every individual, in each of these departments of human industry, will retain some portion of the product which he has created, but which he is ready to part with for something else. The farmer has strain, which he has raised; the manufacturer, cloth, which he has fabricated; the merchant, commodities, which he has imported or bought for sale. These form mother item of capital.

THIRD. *Of the changes which Capital undergoes.* From what has been already said, it is evident, that capital derives its value from labor, and that the effect of labor exerted, is to produce some change in it Hence, capital, in every industrious country, must be always undergoing changes; and hence, also, it frequently re-appears, in forms very different from those in which it at first existed. The form, however, is of no consequence, if a superior value be the result. Political Economy, unmindful of the form, looks only at an augmentation, either of the *amount*, or of the *degree* of value.

1. The *material* undergoes changes. The seed and manures of the *farmer* are changed into vegetables, and these again into the grain of the harvest.

The cotton and wool of the *manufacturer* are changed into the fabrics which he produces. The wood and nails of the *carpenter* are changed into houses.

The commodities of the *merchant* undergo changes. He exports cotton, rice, wheat, or manufactures; and imports calicoes, silks, wine, hardware, &c.

2. The *instruments*, or *machinery*, employed by these several classes of persons, undergo changes. These several instruments, in the course of production, are gradually destroyed, or consumed. The plough and cart, and animals of the farmer, the tools of the mechanic, the machinery of the manufacturer, and the ships and vehicles of the merchant, are worn out and rendered worthless. But if they have been profitably used, they have re-appeared, in the increased value, which they have conferred upon the various objects upon which they have been employed.

3. The various kinds of food, clothing, and shelter, necessary for the existence and comfort of the human being, are also changed. They are consumed, from time to time, and their value re-appears, in that new vigor imparted to his body and mind, which forms a fresh capital; to be employed again in the work of production.

4. And lastly: The *mature product* of every laborer is constantly changing. As soon as he has created a product, he is anxious to dispose of it to some one else, that he may invest its increased value in some other material which he may again, with increased advantage, unite with industry. As soon as the farmer has raised grain or fat cattle, he wishes to dispose of them, that he may invent their value again in seed, or manure, or agri-

cultural improvements. As soon as the manufacturer has finished his fabric, he exchanges it for the means of subsistence, materials, or machinery; and so of the merchant, and of every other laborer.

We see, then, that capital is undergoing perpetual changes, and that the course of these changes is constantly from a state of less, to a state of greater value; that is from a state more remotely adapted to the gratification of human desire, to a state less remotely adapted, to it; and that so soon as it has become precisely adapted to this gratification, its change ceases, and it is consumed in some mode or other. And if it be profitably consumed it again re-appears in some form adapted to create a further increase of the means of enjoyment. And hence we see, that, that country is the most prosperous which is the most rapidly accumulating, by the results of its labor, the greatest amount of these ultimate products, in proportion to the number of its inhabitants. The greater the share of these products which falls to the lot of each individual, the greater are the means of physical happiness in his possession.

FOURTH. *The increase of Capital*. In all these changes which we have considered, it is always to be remarked, that there is, in the very act of change, a destruction of value. He who changes iron into steel, consumes the iron, destroys that particular value and creates another in its place. He who sows wheat, destroys the value of that wheat, for food; and he who spins cotton, destroys the value of cotton wool as cotton wool. That is, neither of these substances can ever be used again for the purposes to which they were before adapted. If, however, the industry of the laborer have been skilfully directed, the product will have acquired an exchangeable value sufficient to replace the original material in additional quantity, and also to repay him for his labor, and pay the interest of his capital. The amount of difference between the exchangeable value of his original material, together with his labor, and the exchangeable value of his product, is his profit. The annual amount of these profits, is his annual gross revenue. The annual amount of these profits in a nation is the gross national revenue.

It is obvious, that it matters not in what *form* capital re-appears, if it only re-appear in a form bearing a greater exchangeable value. The smith exchanges geld or silver for coal; he burns up his coal, and nothing is left but ashes. But it has produced an invisible substance, called caloric, by means of which he has been able to give such an increased value to iron, as will not only re- place his gold and silver, but also the iron itself, and will also pay him for his labor. The farmer exchanges his gold or silver for manure, but this manure will so increase his harvest, that he will be able to replace his gold and silver, and also be abundantly repaid for his labor. The principle is the same, in all cases of change of capital. It matters not into what we change our capital, nor how valuable the substance may be that is exchanged, if we only receive, in return, a greater amount of exchangeable value, or that which will procure for us a greater amount of objects of desire.

We see, hence, in what manner nations and individuals grow rich. It is by uniting the industry of this year to the capital of last year, and by this process, creating an augmentation of capital. This augmentation will be either greater or less, in proportion as our industry has been successful in giving additional value to that value which previously existed. If we destroy a value, and produce another only equal to it, we lose our *labor*. If we destroy a value, and re-produce nothing, we lose both *labor* and *capital*. It is only as the value created is superior to the value of labor and capital consumed, that we are enriched. Hence we see, that wealth is & acquired by small, but oft repeated accumulations. The gross amount of these accumulations will be decided by our skill and industry. But, as from this amount our various expenditures must be subtracted, our nett revenue will depend not only on our skill and industry, but also on our frugality. Though a man earn much, yet, if he spend all, he will grow no richer. Hence, *industry* and *frugality* are the great sources of wealth.

Nor is this the less true of nations. Hence it is, that wars, unnecessarily expensive governments, or high taxes for whatever purpose, may keep the most enterprising and industrious nation always poor.

FIFTH. *Of Productive and Unproductive Capital.*

Productive capital is that; which, being in any manner united with industry, is in the process of augmentation. Unproductive capital is that, which, not being, united with industry, remains, at the end of the year, just the same as it was at the beginning. Money at interest, capital undergoing the various transformations effected by industry, tilled land, and manufactories in operation, are productive capital. Money lying in coffers, materials unsaleable, manufactories unoccupied, and land lying waste, are unproductive capital.

When capital is unproductive, it may be considered as losing for us, annually, its ordinary rate of interest; because it must have been purchased with that which would have yielded that interest. Hence it Is, that every sound economist is anxious to have the whole of his capital productively invested. He who acts otherwise, is ignorant of the principles of production, indolent, or slovenly. The farmer who allows a heap of manure to lie in his farm yard for a year, instead of spreading it on his land, the merchant who allows his ships to lie idle, or his goods to be scattered, unsold, over several warehouses, or the manufacturer who owns twice as much machinery as he is able to employ, are annually losing all the accumulation which this capital, properly invested, would produce. And still more, as we have seen that all gains arise from small and successive accumulations, and as almost every product is liable to waste, it is manifest that habitual negligence of this sort must greatly diminish, if it do not entirely consume, all the nett revenue of an establishment. The effort of every man should be, to unite every fraction of his capital with industry, and to keep it so united, continually. Any gain, even the smallest, is better than no gain at all.

From what has been said, it is evident that die process of accumulation, in all branches of production, is the same. It will also appear, that where capital is free, that is, where there are no restrictions upon the use of it, there can be no great permanent difference in the rate of accumulation, between the different modes in which it is employed. If the profits of one kind of business are above the average rate, other capital will flow into that channel. If the profit in any branch of production be below the ordinary rate, capital will be withdrawn from it. If commerce be unusually lucrative, men will leave other pursuits, and devote themselves to commerce, until, by competition, they reduce the profits to the ordinary rate. If commerce be depressed, men will leave it, until, by the reduction of the supply of commercial facilities, the rate of profit is increased. Rates of profit cannot be rendered permanently unequal in any other manner, than by oppressive legislation. The differences in profit, in the various departments of industry, are, therefore, more apparent than real. When profit is sure, it is of course less than when it is uncertain. But, how much soever individual cases may differ, it will be found that the average is, for long periods, very nearly equal.

SIXTH. *Of Fixed and Circulating Capital*. The capital from which the owner derives profit only by exchanging its form or place, is circulating capital. Thus, the wares of the merchant, the products of the manufacturer, the harvest, of the farmer, are circulating capital On the other hand, the instruments which each of these producers uses, in performing his various operations, are fixed capital. Such are the ships and warehouses of the one, the machines and buildings of the other, and the tools and land of the third.

Circulating capital is, in general, that which is already prepared for the gratification of human desire, or that which is in a course of preparation for this state. Fixed capital, in general, consists of the instruments, or fixtures, which, in some form or other, assist us in accomplishing this result. Tools, machinery, houses, ships, roads, canals, and improvements on farms, &c., arc fixed capital. Circulating capital is in general rapidly consumed. It is commonly an annual product, and subject to an annual consumption. Fixed capital is not an annual product, and may last for a year, a lifetime, or indefinitely. It is, however, still liable to gradual decay, which decay must be replaced, or else the possessor would find himself growing poorer, inasmuch as these tools and machinery are the means by which his labor is rendered productive.

The amount of fixed capital employed in some branches of industry, is much greater than that in others. Some mechanical trades require no more fixed capital than a cheap set of tools. Others, as large manufacturing establishments, require a large fixed investment. In proportion to the amount which must be thus employed, will be the amount of accumulated property necessary to be possessed by him who wishes to employ himself in that particular department of industry. Sometimes, by far the greater part of the investment is fixed capital, and it is also very great in amount. In this case, it is frequently apportioned among individuals, who each subscribe and pay a part of the cost. Such is the case with railroads, canals, and works of public improvement generally.

There is an obvious tendency in the nature of things, to convert circulating, into fixed capital. As circulating capital is annually consumed, it must be annually replaced, or mankind, after the first year, would all perish t is replaced by the annual productions of the earth, either vegetable, animal, or mineral. But, if the industry of man has been successfully exerted, the amount of annual production will be sufficient, not only to supply the ordinary wants of the producers, and to repair the waste and wear of fixed capital, but also to leave a surplus unappropriated. Now, as this kind of capital is annual, and as it is also perishable, if it be not used in some way, this surplus must be a total loss. If it be appropriated to the multiplication of annual capital, it will only increase that surplus, which is already too great. Hence, it can be usefully employed only in the creation of fixed capital. To accomplish this result, it is offered in the form of wages, to mechanics, artisans, and those persons who employ themselves in the manufacture of those articles, in which fixed capital consists. Hence, the wages of this class of persons will rise, and a portion of them will be drawn from the production of circulating capital. This might at first be supposed to diminish the amount of circulating capital. Such would be the result, were it not for the fact, that the very object of fixed capital, is to enable us to create circulating capital, with a less amount of labor. A society, in which a part of the members are devoted to the making of useful machines, will create a greater amount of annual products, than one in which all are devoted exclusively to the creation of annual products. Thus, in a short time, the annual surplus is greater than before, and a greater number of persons is employed in creating fixed capital, and that kind of fixed capital, which involves, in its creation, a greater amount of expense. It is thus that a society, age after age, grows rich, and each successive race of men leaves the world better provided with the means of production, than it found it.

This may all be illustrated, by a few very familiar instances. A savage, who obtains peltry by his bow and arrows, having provided for the food and clothing of his family, will, if he be industrious, possess a surplus which must now be useless to him. He would naturally exchange his surplus for a rifle; a kind of fixed capital, by means of which, his circulating capital would be greatly increased. This increase of capital would enable him, besides procuring better clothes and more numerous conveniences, to add to his fixed capital by purchasing a horse, or a plough, or by erecting a house. These, in their turn, would augment his circulating capital; and thus, with every year, his fixed and circulating capital would steadily increase. Hence, very soon, There would arise a demand for the services of men who employed themselves in creating fixed, instead of circulating capital. That is, mechanical arts would be practised; and the artisans would be, as we find that in such a state of society they always are, exorbitantly paid for their labor.

Again: Suppose a farmer to enter upon new and untilled land. His first care is to produce the necessities of life, for himself and his family. When this is accomplished, he appropriates a part of his labor to the creation of fixed, instead of annual capital: that is, he erects fences, purchases with his produce carts and animal, builds barns and outhouses, and thus renders his farm a much more productive instrument than before. With his increasing surplus he purchases additional land, if he needs it, and brings it all into such a state of cultivation as he thinks desirable. By all these means, his annual surplus is rendered greater, and he is enabled to extend the amount of his fixed capital, by building a better house, purchasing better ploughs, harrows, carts, and various machines by which his future labor will be rendered more productive. But we see that this could not be done by the farmers of a neighborhood, unless some portion of them abandoned farming, and devoted themselves to the creation of fixed capital. There would, therefore, arise a great demand for mechanical labor. And as there would hence arise the necessity for a great number of exchanges, some portion of the society must devote themselves to effecting them; that is, must become merchants. In this manner, circulating capital first gives rise to fixed capital, and fixed capital increases again the amount of circulating capital; and thus they go on, year after year, mutually augmenting each other.

Thus also the merchant, whose business it is to augment the exchangeable value of a given amount of circulating capital by transportation and exchange, produces, by his operations, an annual surplus. This he adds to his former capital, for a while, but soon purchases fixed capital, such as ships, &c., to facilitate his operations. When he has enough of these, and as large an amount of circulating capital as he wishes to employ, be then begins to invest his surplus either in some permanent works of public improvement, as bridges, roads, canals, or in something, which, besides facilitating the productiveness of the society, will also yield him a revenue, or else he employs it in manufactures, according to the condition of the country, and its natural demands and facilities.

From what has been remarked above, we may easily see the natural course which a nation takes, in the progressive accumulation of wealth. Its first productions are, circulating, or annual capital; the products of the field, of the forest, or of the ocean. Next follow improvement in permanent conveniences, and the construction of instruments for agricultural production; then the exchange of its own products for other circulating capital, or for the annual necessaries of life; and then the exchange for fixed capital of the most necessary kind. Thus, the Dutch, on their first settlement in this country, used to import their bricks from Holland. Commerce being thus commenced with an older country, the colonists soon engage in it themselves, and invest a large portion of their annual surplus in ships. Before manufactures had commenced in this country, previously to the Revolution, the commerce of the colonies had become already extensive. All these changes prepare the way for the investment of capital in manufactures, which, in their proper and natural time, *must* be established; and when that time arrives, they *will* be established, without the aid of legislative enactment, and according to the very laws by which accumulation is governed.

From what has been remarked, we also see that the advantages which we enjoy over savage nations result, principally, from the possession of a greater amount of fixed capital; or, in other words, the permanent results of pre-exerted industry. That advantage consists in this, that this capital, besides affording to its owners the ordinary rate of profit, enables men to produce at a much cheaper rate; that is, at a less expense of labor. Thus, a cotton factory, besides affording a fair profit to the owner, enables him to do, by one hour's labor, what would otherwise require the labor of days or of weeks.

By all this difference, therefore, we have the advantage over savages, or over those who went before us. Hence, a nation, which does- not possess the results of pre-exerted industry, must be poor, unless its natural advantages enable it to avail itself of those of other countries.*

Hence, we also see the reason why the traffic between savage and civilized nations is so greatly in favor of the latter. The latter are enabled to offer in barter that which is of inestimable value to the savage, but which the civilized man can produce with a very small portion of labor. An axe would cost a savage the labor of weeks or of months, while a smith in New England would make it in a few hours. Hence, it is not wonderful that the one should be willing to give for it vastly more than it costs the other. And, on the other hand, the commodities of the savage are of very little value to *him*, but of high value to the mechanic or artisan. Hence, the gain to him also is great. An Indian who exchanges peltry, which is worth in New York fifty or one hundred dollars, for a rifle, powder, and bullets, has improved his condition, by means of the purchase, really more than the gunsmith, who has made so exorbitant a profit.

SEVENTH. *Of Money*. It will be observed that, thus far, I have not mentioned money as an item of capital. Although this is not the place in which to treat of tile functions of money, yet it may be proper here to add a single remark concerning it.

Money forms but a very small part of the capital of any country. Every one may easily judge of this, from his own observation. How very small a portion of any one's possessions is in money. And if this be true of every individual separately, it must be true of all the individuals collectively.

*Or, in other words, as it is well expressed by Mr. Carey, in his late work on this subject; the *quality* as well as the *quantity* of labor, enters into the account, whenever we speak of the exchangeable value of the products which it has created The *quality* of labor is always in proportion to the amount of pre-exerted industry with which it operates.

The sole use of money, is to facilitate exchanges. It is an instrument for the saving of labor, and for the performing of labor with greater accuracy. Of this, any one may convince himself in a moment, if he will imagine two cases, in the one of which he was obliged to make several exchanges without money, and the other in which he could make them with it.

Money gains nothing by exchange, but rather loses in value, like every other machinery which is worn out while it accomplishes its object. Hence, it belongs to the class of fixed capital. It is subject to slow wear, which must be replaced out of the circulating capital of the country.

And, hence, as any country may have a greater amount of any particular kind of fixed capital than it needs, as, for instance, of any particular kind of machinery; and as, when this is the case, it sends it abroad, or in other words, makes it an article of export, or changes it into circulating capital, so is it with money. If a country has more money than is sufficient to accomplish its exchanges, it sends it abroad, and receives back something that it needs more. Such is, permanently, the case in mining countries; and such is, at tunes, the condition of almost every commercial nation.