CHAPTER VII

THE AUXILIARIES OF PRODUCTION

In the preceding chapter, on the "Elements of Production," we have pointed out that all material commodities are either the spontaneous outpourings of Nature or the product of Nature and Labour, or, in other words, of Land and Labour. And that just as man labours only to minister to his desires, whatever these may be, so all the products of his unforced toil are destined to this same end — some to minister directly to his desires, others to minister to them indirectly only, by assisting and facilitating his future industrial operations. This latter contention really requires no proof. Face to face with Nature, without anything to assist his labours, some auxiliary of production, the activities of man, like those of his more humble fellow-creatures, the "lower animals," would practically be limited to appropriating and consuming the materials supplied by Nature. Hence it is, that besides "enjoyable commodities," commodities themselves capable of yielding enjoyment, the activities of mankind are directed to the production of "serviceable commodities," commodities capable of facilitating their future industrial operations. To revert to a former illustration, a man thrown on a desolate island would first strive to satisfy his immediate wants from any available natural source; but, to use a popular phrase, as soon as he had time to look about him, he would naturally and inevitably, or instinctively, direct his energies to the collecting or fashioning of something capable of assisting his future labours, and rendering them more productive; in other words, he would make or acquire tools. As Carlyle well points out, "Nowhere do you find man without tools; without tools he is nothing, with tools he is all."

Using the term "tools" in its broadest possible sense, it may be used to connote all auxiliaries of production, all instruments, animate or inanimate, by the aid of which man facilitates his industrial operations. We are well aware that this term is generally restricted to instruments used to facilitate mechanical operations only, but its etymological derivation' seems to us to justify its use in a much wider sense, to include all auxiliaries of production, anything and everything that men acquire in order to aid their industrial activities. Surely to the agriculturalist seeds are as much "tools" as ploughs and spades. For the one he is as much dependent on Nature as for the other. True it is that seeds once collected are ready for use, whilst spades, ploughs, etc., have to be shaped and fashioned from the material of which they are composed; and that seeds possess properties, more especially the property of reproduction, different from "dead" matter. Against which it may be contended that the improved seed of today is as much the product of man's craft and ingenuity as the plough or spade; whilst it is just this property of reproduction which makes seeds, etc., such useful, valuable, and indispensable tools, in fact, the most useful, valuable, and

indispensable that men possess — it is, in fact, on these reproductive powers, inherent in "living" matter, that agriculturalists, horticulturalists, etc., have to rely for their earnings, for their "wages," and on which mankind, as a whole, have to rely for the constant renewing of their food supply. The same reasoning applies to cattle, sheep, poultry, etc., which are the tools wherewith pastoralists, cattleraisers, egg-farmers, etc., carry on their respective industries. Hence we feel ourselves justified in making use of this term to denote all auxiliaries of production; not only spades, ploughs, and spinning looms, wheel-barrows, carts, roads and railways, but also seeds, sheep, poultry, cattle, etc.; in fact, to connote all things, the function of which is to aid man's industrial operations.

1 The term "tool" is derived from the Anglo-Saxon verb "tawian," to make, or to prepare.

All material commodities, as we have seen, are either the spontaneous products of Nature or the joint products of Nature and human labour, or of Nature, human labour, and tools. But since tools, like all other commodities man possesses, may be regarded simply as "accumulated labour" — consisting as they do of natural products on which he has expended, in which he has saved up, stored up, or accumulated his own labour force, his own power to minister to his wants — all commodities in the possession of man may be regarded as the direct product of Nature and Labour, or of Land and Labour.

It would have been quite unnecessary to dwell on such a simple, self-evident fact, that all commodities men possess are the product of land and labour, or land, labour, and tools, were it not that the ignoring of it seems to us to be the direct cause of many popular errors, as well as of some of those fundamental fallacies which have done so much to stultify the labours of the many able, earnest men who have devoted themselves to the study and exposition of Political Economy. Moreover, before new teachings, however simple, can be accepted, faith in the older ones, already in possession of the mind, must be removed, or at least shaken. Now it is generally held, and is taught in all economic works, that Land, Labour, and Capital are "the three requisites in production, without the combined agency of which no wealth can be produced." Such a statement might be allowed to pass unchallenged, if under this mysterious term "capital" were only included such things as were employed, or as could be employed, in assisting men's labours. This, however, is far from being the case. Whilst under the term "land," Economists agree in including all natural opportunities and forces, all natural outlets to man's industrial activities, and under "labour" all human exertions; this vague and ambiguous term "capital" has been used by almost every independent Economist in a different sense, according to the particular views he held on economic questions, or according to the particular conclusions he was desirous of supporting. Hence, each has found it necessary to

reject the definitions of his predecessors and to frame a new one for himself. To appreciate the full significance of this fact, it is necessary to point out that, rightly or wrongly, what is known as the a priori method of reasoning, now so rigorously excluded from all branches of the Physical Sciences, has been generally accepted as the only one applicable to Political Economy. As Mill expresses it: "It reasons, and, as we contend, must necessarily reason, from assumptions, not from facts."' In other words, the premises from which Economists reason are not facts, or generalisations from facts, but certain assumptions, axioms, and more or less exact definitions of certain terms in general use, more especially in commercial circles, concerning the particular group of phenomena they proposed to investigate. And to verify their conclusions the student is referred, not to any facts, but to the accord of such conclusions with the premises from which they were deduced.

1"Some Unsettled Questions of Political Economy," p. 144. But it was the same close reasoner who told us that — " If there are some subjects on which the results obtained have finally received the unanimous assent of all who have attended to the proof, and others on which mankind have not yet been equally successful; on which the most sagacious minds have occupied themselves from the earliest date, and have never succeeded in establishing any considerable body of truths, so as to be beyond denial or doubt; it is by generalising the methods successfully followed in the former inquiries, and adapting them to the latter, that we may hope to remove this blot on the face of science." ("System of Logic," Book VI., chap, i., § 2.) Comment is needless. For proof of this somewhat sweeping statement, we need only refer again to Mill's conclusions concerning "unproductive labour" generally, more especially to his contention that "the labour of saving a friend's life is not productive, unless the friend is a productive labourer, and produces more than he consumes." As the great master logician himself points out, this conclusion is necessitated by and based on his definition of "Unproductive Labour," which itself is necessitated by and based on the most unwarranted but fundamental assumption of the "orthodox " Political Economy, that men work in order to produce or acquire, or rather in order to possess "wealth." And the reasoning being correct, the conclusion is unavoidable, if the premises from which it has been deduced be accepted.

We cannot be surprised, therefore, that the votaries of this, as of other "abstract" sciences, cling to the use of vague, indefinite, ambiguous terms, which admit of being defined in such a manner as to lead to the conclusions they desire to prove — or we should say to support; for on these lines all that can be shown is that the conclusions drawn can be legitimately deduced from the accepted premises and definitions.

Now, in popular phraseology the term "capital" is used to denote anything and everything, the possession of which tends to increase the earned or unearned income

of the individual or community; anything, in fact, that confers on its owner power over Nature or over his fellow-men. Title-deeds to slaves or to land, bonds, or promises to pay of individuals or communities, all stocks of merchandise, whatever be their function, whether to minister to desires or to facilitate future industry (e.g., whether sponge-cakes or spades), even skill, knowledge, or ability to labour (the "capital" of the workers): all are popularly included under this much-embracing and most ambiguous term. "Capital" is, in fact, used as synonymous with "wealth," but more especially to denote such portions of a man's "wealth" as secure him a revenue, whether earned or unearned; while the term "Capitalist" is used to denote anyone commanding or possessing a larger or lesser proportion of such things — more especially, however, of such things as secure him the control of the labour, or of the results to the activities, of his fellow-men.

Now, though, as Mill expresses it, "popular phraseology is shaped out by a different class of necessities from those of scientific exposition," yet Political Economists, as far as we know, without exception, have accepted this most indeterminate word, in all its original vagueness, as the foundation-stone of most, if not all, their speculations; each, of course, pruning and shaping this most plastic and adaptable term in accordance with the use to which he desired to put it. Some, like Bastiat¹ and Adam Smith, have used it to denote not only the whole stock of tools, materials, provisions, etc., at the command of the community, but also all ability to labour. Others, like Ricardo, to denote such portion only of the available stock of food, clothing, tools, materials, machinery, etc., as is being used in production. Others again, like M'Culloch, all such stock as is capable of being so used. Others again, following John Stuart Mill, have made neither the use nor the capability to be so used, but the determination so to use them on the part of their owners, the test of "Capital." Following in the steps of Adam Smith, Mill points out that "a stock previously accumulated of the product of former labour" is a necessary pre-requisite of modern industrial operations; and that "this accumulated stock of the produce of labour is termed Capital." ²The function or "office" of "Capital" is, he tells us, " to afford the shelter, protection, tools, and materials which the work requires, and to feed and otherwise maintain take pains. "Capital," he tells us, "does not consist in the vegetative force which has made cotton germinate and flower, but in the pains taken by the planter. Capital is not the wind which fills the sails of the ship, or the magnetism which acts upon the needle, but the pains taken by the sail-maker and optician. Capital is not the elasticity of steam which turns the spindles of the mill, but the pains taken by the machine-maker."

1 Speaking of an imaginary Robinson Crusoe, who, however, is not supposed to be an Economist, Bastiat says: "Tools, materials, provisions — these, doubtless, Robinson will denominate his 'Capital.'" (What Robinson would, doubtless, denominate his "Wealth," Bastiat does not inform us.) And he then almost immediately continues:

"Let us vary the hypothesis, and place ourselves in the midst of the social order. Capital is still composed of instruments of labour, materials, and provisions, without which no enterprise of any magnitude can be undertaken, either in a state of isolation or in a social state." In another part of the same chapter ("Harmonies of Political Economy,"p. 198), however, after informing his readers that "Capital is an instrument of labour," and that "the use of instruments of labour is to procure us the co-operation of the gratuitous forces of Nature," he uses this same term as synonymous with labour with ability to work and

2 Adam Smith uses the term in the same loose and all-embracing manner, which the aim and scope of his work seems to us to have entitled him to do. After pointing out that the division of labour necessitates that a stock of goods of different kinds should be stored up somewhere, he argues that the possessor of such a stock expects that some part of it should bring him in a revenue, and lays it down broadly that "that part which he expects to afford him this revenue is called his capital." Under this elastic term he includes not only "all useful machines and instruments of trade which facilitate and abridge labour," and "all those profitable buildings which are the means of procuring a revenue," not only all improvements of land, and all stocks of money, materials, provisions, and merchandise, but also "the acquired and useful abilities of all the inhabitants or members of the society." (See "Wealth of Nations," Book II., chap, i.)

a "Principles of Political Economy," Book I., chap, iv., p. 51.

the labourers during the process." But still he contends that "the distinction between Capital and not-Capital does not lie in the kind of commodities, but in the mind of the capitalist — in his will to employ them for one purpose rather than another." Things, like money, that in themselves "cannot perform any part of the office of capital," may be exchanged for things that can. Hence, he contends that "all property, however illadapted in itself for the use of labourers, is a part of capital so soon as it, or the value to be received from it, is set apart for productive reinvestment." And he concludes that "the sum of all the values so destined by their respective possessors, compose the capital of the country," which seems to us to include all the land as well as all the labour of the country under this all-embracing term; a view corroborated by the fact that in another chapter¹ Mill tells us that "To employ industry on the land is to apply capital to the land. To employ labour in a manufacture is to invest capital in the manufacture." From the commercial standpoint, or from the standpoint of a slaveowner, employer, or "investor," this may be true enough; but that it is possible to use this term in so broad and general a manner seems to us sufficient reason to banish it, as calculated only to mislead and confuse, from any book endeavouring to treat of

economic problems in a simple and understandable manner.

1 Ibid., chap, v., p. 1.

Even the master-mind of a Henry George seems to have been perplexed when confronted with this elusive and delusive term. George rejects exchangeability as any test of "wealth," and restricts the use of this term to concrete things acquired by man capable of ministering to human requirements; or, to use his own words, to "natural products that have been secured, moved, combined, separated, or in other ways modified by human exertion, so as to fit them for the gratification of human desires." "Capital," he points out, "is wealth devoted to a certain purpose," which is certainly to make the function things are destined to fulfil, the test of "capital"; and he defines or describes it as "that fart of wealth which is devoted to the aid of production." Strictly speaking, this is to restrict the use of this term to what we have termed the auxiliaries of production, to anything, the office of which is to aid the industrial operations of mankind. A rigid adherence to this clear definition, however, would exclude many concrete things, more especially stocks of merchandise, the "capital" of distributors, traders, merchants, etc., popularly included under this term; hence, a few pages later George finds another dividing line or test of the "wealth" that is "capital" and the "wealth" that is "not capital," not "in the character, capabilities, or final destination of the things," but in "whether they are or are not in the possession of the consumer." He therefore offers another definition of this mysterious term, viz., "Wealth in course of exchange, understanding exchange to include, not merely the passing from hand to hand, but also such transmutations as occur when the reproductive or transforming forces of nature are utilised for the increase of wealth," which, of course, is to make the temporary state or condition of things the test of " capital." Now these two definitions cannot be said to be complementary one to the other. Each denotes a separate and distinct group of commodities, viz., (a) those destined or devoted to the aid of production, including exchange, such as tools and machinery, roads, railways, and other means of transport, scales, counters, marts, shops, and other aids to exchange; and (b) those in course of production, regarding production as incomplete until the commodity is in the hands of the consumer. And though it is true that these and many other things are popularly included under this much-embracing term, we cannot see that investigations into economic problems are in any way facilitated by including them under one term; certainly not by using such an ambiguous and delusive term as "capital" for that purpose.

1 " Progress and Poverty," Book I., chap. ii.

For our part we shall make no use whatever of this mystic and mysterious term, which seems to us calculated to confuse and perplex rather than to simplify and enlighten; and we think we have said enough to justify this determination. Scientific exactness is

not to be expected in popular phraseology, and we have no desire to enter into a controversy as to what particular meaning may, can, or should be given to any ambiguous term in general use, much less of one, without the use of which every economic subject can be thoroughly discussed. For our present purpose it is sufficient to have ascertained that all commodities men possess are the product of Land and Labour, or of Land, Labour, and Tools, under which latter term may be included all auxiliaries of production, everything acquired by man the function of which is to assist his industrial operations.

Of that fanciful creation of the "orthodox" Economists, the Wage Fund, we do not propose to treat; it has been sufficiently demolished by Henry George. "Capitalists" were supposed to go about girdled with a big bag, containing all the claims on the existing "wealth" of the world. These they were assumed to dole out to the workers, according to the services these rendered them. The average earnings of the individual wage-earner were supposed to be determined, in some mysterious manner, by the ratio between the amount this mystical and mythical bag contained, and the number of workers desiring employment. Without the presence of the "capitalists" and their big bag containing the Wage Fund, it was assumed to be impossible for the rest of the community to live or work at all; but as has already been shown, give mankind access to Nature, to land, and they can and do produce for themselves both enjoyable and serviceable commodities, and that even in the absence of any "Capitalist" or of any "Wage Fund."

1" I dwell on the obvious fact that labor always precedes wages, because it is all-important to an understanding of the more complicated phenomena of wages that it should be kept in mind. . . . Now what does the rendering of labor in production imply? Evidently the production of wealth, which, if it is to be exchanged or used in production, is capital. Therefore, the payment of capital in wages presupposes a production of capital by the labor for which the wages are paid. And as the employer generally makes a profit, the payment of wages is, so far as he is concerned, bnt the return to the laborer of a portion of the capital he has received from the labor. So far as the employee is concerned, it is but the receipt of a portion of the capital his labour has previously produced. ... It came, not from capital, but from the value created by the labor itself. There was no more advance of capital than if he had hired his hands to dig clams, and paid them with a part of the clams they dug. Their wages were as truly the produce of their labor as were the wages of the primitive man, when, long 'before the appropriation of land and the accumulation of stock,' he obtained an oyster by knocking it with a stone from the rocks." — " Progress and Poverty," Book I., chap.

1 "Industry is limited by capital. . . . There can be no more industry than is supplied with materials to work up and food to eat. Self-evident as the thing is, it is often

forgotten that the people of a country are maintained and have their wants supplied, not by the produce of present labour, but of past. They consume what has been produced, not what is about to be produced. Now, of what has been produced, a part only is allotted to the support of productive labour; and there will not and cannot be more of that labour than the portion so allotted (which is the capital of the country) can feed and supply with the materials and instruments of production." — Mill, "Principles of Political Economy," Book I., chap, v., § 1. In the same chapter, however, a few paragraphs farther on, § 4, as if desirous of showing the sort of society the enunciation of these doctrines had called up in his mind, and to which, indeed, they are alone applicable, speaking of the slaveowner, he says: "If all that he made his slaves produce and forbear to consume had been consumed by him on personal indulgences, he would not have increased his capital, nor been enabled to maintain an increasing number of slaves. To maintain any slaves at all implied a previous saving, a stock, #at least, of food, provided in advance."

Unfortunately, however, existing social conditions give a substratum of reality to this conception, which is a true view of the relations of a "capitalistic" slave-owner to his chattel-slaves. At present the industry of the community is in thraldom to what are known as "Capitalists"; this portion of the community dominate and direct the activities of the rest of their fellow-citizens, who can only live and work by their permission, and on their terms. Speaking generally, these "Capitalists," as a class, have claims not only over the greater part of any existing "wealth," but over large amounts of "wealth" yet to be produced by the labours of future generations. Of what these claims consist, how they have been created, and to what they are due, we shall have to treat later on. Certain it is that to redeem the masses of mankind from this thraldom, which is robbing them of their manhood, degrading them physically, mentally, and morally, depriving them of hope, stifling all higher aspirations, and plunging them into the cursed abyss of poverty and pauperism, with its attendant train of brutality, immorality, vice, and crime; to enable them to face the light of the sun as free, independent men, whilst yet enjoying all the advantages of that inter-dependence which is the necessary condition of co-operation and division of labour — would be to solve what is known as the Social Question, which today is troubling the hearts and vexing the understanding of all earnest men, of all whose desire is for the uplifting of humanity and the progress of mankind to a higher, purer, and nobler civilisation.