

human nature, it attempts to trace the secondary or derivative laws, by which the production of wealth is determined; and in which must lie the explanation of the diversities of riches and poverty in the present and past, and the ground of whatever progress in wealth is reserved for the future.

Unlike the laws of Production, those of Distribution are partly of human institution; since the manner in which wealth is distributed in any given society, depends on the statutes or usages therein prevalent. But though governments or nations can in some measure determine what institutions shall be established, they cannot arbitrarily determine how those institutions shall work. The conditions on which the power they possess over the distribution of wealth is dependent, and the manner in which the distribution is affected by the various modes of conduct which society may think fit to adopt, are determined by laws as rigid as those of Production itself.

The laws of Production and Distribution, and some of the practical consequences deducible from them, are the subject of the following treatise.

BOOK I.

PRODUCTION.

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CHAPTER I.

OF THE REQUISITES OF PRODUCTION.

§ 1. THE requisites of production are two : labour, and appropriate natural objects.

Labour is either bodily or mental ; or, to express the distinction more comprehensively, either muscular or nervous ; and it is necessary to include in the idea, not solely the exertion itself, but all feelings of a disagreeable kind, all bodily inconvenience or mental annoyance, connected with the employment of one's thoughts, or muscles, or both, in a particular occupation. Of the other requisite—appropriate natural objects—it is to be remarked, that some objects exist or grow up spontaneously, of a kind suited to the supply of human wants. There are caves and hollow trees capable of affording shelter ; fruit, roots, wild honey, and other natural products, on which human life can be supported ; but even here a considerable quantity of labour is generally required, not for the purpose of creating, but of finding and appropriating them. In all but these few and (except in the very commencement of human society) unimportant cases, the

objects supplied by nature are only instrumental to human wants, after having undergone some degree of transformation by human exertion. Even the wild animals of the forest and of the sea, from which the hunting and fishing tribes derive their sustenance—although the labour of which they are the subject is chiefly that required for appropriating them—must yet, before they are used as food, be killed, divided into fragments, and subjected in almost all cases to some process of cookery, which are operations requiring a certain degree of human labour. The amount of transformation which natural substances undergo before being brought into the shape in which they are directly applied to human use, varies from this or a still less degree of alteration in the nature and appearance of the object, to a change so total that no trace is perceptible of the original shape and structure. There is little resemblance between a piece of a mineral substance found in the earth, and a plough, an axe, or a saw. There is less resemblance between porcelain and the decomposing granite of which it is made, or between sand mixed with sea-weed, and glass. The difference is greater still between the fleece of a sheep, or a handful of cotton seeds, and a web of muslin or broad cloth; and the sheep and seeds themselves are not spontaneous growths, but results of previous labour and care. In these several cases the ultimate product is so extremely dissimilar to the substance supplied by nature, that in the custom of language nature is represented as only furnishing materials.

Nature, however, does more than supply materials; she also supplies powers. The matter of the globe is not an inert recipient of forms and properties impressed by human hands; it has active energies by which it co-operates with, and may even be used as a substitute for, labour. In the early ages men converted their corn into flour by pounding it between two stones; they next hit on a contrivance which enabled them, by turning a handle, to make one of the stones revolve upon the other; and this process, a little improved,

is still the common practice of the East. The muscular exertion, however, which it required, was very severe and exhausting, insomuch that it was often selected as a punishment for slaves who had offended their masters. When the time came at which the labour and sufferings of slaves were thought worth economizing, the greater part of this bodily exertion was rendered unnecessary, by contriving that the upper stone should be made to revolve upon the lower, not by human strength, but by the force of the wind or of falling water. In this case, natural agents, the wind or the gravitation of the water, are made to do a portion of the work previously done by labour.

§ 2. Cases like this, in which a certain amount of labour has been dispensed with, its work being devolved upon some natural agent, are apt to suggest an erroneous notion of the comparative functions of labour and natural powers; as if the co-operation of those powers with human industry were limited to the cases in which they are made to perform what would otherwise be done by labour; as if, in the case of things made (as the phrase is) by hand, nature only furnished passive materials. This is an illusion. The powers of nature are as actively operative in the one case as in the other. A workman takes a stalk of the flax or hemp plant, splits it into separate fibres, twines together several of these fibres with his fingers, aided by a simple instrument called a spindle; having thus formed a thread, he lays many such threads side by side, and places other similar threads directly across them, so that each passes alternately over and under those which are at right angles to it; this part of the process being facilitated by an instrument called a shuttle. He has now produced a web of cloth, either linen or sack-cloth according to the material. He is said to have done this by hand, no natural force being supposed to have acted in concert with him. But by what force is each step of this operation rendered possible, and the web, when produced,

held together? Is it not by the tenacity, or force of cohesion, of the fibres? which is one of the forces in nature, and which we can measure exactly against other mechanical forces, and ascertain how much of any of them it suffices to neutralize or counterbalance.

If we examine any other case of what is called the action of man upon nature, we shall find in like manner that the powers of nature, or in other words the properties of matter, do all the work, when once objects are put into the right position. This one operation, of putting things into fit places for being acted upon by their own internal forces, and by those residing in other natural objects, is all that man does, or can do, with matter. He only moves one thing to or from another. He moves a seed into the ground; and the natural forces of vegetation produce in succession a root, a stem, leaves, flowers, and fruit. He moves an axe through a tree, and it falls by the natural force of gravitation; he moves a saw through it, in a particular manner, and the physical properties by which a softer substance gives way before a harder, make it separate into planks, which he arranges in certain positions, with some adhesive matter between them, and produces a table, or a house. He moves a spark to fuel, and it ignites, and by the force of combustion it cooks the food, melts or softens the iron, converts into beer or sugar the malt or cane juice, which he has previously moved to the spot. He has no other means of acting on matter than by moving it. Motion, and resistance to motion, are the only things which his muscles are constructed for. By muscular contraction he can create a pressure on an outward object, which, if sufficiently powerful, will set it in motion, or if it be already moving, will check or modify or altogether arrest its motion, and he can do no more. But this is enough to have given him all the command which mankind have acquired over natural forces immeasurably more powerful than themselves; a command which, great as it is already, is without doubt destined to become indefi-

nately greater. He exerts this power either by availing himself of natural forces in existence, or by arranging objects in those mixtures and combinations by which natural forces are generated; as when by putting a lighted match to fuel, and water into a boiler over it, he generates the expansive force of steam, a power which has been made so largely available for the attainment of human purposes.

Labour, then, in the physical world, is always and solely employed in putting objects in motion; the properties of matter, the laws of nature, do the rest. The skill and ingenuity of human beings is chiefly exercised in discovering movements, practicable by their powers, and capable of bringing about the effects which they desire. But, while movement is the only effect which man can immediately and directly produce by his muscles, it is not necessary that he should produce directly by them all the movements which he requires. The first and most obvious substitute is the muscular action of cattle: by degrees he makes the powers of inanimate nature aid him in this too, as by making the wind, or water, things already in motion, communicate a part of their motion to the wheels, which before that invention he made revolve by muscular force. He extorts this service from the powers of wind and water by a set of actions, consisting like the former in moving certain objects into certain positions in which they constitute what is termed a machine; but the muscular action necessary for this is not constantly renewed, but performed once for all, and there is on the whole a great economy of labour.

§ 3. Some writers have raised the question, whether nature gives more assistance to labour in one kind of industry or in another; and have said that in some occupations labour does most, in others nature most. In this, however, there seems much confusion of ideas. The part which nature has in any work of man, is indefinite and incommensurable. It is impossible to decide that in any one thing nature does

more than in any other. One cannot even say that labour does less. One may say, that less labour is required; but if that which is required, is absolutely indispensable, the result is just as much the product of labour, as of nature. When two conditions are equally necessary for producing the effect at all, it is useless to say that so much of it is produced by one and so much by the other: it is like attempting to decide which half of a pair of scissors has most to do in the act of cutting; or which of the factors, five and six, contributes most to the production of thirty. The form which this conceit usually assumes, is that of supposing, that nature lends more assistance to human endeavours in agriculture, than in manufactures. This notion, held by the French Economistes, and from which Adam Smith was not free, arose from a misconception of the nature of rent. The rent of land being a price paid for a natural agency, and no such price being paid in manufactures, these writers imagined that since a price was paid, it was because there was a greater amount of service to be paid for: whereas a better consideration of the subject would have shown that the reason why the use of land bears a price is simply the limitation of its quantity, and that if air, heat, electricity, chemical agencies, and the other powers of nature employed by manufacturers were sparingly supplied, and could, like land, be engrossed and appropriated, a rent could be exacted for them also.

§ 4. This leads to a distinction which we shall find to be of primary importance. Of natural powers, some are unlimited, others limited in quantity. By an unlimited quantity is of course not meant literally, but practically unlimited: a quantity beyond the use which can in any, or at least in present circumstances, be made of it. Land is, in some newly settled countries, practically unlimited in quantity: there is more than can be used by the existing population of the country, or by any accession likely to be made to it for generations to come. But even there, land favourably

situated with regard to markets or means of carriage, is generally limited in quantity: there is not so much of it as persons would gladly occupy and cultivate, or otherwise turn to use. In all old countries, land capable of cultivation, land at least of any tolerable fertility, must be ranked among agents limited in quantity. Water, for ordinary purposes, on the banks of rivers or lakes, may be regarded as of unlimited abundance; but if required for irrigation, it may even there be insufficient to supply all wants, while in places which depend for their consumption on cisterns or tanks, or on wells which are not copious, or are liable to fail, water takes its place among things the quantity of which is most strictly limited. Where water itself is plentiful, yet water-power, *i. e.*, a fall of water applicable by its mechanical force to the service of industry, may be exceedingly limited, compared with the use which would be made of it if it were more abundant. Coal, metallic ores, and other useful substances found in the earth, are still more limited than land. They are not only strictly local, but exhaustible; though, at a given place and time, they may exist in much greater abundance than would be applied to present use even if they could be obtained gratis. Fisheries, in the sea, are in most cases a gift of nature practically unlimited in amount; but the Arctic whale fisheries have long been insufficient for the demand which exists even at the very considerable price necessary to defray the cost of appropriation: and the immense extension which the Southern fisheries have in consequence assumed, is tending to exhaust them likewise. River fisheries are a natural resource of a very limited character, and would be rapidly exhausted if allowed to be used by every one without restraint. Air, even that state of it which we term wind, may, in most situations, be obtained in a quantity sufficient for every possible use; and so likewise, on the sea coast or on large rivers, may water carriage: though the wharfage or harbour-room applicable to the service of that mode of transport is in

many situations far short of what would be used if easily attainable.

It will be seen hereafter how much of the economy of society depends on the limited quantity in which some of the most important natural agents exist, and more particularly, land. For the present I shall only remark that so long as the quantity of a natural agent is practically unlimited, it cannot, unless susceptible of artificial monopoly, bear any value in the market, since no one will give anything for what can be obtained gratis. But as soon as a limitation becomes practically operative; as soon as there is not so much of the thing to be had, as would be appropriated and used if it could be obtained for asking; the ownership or use of the natural agent acquires an exchangeable value. When more water-power is wanted in a particular district, than there are falls of water to supply it, persons will give an equivalent for the use of a fall of water. When there is more land wanted for cultivation than a place possesses, or than it possesses of a certain quality and certain advantages of situation, land of that quality and situation may be sold for a price, or let for an annual rent. This subject will hereafter be discussed at length; but it is often useful to anticipate, by a brief suggestion, principles and deductions which we have not yet reached the place for exhibiting and illustrating fully.

CHAPTER II.

OF LABOUR AS AN AGENT OF PRODUCTION.

§ 1. THE labour which terminates in the production of an article fitted for some human use, is either employed directly about the thing, or in previous operations destined to facilitate, perhaps essential to the possibility of, the subsequent ones. In making bread, for example, the labour employed about the thing itself is that of the baker; but the labour of the miller, though employed directly in the production not of bread but of flour, is equally part of the aggregate sum of labour by which the bread is produced; as is also the labour of the sower, and of the reaper. Some may think that all these persons ought to be considered as employing their labour directly about the thing; the corn, the flour, and the bread being one substance in three different states. Without disputing about this question of mere language, there is still the ploughman, who prepared the ground for the seed, and whose labour never came in contact with the substance in any of its states; and the plough-maker, whose share in the result was still more remote. All these persons ultimately derive the remuneration of their labour from the bread, or its price: the plough-maker as much as the rest; for since ploughs are of no use except for tilling the soil, no one would make or use ploughs for any other reason than because the increased returns thereby obtained from the ground afforded a source from which an adequate equivalent could be assigned for the labour of the plough-maker. If the produce is to be used or consumed in the form of bread, it is from the bread that this equivalent must come. The bread must suffice to remunerate all these labourers, and several others; such as the carpenters and bricklayers who

erected the farm-buildings; the hedgers and ditchers who made the fences necessary for the protection of the crop; the miner and smelter who extracted or prepared the iron of which the plough and other implements were made. These, however, and the plough-maker, do not depend for their remuneration upon the bread made from the produce of a single harvest, but upon that made from the produce of all the harvests which are successively gathered until the plough, or the buildings and fences, are worn out. We must add yet another kind of labour; that of transporting the produce from the place of its production to the place of its destined use: the labour of carrying the corn to market, and from market to the miller's, the flour from the miller's to the baker's, and the bread from the baker's to the place of its final consumption. This labour is sometimes very considerable: flour is transported to England from beyond the Atlantic, corn from the heart of Russia; and in addition to the labourers immediately employed, the wagoners and sailors, there are also costly instruments, such as ships, in the construction of which much labour has been expended: that labour, however, not depending for its whole remuneration upon the bread, but for a part only; ships being usually, during the course of their existence, employed in the transport of many different kinds of commodities.

To estimate, therefore, the labour of which any given commodity is the result, is far from a simple operation. The items in the calculation are very numerous—as it may seem to some persons, infinitely so; for if, as a part of the labour employed in making bread, we count the labour of the blacksmith who made the plough, why not also (it may be asked) the labour of making the tools used by the blacksmith, and the tools used in making those tools, and so back to the origin of things? But after mounting one or two steps in this ascending scale, we come into a region of fractions too minute for calculation. Suppose, for instance, that the same plough will last, before being worn out, a dozen years. Only

one-twelfth of the labour of making the plough must be placed to the account of each year's harvest. A twelfth part of the labour of making a plough is an appreciable quantity. But the same set of tools, perhaps, suffice to the plough-maker for forging a hundred ploughs, which serve during the twelve years of their existence to prepare the soil of a hundred different farms. A twelve-hundredth part of the labour of making the tools, is as much, therefore, as has been expended in procuring one year's harvest of a single farm: and when this fraction comes to be further apportioned among the various sacks of corn and loaves of bread, it is seen at once that such quantities are not worth taking into the account for any practical purpose connected with the commodity. It is true that if the tool-maker had not laboured, the corn and bread never would have been produced; but they will not sell a tenth part of a farthing dearer in consideration of his labour.

§ 2. Another of the modes in which labour is indirectly or remotely instrumental to the production of a thing, requires particular notice: namely, when it is employed in producing subsistence, to maintain the labourers while they are engaged in the production. This previous employment of labour is an indispensable condition to every productive operation, on any other than the very smallest scale. Except the labour of the hunter and fisher, there is scarcely any kind of labour to which the returns are immediate. Productive operations require to be continued a certain time, before their fruits are obtained. Unless the labourer, before commencing his work, possesses a store of food, or can obtain access to the stores of some one else, in sufficient quantity to maintain him until the production is completed, he can undertake no labour but such as can be carried on at odd intervals, concurrently with the pursuit of his subsistence. He cannot obtain food itself in any abundance; for every mode of so obtaining it, requires that there be already food in store. Agriculture only brings

forth food after the lapse of months; and though the labours of the agriculturist are not necessarily continuous during the whole period, they must occupy a considerable part of it. Not only is agriculture impossible without food produced in advance, but there must be a very great quantity in advance to enable any considerable community to support itself wholly by agriculture. A country like England or France is only able to carry on the agriculture of the present year, because that of past years has provided, in those countries or somewhere else, sufficient food to support their agricultural population until the next harvest. They are only enabled to produce so many other things besides food, because the food which was in store at the close of the last harvest suffices to maintain not only the agricultural labourers, but a large industrious population besides.

The labour employed in producing this stock of subsistence, forms a great and important part of the past labour which has been necessary to enable present labour to be carried on. But there is a difference, requiring particular notice, between this and the other kinds of previous or preparatory labour. The miller, the reaper, the ploughman, the plough-maker, the waggoner and waggon-maker, even the sailor and ship-builder when employed, derive their remuneration from the ultimate product—the bread made from the corn on which they have severally operated, or supplied the instruments for operating. The labour that produced the food which fed all these labourers, is as necessary to the ultimate result, the bread of the present harvest, as any of those other portions of labour; but is not, like them, remunerated from it. That previous labour, has received its remuneration from the previous food. In order to raise any product, there are needed labour, tools, and materials, and food to feed the labourers. But the tools and materials are of no use except for obtaining the product, or at least are to be applied to no other use, and the labour of their construction can be remunerated only from the product when obtained.

The food, on the contrary, is intrinsically useful, and is applied to its direct use, that of feeding human beings. The labour expended in producing the food, and recompensed by it, needs not be remunerated over again from the produce of the subsequent labour which it has fed. If we suppose that the same body of labourers carried on a manufacture, and grew food to sustain themselves while doing it, they have had for their trouble the food and the manufactured article; but if they also grew the material and made the tools, they have had nothing for that trouble but the manufactured article alone.

The claim to remuneration founded on the possession of food, available for the maintenance of labourers, is of another kind; remuneration for abstinence, not for labour. If a person has a store of food, he has it in his power to consume it himself in idleness, or in feeding others to attend on him, or to fight for him, or to sing or dance for him. If, instead of these things, he gives it to productive labourers to support them during their work, he can, and naturally will, claim a remuneration from the produce. He will not be content with simple repayment; if he receives merely that, he is only in the same situation as at first, and has derived no advantage from delaying to apply his savings to his own benefit or pleasure. He will look for some equivalent for this forbearance: he will expect his advance of food to come back to him with an increase, called in the language of business, a profit: and the hope of this profit will generally have been a part of the inducement which made him accumulate a stock, by economizing in his own consumption; or at any rate, which made him forego the application of it, when accumulated, to his personal ease or satisfaction. The food also which maintained other workmen while producing the tools or materials, must have been provided in advance by some one, and he too must have his profit from the ultimate product; but there is this difference, that here the ultimate product has to supply not only the profit, but also the

remuneration of the labour. The tool-maker (say for instance the plough-maker), does not indeed usually wait for his payment until the harvest is reaped; the farmer advances it to him, and steps into his place by becoming the owner of the plough. Nevertheless, it is from the harvest that the payment is to come; since the farmer would not undertake this outlay unless he expected that the harvest would repay him, and with a profit too on this fresh advance; that is, unless the harvest would yield, besides the remuneration of the farm labourers (and a profit for advancing it), a sufficient residue to remunerate the plough-maker's labourers, give the plough-maker a profit, and a profit to the farmer on both.

§ 3. From these considerations it appears, that in an enumeration and classification of the kinds of industry which are intended for the indirect or remote furtherance of other productive labour, we need not include the labour of producing subsistence or other necessaries of life to be consumed by productive labourers; for the main end and purpose of this labour is the subsistence itself; and though the possession of a store of it enables other work to be done, this is but an incidental consequence. The remaining modes in which labour is indirectly instrumental to production, may be arranged under five heads.

First: Labour employed in producing materials, on which industry is to be afterwards employed. This is, in many cases, a labour of mere appropriation; *extractive* industry, as it has been called. The labour of the miner, for example, consists of operations for digging out of the earth substances convertible by industry into various articles fitted for human use. Extractive industry however is not confined to the extraction of materials. Coal, for instance, is employed, not only in the processes of industry, but in directly warming human beings. When so used it is not a material, but is itself the ultimate product. So also in the case of a mine

of precious stones. These are to some small extent employed in the productive arts, as diamonds by the glass-cutter, emery and corundum for polishing, but their principal destination, that of ornament, is a direct use; though they commonly require, before being so used, some process of manufacture, which may perhaps warrant our regarding them as materials. Metallic ores of all sorts are materials merely.

Under the head, production of materials, we must include the industry of the wood-cutter, when employed in cutting and preparing timber for building, or wood for the purposes of the carpenter's or any other art. In the forests of America, Norway, Germany, the Pyrenees and Alps, this sort of labour is largely employed on trees of spontaneous growth. In other cases, we must add to the labour of the wood-cutter that of the planter and cultivator.

Under the same head are also comprised the labours of the agriculturist in growing flax, hemp, cotton, feeding silkworms, raising food for cattle, producing bark, dye-stuffs, oleaginous plants, and many other things only useful because required in other departments of industry. So, too, the labour of the hunter, as far as his object is furs or feathers; of the shepherd and the cattle-breeder, in respect of wool, hides, horn, bristles, horse hair, and the like. The things used as materials in some process or other of manufacture are of a most miscellaneous character, drawn from almost every quarter of the animal, vegetable, and mineral kingdoms. And besides this, the finished products of many branches of industry are the materials of others. The thread produced by the spinner is applied to hardly any use except as material for the weaver. Even the product of the loom is chiefly used as material for the fabricators of articles of dress or furniture, or of further instruments of productive industry, as in the case of the sail-maker. The currier and tanner find their whole occupation in converting raw material into what may be termed prepared material. In strictness of speech, almost all food, as it comes from the hands of the agricul-

turist, is nothing more than material for the occupation of the baker or the cook.

§ 4. The second kind of indirect labour is that employed in making tools or implements for the assistance of labour. I use these terms in their most comprehensive sense, embracing all permanent instruments or helps to production, from a flint and a piece of steel for striking a light, to a steam-ship, or the most complex apparatus of manufacturing machinery. There may be some hesitation where to draw the line between implements and materials; and some things used in production (such as fuel) would scarcely in common language be called by either name, popular phraseology being shaped out by a different class of necessities from those of scientific exposition. To avoid a multiplication of classes and denominations answering to distinctions of no scientific importance, political economists generally include all things which are used as *immediate* means of production (the means which are not immediate will be considered presently) either in the class of implements or in that of materials. Perhaps the line is most usually and most conveniently drawn, by considering as a material every instrument of production which can only be used once, being destroyed (at least as an instrument for the purpose in hand) by a single employment. Thus fuel, once burnt, cannot be again used as fuel; what can be so used is only any portion which has remained unburnt the first time. And not only it cannot be used without being consumed, but it is only useful by being consumed; for if no part of the fuel were destroyed, no heat would be generated. A fleece, again, is destroyed as a fleece by being spun into thread; and the thread cannot be used as thread when woven into cloth. But an axe is not destroyed as an axe by cutting down a tree: it may be used afterwards to cut down a hundred or a thousand more; and although deteriorated in some small degree by each use, it does not do its work by being deteriorated, as

the coal and the fleece do theirs by being destroyed; on the contrary, it is the better instrument the better it resists deterioration. There are some things, rightly classed as materials, which may be used as such a second and a third time, but not while the product to which they at first contributed remains in existence. The iron which formed a tank or a set of pipes may be melted down to form a plough or a steam-engine; the stones with which a house was built may be used after it is pulled down, to build another. But this cannot be done while the original product subsists; their function as materials is suspended until the exhaustion of the first use. Not so with the things classed as implements; they may be used repeatedly for fresh work, until the time, sometimes very distant, at which they are worn out, while the work already done by them may subsist unimpaired, and when it perishes, does so by its own laws, or by casualties of its own.

The only practical difference of much importance arising from the distinction between materials and implements, is one which has attracted our attention in another case. Since materials are destroyed as such by being once used, the whole of the labour required for their production, as well as the abstinence of the person who supplied the means for carrying it on, must be remunerated from the fruits of that single use. Implements, on the contrary, being susceptible of repeated employment, the whole of the products which they are instrumental in bringing into existence are a fund which can be drawn upon to remunerate the labour of their construction, and the abstinence of those by whose accumulations that labour was supported. It is enough if each product contributes a fraction, commonly an insignificant one, towards the remuneration of that labour and abstinence, or towards indemnifying the immediate producer for advancing that remuneration to the person who produced the tools.

§ 5. Thirdly: Besides materials for industry to employ

itself on, and implements to aid it, provision must be made to prevent its operations from being disturbed and its products injured, either by the destroying agencies of nature, or by the violence or rapacity of men. This gives rise to another mode in which labour not employed directly about the product itself, is instrumental to its production; namely, when employed for the *protection* of industry. Such is the object of all buildings for industrial purposes; all manufactories, warehouses, docks, granaries, barns, farm-buildings devoted to cattle or to the operations of agricultural labour. I exclude those in which the labourers live, or which are destined for their personal accommodation: these, like their food, supply actual wants, and must be counted in the remuneration of their labour. There are many modes in which labour is still more directly applied to the protection of productive operations. The herdsman has little other occupation than to protect the cattle from harm: the positive agencies concerned in the realization of the product, go on nearly of themselves. I have already mentioned the labour of the hedger and ditcher, of the builder of walls or dykes. To these must be added that of the soldier, the policeman, and the judge. These functionaries are not indeed employed exclusively in the protection of industry, nor does their payment constitute, to the individual producer, a part of the expenses of production. But they are paid from the taxes, which are derived from the produce of industry; and in any tolerably governed country they render to its operations a service far more than equivalent to the cost. To society at large they are therefore part of the expenses of production; and if the returns to production were not sufficient to maintain these labourers in addition to all the others required, production, at least in that form and manner, could not take place. Besides, if the protection which the government affords to the operations of industry were not afforded, the producers would be under a necessity of either withdrawing a large share of their time and labour from produc-

tion, to employ it in defence, or of engaging armed men to defend them; all which labour, in that case, must be directly remunerated from the produce; and things which would not pay for this additional labour, would not be produced. Under the present arrangements, the product pays its quota towards the same protection, and notwithstanding the waste and prodigality incident to government expenditure, obtains it of better quality at a much smaller cost.

§ 6. Fourthly: There is a very great amount of labour employed, not in bringing the product into existence, but in rendering it, when in existence, accessible to those for whose use it is intended. Many important classes of labourers find their sole employment in some function of this kind. There is first the whole class of carriers, by land or water: muleteers, waggoners, bargemen, sailors, wharfmen, coalheavers, porters, railway establishments, and the like. Next, there are the constructors of all the implements of transport; ships, barges, carts, locomotives, &c., to which must be added roads, canals, and railways. Roads are sometimes made by the government, and opened gratuitously to the public; but the labour of making them is not the less paid for from the produce. Each producer, in paying his quota of the taxes levied generally for the construction of roads, pays for the use of those which conduce to his convenience; and if made with any tolerable judgment, they increase the returns to his industry by far more than an equivalent amount.

Another numerous class of labourers employed in rendering the things produced accessible to their intended consumers, is the class of dealers and traders, or, as they may be termed, distributors. There would be a great waste of time and trouble, and an inconvenience often amounting to impracticability, if consumers could only obtain the articles they want by treating directly with the producers. Both producers and consumers are too much scattered, and the

latter often at too great a distance from the former. To diminish this loss of time and labour, the contrivance of fairs and markets was early had recourse to, where consumers and producers might periodically meet, without any intermediate agency; and this plan answers tolerably well for many articles, especially agricultural produce, agriculturists having at some seasons a certain quantity of spare time on their hands. But even in this case, attendance is often very troublesome and inconvenient to buyers who have other occupations, and do not live in the immediate vicinity; while, for all articles the production of which requires continuous attention from the producers, these periodical markets must be held at such considerable intervals, and the wants of the consumers must either be provided for so long beforehand, or must remain so long unsupplied, that even before the resources of society permitted the establishment of shops, the supply of these wants fell universally into the hands of itinerant dealers: the pedlar, who might appear once a month, being preferred to the fair, which only returned once a year. In country districts remote from towns or large villages, the industry of the pedlar is not yet wholly superseded. But a dealer who has a fixed abode and fixed customers is so much more to be depended on, that consumers prefer resorting to him if he is conveniently accessible; and dealers therefore find their advantage in establishing themselves in every locality where there are sufficient consumers near at hand to afford them a remuneration.

In many cases the producers and dealers are the same persons, at least as to the ownership of the funds and the control of the operations. The tailor, the shoemaker, the baker, and many other tradesmen, are the producers of the articles they deal in, so far as regards the last stage in the production. This union, however, of the functions of manufacturer and retailer, is only expedient when the article can advantageously be made at or near the place convenient for retailing it, and is, besides, manufactured and sold in small parcels.

When things have to be brought from a distance, the same person cannot effectually superintend both the making and the retailing of them: when they are best and most cheaply made on a large scale, a single manufactory requires so many local channels to carry off its supply, that the retailing is most conveniently delegated to other agency: and even shoes and coats, when they are to be furnished in large quantities at once, as for the supply of a regiment or of a workhouse, are usually obtained not directly from the producers, but from intermediate dealers, who make it their business to ascertain from what producers they can be obtained best and cheapest. Even when things are destined to be at last sold by retail, convenience soon creates a class of wholesale dealers. When products and transactions have multiplied beyond a certain point; when one manufactory supplies many shops, and one shop has often to obtain goods from many different manufactories, the loss of time and trouble both to the manufacturers and to the retailers by treating directly with one another, makes it more convenient to them to treat with a smaller number of great dealers or merchants, who only buy to sell again, collecting goods from the various producers, and distributing them to the retailers, to be by them further distributed among the consumers. Of these various elements is composed the Distributing Class, whose agency is supplementary to that of the Producing Class: and the produce so distributed, or its price, is the source from which the distributors are remunerated for their personal exertions, and for the abstinence which enabled them to advance the funds needful for the business of distribution.

§ 7. We have now completed the enumeration of the modes in which labour employed on external nature is subservient to production. But there is yet another mode of employing labour, which conduces equally, though still more remotely, to that end: this is, labour of which the subject is human beings. Every human being has been

brought up from infancy at the expense of much labour to some person or persons, and if this labour, or part of it, had not been bestowed, the child would never have attained the age and strength which enable him to become a labourer in his turn. To the community at large, the labour and expense of rearing its infant population forms a part of the outlay which is a condition of production, and is to be replaced with increase from the future produce of their labour. By the individual, this labour and expense are usually incurred from other motives than to obtain such ultimate return, and, for most purposes of political economy, need not be taken into account as expenses of production. But the technical or industrial education of the community; the labour employed in learning and in teaching the arts of production, in acquiring and communicating skill in those arts; this labour is really, and in general solely, undergone for the sake of the greater or more valuable produce thereby attained, and in order that a remuneration, equivalent or more than equivalent, may be reaped by the learner, besides an adequate remuneration for the labour of the teacher, when a teacher has been employed.

As the labour which confers productive powers, whether of hand or of head, may be looked upon as part of the labour by which society accomplishes its productive operations, or in other words, as part of what the produce costs to society, so too may the labour employed in keeping up productive powers; in preventing them from being destroyed or weakened by accident or disease. The labour of a physician or surgeon, when made use of by persons engaged in industry, must be regarded in the economy of society as a sacrifice incurred, to preserve from perishing by death or infirmity that portion of the productive resources of society which is fixed in the lives and bodily or mental powers of its productive members. To the individuals, indeed, this forms but a part, sometimes an imperceptible part, of the motives that induce them to submit to medical treatment: it is not prin-

cipally from economical motives that persons have a limb amputated, or endeavour to be cured of a fever, although when they do so there is generally sufficient inducement for it even on that score alone. This is therefore one of the cases of labour and outlay which, though conducive to production, yet not being incurred for that end, or for the sake of the returns arising from it, are out of the sphere of most of the general propositions which political economy has occasion to assert respecting productive labour: though, when society and not the individuals are considered, this labour and outlay must be regarded as part of the advance by which society effects its productive operations, and for which it is indemnified by the produce.

§ 8. Another kind of labour, usually classed as mental, but conducing to the ultimate product as directly, though not so immediately, as manual labour itself, is the labour of the inventors of industrial processes. I say, usually classed as mental, because in reality it is not exclusively so. All human exertion is compounded of some mental and some bodily elements. The stupidest hodman who repeats from day to day the mechanical act of climbing a ladder, performs a function partly intellectual; the most intelligent dog or elephant probably could not be taught to do it: the dullest human being, instructed beforehand, is capable of turning a mill; but a horse cannot turn it without somebody to guide and watch him. On the other hand, there is some bodily ingredient in the labour most purely mental, when it generates any external result. Newton could not have produced the *Principia* without the bodily exertion either of penmanship or of dictation; and he must have drawn many figures, and written out many calculations and demonstrations, while he was preparing it in his mind. Inventors, besides the labour of their brains, generally go through much labour with their hands, in the models which they construct and the experiments they have to make before their idea can realize itself successfully in act.

Whether mental, however, or bodily, their labour is a part of that by which the production is brought about. The labour of Watt in contriving the steam-engine was as essential a part of production as that of the mechanics who build or the engineers who work the instrument; and was undergone, no less than theirs, in the prospect of a remuneration from the produce. The labour of invention is often estimated and paid on the very same plan as that of execution. Many manufacturers of ornamental goods have inventors in their employment, who receive wages or salaries for designing patterns, exactly as others do for copying them. All this is strictly part of the labour of production; as the labour of the author of a book is equally a part of its production with that of the printer and binder.

In a national, or universal point of view, the labour of the savant, or speculative thinker, is as much a part of production in the very narrowest sense, as that of the inventor of a practical art; many such inventions having been the direct consequences of theoretic discoveries, and every extension of knowledge of the powers of nature being fruitful of applications to the purposes of outward life. The electro-magnetic telegraph was the wonderful and most unexpected consequence of the experiments of Ørsted and the mathematical investigations of Ampère: and the modern art of navigation is an unforeseen emanation from the purely speculative and apparently merely curious enquiry, by the mathematicians of Alexandria, into the properties of three curves formed by the intersection of a plane surface and a cone. No limit can be set to the importance, even in a purely productive and material point of view, of mere thought. Inasmuch however as these material fruits, though the result, are seldom the direct purpose of the pursuits of savants, nor is their remuneration in general derived from the increased production which may be caused incidentally, and mostly after a long interval, by their discoveries; this ultimate influence does not, for most of the purposes of political economy,

require to be taken into consideration; and speculative thinkers are generally classed as the producers only of the books, or other useable or saleable articles, which directly emanate from them. But when (as in political economy one should always be prepared to do) we shift our point of view, and consider not individual acts, and the motives by which they are determined, but national and universal results, intellectual speculation must be looked upon as a most influential part of the productive labour of society, and the portion of its resources employed in carrying on and in remunerating such labour, as a highly productive part of its expenditure.

§ 9. In the foregoing survey of the modes of employing labour in furtherance of production, I have made little use of the popular distinction of industry into agricultural, manufacturing, and commercial. For in truth this division fulfils very badly the purposes of a classification. Many great branches of productive industry find no place in it, or not without much straining; for example (not to speak of hunters or fishers) the miner, the road-maker, and the sailor. The limit, too, between agricultural and manufacturing industry cannot be precisely drawn. The miller, for instance, and the baker—are they to be reckoned among agriculturists or among manufacturers? Their occupation is in its nature manufacturing; the food has finally parted company with the soil before it is handed over to them: this however might be said with equal truth of the thresher, the winnower, the makers of butter and cheese; operations always counted as agricultural, probably because it is the custom for them to be performed by persons resident on the farm, and under the same superintendance as tillage. For many purposes all these persons, the miller and baker inclusive, must be placed in the same class with ploughmen and reapers. They are all concerned in producing food, and depend for their remuneration on the food produced; where the one class abounds and flourishes, the others do so too; they form collectively the

“agricultural interest;” they render but one service to the community by their united labours, and are paid from one common source. Even the tillers of the soil, again, when the produce is not food but the materials of what are commonly termed manufactures, belong in many respects to the same division in the economy of society as manufacturers. The cotton planter of Carolina, and the wool grower of Australia, have more interests in common with the spinner and weaver than with the corn grower. But on the other hand, the industry which operates immediately upon the soil has, as we shall see hereafter, some properties on which many important consequences depend, and which distinguish it from all the subsequent stages of production, whether carried on by the same person or not; from the industry of the thresher and winnowing as much as from that of the cotton spinner. When I speak therefore of agricultural labour, I shall generally mean this, and this exclusively, unless the contrary is either stated or implied in the context. The term manufacturing is too vague to be of much use when precision is required, and when I employ it I wish to be understood as intending to speak popularly rather than scientifically.

CHAPTER III.

OF UNPRODUCTIVE LABOUR.

§ 1. LABOUR is indispensable to production, but has not always production for its effect. There is much labour, and of a high order of usefulness, of which production is not the object. Labour has accordingly been distinguished into Productive and Unproductive. There has been not a little controversy among political economists on the question, what kinds of labour should be reputed to be unproductive; and they have not always perceived, that there was in reality no matter of fact in dispute between them.

Many writers have been unwilling to class any labour as productive unless its result is palpable in some material object, capable of being transferred from one person to another. There are others (among whom are Mr. M'Culloch and M. Say) who looking upon the word unproductive as a term of disparagement, remonstrate against imposing it upon any labour which is regarded as useful—which produces a benefit or a pleasure worth the cost. The labour of officers of government, of the army and navy, of physicians, lawyers, teachers, musicians, dancers, actors, domestic servants, &c., when they really accomplish what they are paid for, and are not more numerous than is required for its performance, ought not, say these writers, to be “stigmatized” as unproductive, an expression which they appear to regard as synonymous with wasteful or worthless. But this seems to me a misunderstanding of the matter in dispute. Production not being the sole end of human existence, the term unproductive does not necessarily imply any stigma; nor was ever intended to do so in the present case. The question is one of mere language, and classification. Differences of language,

however, are by no means unimportant, even when not grounded on differences of opinion; for though either of two expressions may be consistent with the whole truth, they generally tend to fix attention upon different parts of it. We must therefore enter a little into the consideration of the various meanings which may attach to the words productive and unproductive when applied to labour.

In the first place, even in what is called the production of material objects, it must be remembered that what is produced is not the matter composing them. All the labour of all the human beings in the world could not produce one particle of matter. To weave broadcloth is but to re-arrange, in a peculiar manner, the particles of wool; to grow corn is only to put a portion of matter called a seed, into a situation where it can draw together particles of matter from the earth and air, to form the new combination called a plant. Though we cannot create matter, we can cause it to assume properties, by which from having been useless to us it becomes useful. What we produce, or desire to produce, is always, as M. Say rightly terms it, an utility. Labour is not creative of objects, but of utilities. Neither, again, do we consume and destroy the objects themselves; the matter of which they were composed remains, more or less altered in form: what has really been consumed is only the qualities by which they were fitted for the purpose they have been applied to. It is, therefore, pertinently asked by M. Say and others—since, when we are said to produce objects, we only produce utility, why should not all labour which produces utility, be accounted productive? Why refuse that title to the surgeon who sets a limb, the judge or legislator who confers security, and give it to the lapidary who cuts and polishes a diamond? Why deny it to the teacher from whom I learn an art by which I can gain my bread, and accord it to the confectioner who makes bonbons for the momentary pleasure of a sense of taste?

It is quite true that all these kinds of labour are pro-

ductive of utility; and the question which now occupies us could not have been a question at all, if the production of utility were enough to satisfy the notion which mankind have usually formed of productive labour. Production, and productive, are of course elliptical expressions, involving the idea of a something produced, but this something, in common apprehension, I conceive to be, not utility, but Wealth. Productive labour means labour productive of wealth. We are recalled, therefore, to the question touched upon in our first chapter, what Wealth is, and whether only material products, or all useful products, are to be included in it.

§ 2. Now the utilities produced by labour are of three kinds. They are,

First, utilities fixed and embodied in outward objects; by labour employed in investing external material things with properties which render them serviceable to human beings. This is the common case, and requires no illustration.

Secondly, utilities fixed and embodied in human beings; the labour being in this case employed in conferring on human beings, qualities which render them serviceable to themselves and others. To this class belongs the labour of all concerned in education; not only schoolmasters, tutors, and professors, but governments, so far as they aim successfully at the improvement of the people; moralists, and clergymen, as far as productive of benefit; the labour of physicians, as far as instrumental in preserving life and physical or mental efficiency; of the teachers of bodily exercises and of the various trades, sciences, and arts, together with the labour of the learners in acquiring them; and all labour bestowed by any persons, throughout life, in improving the knowledge or cultivating the bodily or mental faculties of themselves or others.

Thirdly, and lastly, utilities not fixed or embodied in any object, but consisting in a mere service rendered; a pleasure

given, an inconvenience or a pain averted, during a longer or a shorter time, but without leaving a permanent acquisition in the improved qualities of any person or thing; the labour being employed in producing an utility directly, not (as in the two former cases) in fitting some other thing to afford an utility. Such, for example, is the labour of the musical performer, the actor, the public declaimer or reciter, and the showman. Some good may no doubt be produced, beyond the moment, upon the feelings and disposition, or general state of enjoyment of the spectators; or instead of good there may be harm; but neither the one nor the other is the effect intended, is the result for which the exhibitor works and the spectator pays; nothing but the immediate pleasure. Such, again, is the labour of the army and navy: they, at the best, prevent a country from being conquered, or from being injured and insulted, which is a service, but in all other respects leave the country neither improved nor deteriorated. Such, too, is the labour of the legislator, the judge, the officer of justice, and all other agents of government in their ordinary functions, apart from any influence they may exert on the improvement of the national mind. The service which they render, is to maintain peace and security; these compose the utility which they produce. It may appear to some, that carriers, and merchants or dealers, should be placed in this same class, since their labour does not add any properties to objects: but I reply that it does: it adds the property of being in the place where they are wanted, instead of being in some other place: which is a very useful property, and the utility it confers is embodied in the things themselves, which now actually are in the place where they are required for use, and in consequence of that increased utility could be sold at an increased price, proportioned to the labour expended in conferring it. This labour, therefore, does not belong to the third class, but to the first.

§ 3. We have now to consider which of these three

classes of labour should be accounted productive of wealth, since that is what the term productive, when used by itself, must be understood to import. Utilities of the third class, consisting in pleasures which only exist while being enjoyed, and services which only exist while being performed, cannot be spoken of as wealth, except by an acknowledged metaphor. It is essential to the idea of wealth to be susceptible of accumulation: things which cannot, after being produced, be kept for some time before being used, are never, I think, regarded as wealth, since however much of them may be produced and enjoyed, the person benefitted by them is no richer, is nowise improved in circumstances. But there is not so distinct and positive a violation of usage in considering as wealth any product which is both useful and susceptible of accumulation. The skill, and the energy and perseverance, of the artisans of a country, are reckoned part of its wealth, no less than their tools and machinery. According to this definition, we should regard all labour as productive which is employed in creating permanent utilities, whether embodied in human beings, or in any other animate or inanimate objects. And this nomenclature I have, in a former publication*, recommended, as the most conformable to the ends of classification, though not strictly conformable to the customs of language.

But in applying the term wealth to the industrial capacities of human beings, there seems always, in popular apprehension, to be a tacit reference to material products. The skill of an artisan is accounted wealth, only as being the means of acquiring wealth in a material sense; and any qualities not tending visibly to that object are scarcely so regarded at all. A country would hardly be said to be richer, except by a metaphor, however precious a possession it might have in the genius, the virtues, or the accomplishments

* *Essays on some Unsettled Questions of Political Economy.* Essay III. On the words Productive and Unproductive.

of its inhabitants; unless indeed these were looked upon as marketable articles, by which it could attract the material wealth of other countries, as the Greeks of old, and several modern nations have done. While, therefore, I should prefer, were I constructing a new technical language, to make the distinction turn upon the permanence rather than upon the materiality of the product, yet when employing terms which common usage has taken complete possession of, it seems advisable so to employ them as to do the least possible violence to that usage; since any improvement in terminology obtained by straining the received meaning of a popular phrase, is generally purchased beyond its value, by the obscurity arising from the conflict between new and old associations.

I shall therefore, in this treatise, when speaking of wealth, understand by it only what is called material wealth, and by productive labour only those kinds of exertion which produce utilities embodied in material objects. But in limiting myself to this sense of the word, I mean to avail myself of the full extent of that restricted acceptation, and I shall not refuse the appellation productive, to labour which yields no material product as its direct result, provided that an increase of material products is its ultimate consequence. Thus, labour expended in the acquisition of manufacturing skill, I class as productive, not in virtue of the skill itself, but of the manufactured products created by the skill, and to the creation of which the labour of learning the trade is essentially conducive. The labour of officers of government in affording the protection which, afforded in some manner or other, is indispensable to the prosperity of industry, must be classed as productive even of material wealth, because without it, material wealth, in anything like its present abundance, could not exist. Such labour may be said to be productive indirectly or mediately, in opposition to the labour of the ploughman and the cotton-spinner, which are productive immediately. They are all alike in this, that they

leave the community richer in material products than they found it; they increase, or tend to increase, material wealth.

§ 4. By Unproductive Labour, on the contrary, will be understood labour which does not terminate in the creation of material wealth; which, however largely or successfully practised, does not render the community, and the world at large, richer in material products, but poorer by all that is consumed by the labourers while so employed.

All labour is, in the language of political economy, unproductive, which ends in immediate enjoyment, without any increase of the accumulated stock of permanent means of enjoyment. And all labour, according to our present definition, must be classed as unproductive, which terminates in a permanent benefit, however important, provided that an increase of material products forms no part of that benefit. The labour of saving a friend's life is not productive, unless the friend is a productive labourer, and produces more than he consumes. To a religious person the saving of a soul must appear a far more important service than the saving of a life; but he will not therefore call a missionary or a clergyman productive labourers, unless they teach, as the South Sea Missionaries have in some cases done, the arts of civilization in addition to the doctrines of religion. It is, on the contrary, evident that the greater number of missionaries or clergymen a nation maintains, the less it has to expend on other things; while the more it expends judiciously in keeping agriculturists and manufacturers at work, the more it will have for every other purpose. By the former it diminishes, *ceteris paribus*, its stock of material products; by the latter, it increases them.

Unproductive may be as useful as productive labour; it may be more useful, even in point of permanent advantage; or its use may consist only in pleasurable sensation, which when gone leaves no trace; or it may not afford even this,

but may be absolute waste. In any case society or mankind grow no richer by it, but poorer. All material products consumed by any one while he produces nothing, are so much subtracted, for the time, from the material products which society would otherwise have possessed. But though society grows no richer by unproductive labour, the individual may. An unproductive labourer may receive for his labour, from those who derive pleasure or benefit from it, a remuneration which may be to him a considerable source of wealth; but his gain is balanced by their loss: they may have received a full equivalent for their expenditure, but they are so much poorer by it. When a tailor makes a coat and sells it, there is a transfer of the price from the customer to the tailor, and a coat besides which did not previously exist; but what is gained by an actor is a mere transfer from the spectator's funds to his, leaving no article of wealth for the spectator's indemnification. Thus the community collectively gains nothing by the actor's labour; and it loses, of his receipts, all that portion which he consumes, retaining only that which he lays by. A community, however, may add to its wealth by unproductive labour, at the expense of other communities, as an individual may at the expense of other individuals. The gains of Italian opera singers, German governesses, French ballet dancers, &c., are a source of wealth, as far as they go, to their respective countries, if they return thither. The petty states of Greece, especially the ruder and more backward of those states, were nurseries of soldiers, who hired themselves to the princes and satraps of the East to carry on useless and destructive wars, and returned with their savings to pass their declining years in their own country: these were unproductive labourers, and the pay they received, together with the plunder they took, was an outlay without return to the countries which furnished it; but, though no gain to the world, it was a gain to Greece. At a later period the same country and its colonies supplied the Roman empire with another class of adventurers, who, under the name of

philosophers or of rhetoricians, taught, to the youth of the higher classes, what were esteemed the most valuable accomplishments: these were mainly unproductive labourers, but their ample recompense was a source of wealth to their own country. In none of these cases was there any accession of wealth to the world. The services of the labourers, if useful, were obtained at a sacrifice to the world of a portion of material wealth; if useless, all that these labourers consumed was waste.

To be wasted, however, is a liability not confined to unproductive labour. Productive labour may equally be waste, if more of it is expended than really conduces to production. If defect of skill in labourers, or of judgment in those who direct them, causes a misapplication of productive industry; if a farmer perseveres in ploughing with three horses and two men, when experience has shown that two horses and one man are sufficient, the surplus labour, although employed for purposes of production, is wasted. If a new process is adopted which proves no better, or not so good as those before in use, the labour expended in perfecting the invention and in carrying it into practice, though employed for a productive purpose, is wasted. Productive labour may render a nation poorer, if the wealth it produces, that is, the increase it makes in the stock of useful or agreeable things, be of a kind not immediately wanted: as when a commodity is unsaleable, because produced in a quantity beyond the present demand; or, when speculators build docks and warehouses before there is any trade. The bankrupt states of North America, with their premature railways and canals, have made this kind of mistake; and it remains to be shown whether England, in the disproportionate developement of railway enterprise, has not followed the example. Labour sunk in expectation of a distant return, when the great exigencies or limited resources of the community require that the return be rapid, may leave the country not only poorer in the meanwhile, by all which those labourers consume, but less rich even

ultimately than if immediate returns had been sought in the first instance, and enterprises for distant profit postponed.

§ 5. The distinction of Productive and Unproductive is applicable to Consumption as well as to Labour. All the members of the community are not labourers, but all are consumers, and consume either unproductively or productively. Whoever contributes nothing directly or indirectly to production, is an unproductive consumer. The only productive consumers are productive labourers; the labour of direction being of course included, as well as that of execution. But the consumption even of productive labourers is not all of it Productive Consumption. There is unproductive consumption by productive consumers. What they consume in keeping up or improving their health, strength, and capacities of work, or in raising other productive labourers to succeed them, is Productive Consumption. But consumption on pleasures or luxuries, whether by the idle or by the industrious, since production is neither its object, nor is in any way advanced by it, must be reckoned Unproductive: with a reservation perhaps of a certain quantum of enjoyment which may be classed among necessaries, since anything short of it would not be consistent with the greatest efficiency of labour. That alone is productive consumption; which goes to maintain and increase the productive powers of the community; either those residing in its soil, in its materials, in the number and efficiency of its instruments of production, or in its people.

There are numerous products which may be said not to admit of being consumed otherwise than unproductively. The annual consumption of gold lace, pine apples, or champagne, must be reckoned unproductive, since these things give no assistance to production, nor any support to life or strength, but what would equally be given by things much less costly. Hence it might be supposed that the labour employed in producing them ought not to be regarded as

productive, in the sense in which the term is understood by political economists. I grant that no labour really tends to the enrichment of society, which is employed in producing things for the use of unproductive consumers. The tailor who makes a coat for a man who produces nothing, is a productive labourer, but in a few weeks or months the coat is worn out, while the wearer has not produced anything to replace it, and the community is then no richer by the labour of the tailor, than if the same sum had been paid for a stall at the opera. Nevertheless, society has been richer by the labour while the coat lasted, that is, until society, through one of its unproductive members, chose to consume the produce of the labour unproductively. The case of the gold lace or the pine apple is no further different, than that they are still further removed than the coat from the character of necessaries. These things also are wealth until they have been consumed.

§ 6. We see, however, by this, that there is a distinction, more important to the wealth of a community than even that between productive and unproductive labour; the distinction, namely, between labour for the supply of productive, and for the supply of unproductive, consumption; between labour employed in keeping up or in adding to the productive resources of the country, and that which is employed otherwise. Of the produce of the country, a part only is destined to be consumed productively; the remainder supplies the unproductive consumption of producers, and the entire consumption of the unproductive classes. Suppose that the proportion of the annual produce applied to the first purpose amounts to half; then one-half the productive labourers of the country are all that are employed in the operations on which the permanent wealth of the country depends. The other half are occupied from year to year and from generation to generation in producing things which are consumed and disappear without return; and whatever this

half consume is as completely lost, as to any permanent effect on the national resources, as if it were consumed unproductively. Suppose that this second half of the labouring population ceased to work, and that the government or their parishes maintained them in idleness for a whole year: the first half would suffice to produce, as they had done before, their own necessaries and the necessaries of the second half, and to keep the stock of materials and implements undiminished: the unproductive classes, indeed, would be either starved or obliged to produce their own subsistence, and the whole community would be reduced during a year to bare necessaries; but the sources of production would be unimpaired, and the next year there would not necessarily be a smaller produce than if no such interval of inactivity had occurred; while if the case had been reversed, if the first half of the labourers had suspended their accustomed occupations, and the second half had continued theirs, the country at the end of the twelvemonth would have been entirely impoverished.

It would be a great error to regret the large proportion of the annual produce, which in an opulent country goes to supply unproductive consumption. It would be to lament that the community has so much to spare from its necessities, for its pleasures and for all higher uses. This portion of the produce is the fund from which all the wants of the community, other than that of mere living, are provided for; the measure of its means of enjoyment, and of its power of accomplishing all purposes not productive. That so great a surplus should be available for such purposes, and that it should be applied to them, is a subject only of congratulation. The things to be regretted, and to be remedied, are the prodigious inequality with which this surplus is distributed, and the large share which falls to the lot of persons who render no equivalent service in return; topics of the greatest importance, but for the discussion of which, the proper place is in another division of our inquiry.

CHAPTER IV.

OF CAPITAL.

§ 1. IT has been seen in the preceding chapters that, besides the primary and universal requisites of production, labour and natural agents, there is another requisite without which no productive operations, beyond the rude and scanty beginnings of primitive industry, are possible: namely, a stock, previously accumulated, of the products of former labour. This accumulated stock of the produce of labour is termed Capital. The function of Capital in production, it is of the utmost importance thoroughly to understand, since a number of the erroneous notions with which our subject is infested, originate in an imperfect and confused apprehension of this point.

Capital, by persons wholly unused to reflect on the subject, is supposed to be synonymous with money. To expose this misapprehension, would be to repeat what has been said in the introductory chapter. Money is no more synonymous with capital than it is with wealth. Money cannot in itself perform any part of the office of capital, since it can afford no assistance to production. To do this, it must be exchanged for other things; and anything, which is susceptible of being exchanged for other things, is capable of contributing to production in the same degree. What capital does for production, is to afford the shelter, protection, tools and materials which the work requires, and to feed and otherwise maintain the labourers during the process. These are the services which present labour requires from past, and from the produce of past, labour. Whatever things are destined for this use—destined to supply productive labour with these various prerequisites—are Capital.

To familiarize ourselves with the conception, let us consider what is done with the capital invested in any of the branches of business which compose the productive industry of a country. A manufacturer, for example, has one part of his capital in the form of buildings, fitted and destined for carrying on his branch of manufacture. Another part he has in the form of machinery. A third consists, if he be a spinner, of raw cotton, flax, or wool; if a weaver, of flaxen, woollen, silk, or cotton, thread; and the like, according to the nature of the manufacture. Food and clothing, for his operatives, it is not the custom of the present age that he should directly provide; and few capitalists, except the producers of food or clothing, have any portion, worth mentioning, of their capital, in that shape. Instead of this, each capitalist has money, which he pays to his workpeople, and so enables them to supply themselves: he has also finished goods in his warehouses, by the sale of which he obtains more money, to employ in the same manner, as well as to replenish his stock of materials, and to replace his buildings and machinery when worn out. His money and finished goods however are not wholly capital, for he does not wholly devote them to these purposes: he employs a part of the one, and of the proceeds of the other, in supplying his personal consumption and that of his family, or in hiring grooms and valets, or maintaining hunters and hounds, or in educating his children, or in paying taxes, or in charity. What then is his capital? Precisely that part of his possessions, whatever it be, which he designs to employ in carrying on fresh production. It is of no consequence that a part, or even the whole of it, is in a form in which it cannot directly supply the wants of labourers.

Suppose, for instance, that our capitalist is a hardware manufacturer, and that his stock in trade, over and above his machinery, consists at present wholly in iron goods. Iron goods cannot feed labourers. Nevertheless by a mere change of the destination of these iron goods, he can cause labourers

to be fed. Suppose that with a portion of the proceeds he intended to maintain a pack of hounds, or an establishment of servants; and that he changes his intention, and employs it in his business, paying it in wages to additional workpeople. These workpeople are enabled to buy and consume the food which would otherwise have been consumed by the hounds or by the servants; and thus without the employer's having seen or touched one particle of the food, his conduct has determined that so much more of the food existing in the country has been devoted to the use of productive labourers, and so much less consumed in a manner wholly unproductive. Now vary the hypothesis, and suppose, that what is thus paid in wages would otherwise have been laid out not in feeding servants or hounds but in buying plate and jewels: and in order to render the effect perceptible let us suppose that the change takes place on a considerable scale, and that a large sum is diverted from buying plate and jewels to employing productive labourers, whom we shall suppose to have been previously, like the Irish peasantry, only half employed and half fed. The labourers, on receiving their increased wages, will not lay them out in plate and jewels, but in food. There is not, however, additional food in the country; nor any unproductive labourers or animals, as in the former case, whose food is set free for productive purposes. Food will therefore be imported if possible; if not possible, the labourers will remain for a season on their short allowance: but the consequence of this change in the demand for commodities, occasioned by the change in the expenditure of capitalists from unproductive to productive, is that next year more food will be produced, and less plate and jewellery. So that again, without having had anything to do with the food of the labourers directly, the conversion by individuals of a portion of their property, no matter of what sort, from an unproductive destination to a productive, has had the effect of causing more food to be appropriated to the consumption of productive labourers. The distinction, then, 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; and all property, however ill adapted 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 employment. The sum of all the values so destined by their respective possessors, composes the capital of the country. Whether all those values are in a shape directly applicable to productive uses, makes no difference. Once appropriated to that end, they do not fail to find a way of transforming themselves into things fitted to be applied to it.

§ 2. As whatever of the produce of the country is devoted to production is capital, so, conversely, the whole of the capital of the country is devoted to production. This second proposition, however, must be taken with some limitations and explanations. A fund may be seeking for productive employment, and find none, adapted to the inclinations of its possessor: it then is capital still, but unemployed capital. Or the stock may consist of unsold goods, not susceptible of direct application to productive uses, and not, at the moment, marketable: these, until sold, are in the condition of unemployed capital. Again, artificial or accidental circumstances may render it necessary to possess a larger stock in advance, that is, a larger capital, before entering on production, than is required by the nature of things. Suppose that the government lays a tax on the production in one of its earlier stages, as for instance by taxing the material. The manufacturer has to advance the tax, before commencing the manufacture, and is therefore under a necessity of having a larger accumulated stock than is required for, or is actually employed in, the production which he carries on. He must have a larger capital, to maintain the same quantity of productive labour; or (what is equivalent) with a given capital he maintains less labour. This mode of levying taxes, therefore, limits unnecessarily

the industry of the country: a portion of the fund destined by its owners for production being diverted from its purpose, and kept in a constant state of advance to the government.

For another example; a farmer may enter on his farm at such a time of the year, that he may be required to pay one, two, or even three quarters rent before obtaining any return from the produce. This, therefore, he is compelled to pay out of his capital. Now rent, when paid for the land itself, and not for improvements made in it by labour, is not a productive expenditure. It is not an outlay for the support of labour, or for the provision of implements or materials the produce of labour. It is the price paid for the use of an appropriated natural agent. That natural agent is indeed as indispensable (and even more so) as any implement: but the having to pay a price for it, is not. In the case of the implement (a thing produced by labour) a price of some sort is the necessary condition of its existence: but the land exists by nature. The payment for it, therefore, is not one of the expenses of production; and the necessity of making that payment out of capital, makes it requisite that there should be a greater capital, a greater antecedent accumulation of the produce of past labour, than is naturally necessary, or than is needed where land is occupied on a different system. This extra capital, though intended by its owners for production, is in reality employed unproductively, and annually replaced, not from any produce of its own, but from the produce of the labour supported by the remainder of the farmer's capital.

Finally, that large portion of the productive capital of a country which is employed in paying the wages and salaries of labourers, evidently is not, all of it, strictly and indispensably necessary for production. As much of it as exceeds the actual necessities of life and health (an excess which in the case of skilled labourers is usually considerable) is not expended in supporting labour, but in remunerating it, and the labourers could wait for this part of their remuneration until the production is completed; it needs not necessarily

pre-exist as capital: and if they unfortunately had to forego it altogether, the same amount of production might take place. In order that the whole remuneration of the labourers should be advanced to them in daily or weekly payments, there must exist in advance, and be appropriated to productive use, a greater stock, or capital, than would suffice to carry on the existing extent of production: greater, by whatever amount of remuneration the labourers receive, beyond what the self-interest of a prudent slave-master would assign to his slaves. In truth, it is only after an abundant capital had already been accumulated, that the practice of paying in advance any remuneration of labour beyond a bare subsistence, could possibly have arisen: since whatever is so paid, is not really applied to production, but to the unproductive consumption of productive labourers, indicating a fund for production sufficiently ample to admit of habitually diverting a part of it to a mere convenience.

It will be observed that I have assumed, that the labourers are always subsisted from capital: and this is obviously the fact, although the capital needs not necessarily be furnished by a person called a capitalist. When the labourer maintains himself by funds of his own, as when a peasant farmer or proprietor lives on the produce of his land, or an artisan works on his own account, they are still supported by capital, that is, by funds provided in advance. The peasant does not subsist this year on the produce of this year's harvest, but on that of the last. The artisan is not living on the proceeds of the work he has in hand, but on those of work previously executed and disposed of. Each is supported by a small capital of his own, which he periodically replaces from the produce of his labour. The large capitalist is, in like manner, maintained from funds provided in advance. If he personally conducts his operations, as much of his expenditure on himself and family as does not exceed a fair remuneration of his labour at the market price, must be considered as a part of his capital, expended, like any other capital, for pro-

duction: and his personal consumption, so far as it consists of necessaries, is productive consumption.

§ 3. At the risk of being tedious, I must add a few more illustrations, to bring out into a still stronger and clearer light the idea of Capital. As M. Say truly remarks, it is on the very elements of our subject that illustration is most usefully bestowed, since the greatest errors which prevail in it may be traced to the want of a thorough mastery over the elementary ideas. Nor is this surprising: a branch may be diseased and all the rest healthy, but unsoundness at the root diffuses unhealthiness through the whole tree.

Let us therefore consider whether, and in what cases, the property of those who live on the interest of what they possess, without being personally engaged in production, can be regarded as capital. It is so called in common language, and, with reference to the individual, not improperly. All funds from which the possessor derives an income, which income he can use without sinking and dissipating the fund itself, are to him equivalent to capital. But to transfer hastily and inconsiderately to the general point of view, propositions which are true of the individual, has been a source of innumerable errors in political economy. In the present instance, that which is virtually capital to the individual, is or is not capital to the nation, according as the fund which by the supposition he has not dissipated, has or has not been dissipated by somebody else.

For example, let property of the value of ten thousand pounds belonging to A, be lent to B, a farmer or manufacturer, and employed profitably in B's occupation. It is as much capital as if it belonged to B. A is really a farmer or manufacturer, not personally, but in respect of his property. Capital worth ten thousand pounds is employed in production—in maintaining labourers and providing tools and materials; which capital belongs to A, while B takes the trouble of employing it, and receives for his remuneration the differ-

ence between the profit which it yields and the interest he pays to A. This case is the simplest of all.

Suppose next that A's ten thousand pounds, instead of being lent to B, are lent on mortgage to C, a landed proprietor, and by him employed in improving the productive powers of his estate, by fencing, draining, road-making, or permanent manures. This is productive employment. The ten thousand pounds are sunk, but not dissipated. They yield a permanent return: the land now affords an increase of produce, sufficient, in a few years, if the outlay has been judicious, to replace the amount, and in time to multiply it manifold. Here, then, is a value of ten thousand pounds, employed in increasing the produce of the country. This constitutes a capital, for which C, if he lets his land, receives the returns in the nominal form of increased rent; and the mortgage entitles A to receive from these returns, in the shape of interest, such annual sum as has been agreed upon between them. We will now vary the circumstances, and suppose that C does not employ the loan in improving his land, but in paying off a former and more onerous mortgage, or in making a provision for children. Whether the ten thousand pounds thus employed are capital or not, will depend on what is done with the amount by the ultimate receiver. If the children invest their fortunes in a productive employment, or the mortgagee on being paid off lends the amount to another landholder to improve his land or to a manufacturer to extend his business, it is still capital, because productively employed.

Suppose, however, that C, the borrowing landlord, is a spendthrift, who burthens his land not to increase his fortune but to squander it, expending the amount in equipages and entertainments. In a year or two it is dissipated, and without return. A is as rich as before; he has no longer his ten thousand pounds, but he has a lien on the land, which he could still sell for that amount. C, however, is 10,000*l.* poorer than formerly; and nobody is richer. It may be said

that those are richer who have made profit out of the money while it was being spent. No doubt if C lost it by gaming, or was cheated of it by his servants, that is a mere transfer, not a destruction, and those who have gained the amount may employ it productively. But if C has received the fair value for his expenditure in articles of subsistence or luxury, which he has consumed on himself, or by means of his servants or guests, these articles have ceased to exist, and nothing has been produced to replace them: while if the same sum had been employed in farming or manufacturing, the consumption which would have taken place would have been more than balanced at the end of the year by new products, created by the hands of those who would in that case have been the consumers. By C's prodigality, that which would have been consumed with a return, is consumed without return. C's tradesmen may have made a profit during the process; but if the capital had been expended productively, an equivalent profit would have been made by builders, fencers, tool-makers, and the tradespeople who supply the consumption of the labouring classes; while at the expiration of the time (to say nothing of any increase), C would have had the ten thousand pounds or its value replaced to him, which now he has not. There is, therefore, on the general result, a difference to the disadvantage of the community, of at least ten thousand pounds, being the amount of C's unproductive expenditure. To A, the difference is not material, since his income is secured to him, and while the security is good, and the market rate of interest the same, he can always sell the mortgage at its original value. To A, therefore, the lien of ten thousand pounds on C's estate, is virtually a capital of that amount; but is it so in reference to the community? It is not. A had a capital of ten thousand pounds, but this has been extinguished—dissipated and destroyed by C's prodigality. A now receives his income, not from the produce of his capital, but from some other source of income belonging to

C, probably from the rent of his land, that is, from payments made to him by farmers out of the produce of *their* capital. The national capital is diminished by ten thousand pounds, and the national income by all which those ten thousand pounds, employed as capital, would have produced. The loss does not fall on the owner of the destroyed capital, since the destroyer has agreed to indemnify him for it. But his loss is only a small portion of that sustained by the community, since what was devoted to the use and consumption of the proprietor, was only the interest; the capital itself was, or would have been, employed in the perpetual maintenance of an equivalent number of labourers, regularly reproducing what they consumed: and of this maintenance they are deprived without compensation.

Let us now vary the hypothesis still further, and suppose that the money is borrowed, not by a landlord, but by the State. A lends his capital to Government to carry on a war: he buys from the State what are called government securities; that is, obligations by the government to pay a certain annual income. If the government employed the money in making a railroad, this might be a productive employment, and A's property would still be used as capital; but since it is employed in war, that is, in the pay of officers and soldiers who produce nothing, and in destroying a quantity of gunpowder and bullets without return, the government is in the situation of C, the spendthrift landlord, and A's ten thousand pounds are so much national capital which once existed, but exists no longer: virtually thrown into the sea, as far as wealth or production is concerned; though for other reasons the employment of it may have been justifiable. A's subsequent income is derived, not from the produce of his own capital, but from taxes drawn from the produce of the remaining capital of the community; to whom his capital is not yielding any return, to indemnify them for the payment; it is lost and gone, and what he now possesses is a claim on the returns to other people's capital

and industry. This claim he can sell, and get back the equivalent of his capital, which he may afterwards employ productively. True; but he does not get back his own capital, or anything which it has produced: that, and all its possible returns, are extinguished: what he gets is the capital of some other person, which that person is willing to exchange for his lien on the taxes. Another capitalist substitutes himself for A as a mortgagee of the public, and A substitutes himself for the other capitalist as the possessor of a fund employed in production, or available for it. By this exchange the productive powers of the community are neither increased nor diminished. The breach in the capital of the country was made when the government took A's money: whereby a value of ten thousand pounds was withdrawn or withheld from productive employment, placed in the fund for unproductive consumption, and destroyed without equivalent.

CHAPTER V.

FUNDAMENTAL PROPOSITIONS RESPECTING CAPITAL.

§ 1. IF the preceding explanations have answered their purpose, they have given not only a sufficiently complete possession of the idea of Capital according to its definition, but a sufficient familiarity with it in the concrete and amidst the obscurity with which the complication of individual circumstances surrounds it, to have prepared even the unpractised reader for certain elementary propositions or theorems respecting capital, the full comprehension of which is already a considerable step out of darkness into light.

The first of these propositions is, That industry is limited by capital. This is so obvious, as to be taken for granted in many common forms of speech; but to see a truth occasionally is one thing, to recognize it habitually, and admit no propositions inconsistent with it, is another. The axiom was until lately almost universally disregarded by legislators and political writers; and doctrines irreconcilable with it are still very commonly professed and inculcated.

The following are common expressions, implying its truth. The act of directing industry to a particular employment is described by the phrase "applying capital" to the employment. 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. This implies that industry cannot be employed to any greater extent than there is capital to invest. The proposition, indeed, must be assented to as soon as it is distinctly apprehended. The expression "applying capital" is of course metaphorical: what is really applied is labour; capital being an indispen-

sable condition. Again, we often speak of the "productive powers of capital." This expression is not literally correct. The only productive powers are those of labour and natural agents; or if any portion of capital can by a stretch of language be said to have a productive power of its own, it is only tools and machinery, which, like wind or water, may be said to co-operate with labour. The food of labourers and the materials of production have no productive power; but labour cannot exert its productive power unless provided with them. 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 provide with the materials and instruments of production.

Yet, in disregard of a fact so evident, it long continued to be believed that laws and governments, without creating capital, could create industry. Not by making the people more laborious, or increasing the efficiency of their labour; these are objects to which the government can in some degree contribute. But when the people already worked as hard and as skilfully as they could be made to do, it was still thought that the government, without providing additional funds, could create additional employment. A government would, by prohibitory laws, put a stop to the importation of some commodity; and when by this it had caused the commodity to be produced at home, it would plume itself upon having enriched the country with a new branch of industry, would parade in statistical tables the amount of produce yielded and labour employed in the production, and

take credit for the whole of this as a gain to the country, obtained through the prohibitory law. Although this sort of political arithmetic has fallen a little into discredit in England, it still flourishes in the nations of Continental Europe. Had legislators been aware that industry is limited by capital, they would have seen that, the aggregate capital of the country not having been increased, any portion of it which they by their laws had caused to be embarked in the newly-acquired branch of industry must have been withdrawn or withheld from some other; in which it gave, or would have given, employment to probably about the same quantity of labour which it employs in its new occupation*.

§ 2. Because industry is limited by capital, we are not however to infer that it always reaches that limit. There may not be as many labourers obtainable, as the capital would maintain and employ. This has been known to occur in new colonies, where capital has sometimes perished uselessly for

* An exception must be admitted when the industry created or upheld by the restrictive law belongs to the class of what are called domestic manufactures. These being carried on by persons already fed—by the labourer, or his wife or children, in the intervals of other employment—no transfer of capital to the occupation is necessary to its being undertaken, beyond the value of the materials and tools, which is often quite inconsiderable. If, therefore, a protecting duty causes this occupation to be carried on, when it otherwise would not, there is in this case a real increase of the production of the country.

In order to render our theoretical proposition invulnerable, this peculiar case must be allowed for; but it does not touch the practical doctrine of free trade. Domestic manufactures cannot, from the very nature of things, require protection, since the subsistence of the labourers being provided from other sources, the price of the product, however much it may be reduced, is nearly all clear gain. If, therefore, the domestic producers retire from the competition, it is never from necessity, but because the product is not worth the labour it costs, in the opinion of the best judges, those who enjoy the one and undergo the other. They prefer the sacrifice of buying their clothing to the labour of making it. They will not continue their labour unless society will give them more for it, than in their own opinion its product is worth.

want of labour: the Swan River settlement, in the first years after its foundation, was an instance. There are many persons maintained from existing capital, who produce nothing, or who might produce much more than they do. If the labourers were reduced to lower wages, or induced to work more hours for the same wages, or if their families, who are already maintained from capital, were employed to a greater extent than they now are in adding to the produce, a given capital would afford employment to more industry. The unproductive consumption of productive labourers, the whole of which is now supplied from capital, might cease, or be postponed until the produce came in; and additional productive labourers might be maintained with the amount. By such means society might obtain from its existing resources a greater quantity of produce: and to such means it has been driven, when the sudden destruction of some large portion of its capital rendered the employment of the remainder with the greatest possible effect, a matter of paramount consideration for the time.

Where industry has not come up to the limit imposed by capital, governments may, in various ways, for example by importing additional labourers, bring it nearer to that limit: as in the importation of Coolies and free negroes into our sugar colonies. There is another way in which governments can create additional industry. They can create capital. They may lay on taxes, and employ the amount productively. They may do what is nearly equivalent; they may lay taxes on income or expenditure, and apply the proceeds towards paying off the public debts. The fundholder when paid off would still desire to draw an income from his property, most of which therefore would find its way into productive employment, while a great part of it would have been drawn from the fund for unproductive expenditure, since people do not usually pay their taxes from what they would have saved, but partly, if not chiefly, from what they would have spent. It may be added, that any increase in the productive power

of capital (or, more properly speaking, of labour) by improvements in the arts of life, or otherwise, tends to increase the employment for labour; since, when there is a greater produce altogether, it is always probable that some portion of the increase will be saved and converted into capital; especially when the increased returns to productive industry hold out an additional temptation to the conversion of funds from an unproductive destination to a productive.

§ 3. While, on the one hand, industry is limited by capital, so on the other, every increase of capital gives, or is capable of giving, additional employment to industry; and this without assignable limit. I do not mean to deny that the capital, or part of it, may be so employed as not to support labourers, being fixed in machinery, buildings, improvement of land, and the like. In any large increase of capital a considerable portion will generally be thus employed, and will only co-operate with labourers, not maintain them. What I do intend to assert is, that the portion which is destined to their maintenance, may (supposing no alteration in anything else) be indefinitely increased, without creating an impossibility of finding them employment: in other words, that if there are human beings capable of work, and food to feed them, they may always be employed in producing something. This proposition requires to be somewhat dwelt upon, being one of those which it is exceedingly easy to assent to when presented in general terms, but somewhat difficult to keep fast hold of, in the crowd and confusion of the actual facts of society. It is also very much opposed to common doctrines. There is not an opinion more general among mankind than this, that the unproductive expenditure of the rich is necessary to the employment of the poor. Before Adam Smith, the doctrine had hardly been questioned; and even since his time, authors of the highest name and of great

merit* have contended, that if consumers were to save and convert into capital more than a limited portion of their income, and were not to devote to unproductive consumption an amount of means bearing a certain ratio to the capital of the country, the extra accumulation would be merely so much waste, since there would be no market for the commodities which the capital so created would produce. I conceive this to be one of the many errors arising in political economy, from the practice of not beginning with the examination of simple cases, but rushing at once into the complexity of concrete phenomena.

Every one can see that if a benevolent government possessed all the food, and all the implements and materials, of the community, it could exact productive labour from all to whom it allowed a share in the food, and could be in no danger of wanting a field for the employment of this productive labour, since as long as there was a single want unsaturated (which material objects could supply), of any one individual, the labour of the community could be turned to the production of something capable of satisfying that want. Now, the individual possessors of capital, when they add to it by fresh accumulations, are doing precisely the same thing, which we suppose to be done by our benevolent government. As it is allowable to put any case by way of hypothesis, let us imagine the most extreme case conceivable. Suppose that every capitalist came to be of opinion that not being more meritorious than a well-conducted labourer, he ought not to fare better; and accordingly laid by, from conscientious motives, the surplus of his profits; or suppose this abstinence not spontaneous, but imposed by law or opinion upon all capitalists, and upon landowners likewise. Unproductive expenditure is now reduced to its lowest limit: and it is asked, how is the increased capital to find employment? Who is to buy the goods which it will produce? There are

* For example, Mr. Malthus, Dr. Chalmers, M. de Sismondi.

no longer customers even for those which were produced before. The goods, therefore, will remain unsold: they will perish in the warehouses; until capital is brought down to what it was originally, or rather to as much less, as the demand of the consumers has lessened. But this is seeing only one half of the matter. In the case supposed, there would no longer be any demand for luxuries, on the part of capitalists and landowners. But when these classes turn their income into capital, they do not thereby annihilate their power of consumption; they do but transfer it from themselves to the labourers to whom they give employment. Now, there are two possible suppositions in regard to the labourers; either there is, or there is not, an increase of their numbers, proportional to the increase of capital. If there is, the case offers no difficulty. The production of necessaries for the new population, takes the place of the production of luxuries for a portion of the old, and supplies exactly the amount of employment which has been lost. But suppose that there is no increase of population. The whole of what was previously expended in luxuries, by capitalists and landlords, is distributed among the existing labourers, in the form of additional wages. We will assume them to be already sufficiently supplied with necessaries. What follows? That the labourers become consumers of luxuries; and the capital previously employed in the production of luxuries, is still able to employ itself in the same manner: the difference being, that the luxuries are shared among the community generally, instead of being confined to a few. The increased accumulation and increased production might, rigorously speaking, continue, until every labourer had every indulgence of wealth, consistent with continuing to work; supposing that the power of their labour were physically sufficient to produce all this amount of indulgences for their whole number. Thus the limit of wealth is never deficiency of consumers, but of producers, and productive power. Every addition to capital gives to labour either additional

employment, or additional remuneration; enriches either the country or the labouring class. If it finds additional hands to set to work, it increases the aggregate produce: if only the same hands, it gives them a larger share of it; and perhaps even in this case, by stimulating them to greater exertion, augments the produce itself.

§ 4. A second fundamental theorem respecting Capital, relates to the source from which it is derived. It is the result of saving. The evidence of this lies abundantly in what has been already said on the subject. But the proposition needs some further illustration.

If all persons were to expend in personal indulgences all that they produce, and all the income they receive from what is produced by others, capital could not increase. All capital, with a trifling exception, was originally the result of saving. I say, with a trifling exception; because a person who labours on his own account, may spend on his own account all he produces, without becoming destitute; and the provision of necessaries on which he subsists until he has reaped his harvest or sold his commodity, though a real capital, cannot be said to have been saved, since it is all used for the supply of his own wants, and no abstinence has been practised. We may imagine a number of individuals or families, settled on as many separate pieces of land, each living on what their own labour produces, and consuming the whole produce. But even these must save (that is, spare from their personal consumption) as much as is necessary for seed. Some saving, therefore, there must have been, even in this simplest of all states of economical relations; people must have produced more than they used, or used less than they produced. Still more must they do so before they can employ other labourers, or increase their production beyond what can be accomplished by the work of their own hands. All that any one employs in supporting and carrying on any other labour than his own, must have been originally brought together by saving; some-

body must have produced it and forborne to consume it. We may say, therefore, without material inaccuracy, that all capital, and especially all addition to capital, are the result of saving.

In a rude and violent state of society, it continually happens that the person who has capital is not the very person who has saved it, but some one who being stronger, or belonging to a more powerful community, has possessed himself of it by plunder. And even in a state of things several degrees more advanced, the increase of capital has usually been in a great measure derived from privations which, though essentially the same with saving, are not generally called by that name, because not voluntary. The actual producers have been slaves, compelled to produce as much as force could extort from them, and to consume as little as the self-interest or the usually very slender humanity of their taskmasters would permit. This kind of compulsory saving, however, would not have caused any increase of capital, unless a part of the amount had been saved over again, voluntarily, by the master. 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. This saving may not, however, have been made by any self-imposed privation of the master; but more probably by that of the slaves themselves while free; the rapine or war, which deprived them of their personal liberty, having transferred also their accumulations to the conqueror.

There are other cases in which the term saving, with the associations usually belonging to it, does not exactly fit the operation by which capital is increased. If it were said, for instance, that the only way to accelerate the increase of capital is by increase of saving, the idea would probably be suggested of greater abstinence, and increased privation. But it is obvious

that whatever increases the productive power of labour, creates an additional fund to make savings from, and enables capital to be enlarged not only without additional privation, but concurrently with an increase of personal consumption. Nevertheless, there is here an increase of saving, in the scientific sense. Though there is more consumed, there is also more spared. There is a greater excess of production over consumption. It is consistent with correctness to call this a greater saving. Though the term is not unobjectionable, there is no other which is not liable to as great objections. To consume less than is produced, is saving; and that is the process by which capital is increased; not necessarily by consuming less, absolutely. We must not allow ourselves to be so much the slaves of words, as to be unable to use the word saving in this sense, without being in danger of forgetting that to increase capital there is another way besides consuming less, namely, to produce more.

§ 5. A third fundamental theorem respecting Capital, closely connected with the one last discussed, is, that although saved, and the result of saving, it is nevertheless consumed. The word saving does not imply that what is saved is not consumed, but only that it is not consumed by the person who saves it. If merely laid by for future use, it is said to be hoarded; and while hoarded, is not consumed at all. But if employed as capital, it is all consumed; not indeed by the capitalist, but by his workpeople. Part is exchanged for tools or machinery, which are worn out by use: part for seed or materials, which are destroyed as such by being sown or wrought up, and destroyed altogether by the consumption of the ultimate product. The remainder is paid in wages to productive labourers, who consume it for their daily wants; or if they in their turn save any part, this also is not, generally speaking, hoarded, but (through savings banks, benefit clubs, or some other channel) re-employed as capital and consumed.

The principle now stated, is a strong example of the necessity of attention to the most elementary truths of our subject: for it is one of the most elementary truths of them all, and yet no one who has not bestowed some thought on the matter is habitually aware of it, and most are not even willing to admit it when first stated. To the vulgar, it is not at all apparent that what is saved, is consumed. To them, every one who saves, appears in the light of a person who hoards; they may think such conduct permissible, or even laudable, when it is to provide for a family, and the like; but they have no conception of it as doing good to other people: saving, is to them another word for keeping a thing to oneself: while spending appears to them to be distributing it among others. The person who expends his fortune in unproductive consumption, is looked upon as diffusing benefits all around; and is an object of so much favour, that some portion of the same popularity attaches even to him who spends what does not belong to him; who not only destroys his own capital, if he ever had any, but, under pretence of borrowing, and on promise of repayment, possesses himself of capital belonging to others, and destroys that likewise.

This popular error comes from attending to a small portion only of the consequences that flow from the saving or the spending; all that part of the effects of either which is out of sight, being out of mind. The eye follows what is saved, into an imaginary strong box, and there loses sight of it; what is spent, it follows into the hands of tradesmen and dependents; but without reaching the ultimate destination in either case. Saving (for productive investment) and spending, coincide very closely in the first stage of their operations. The effects of both begin with consumption; with the destruction of a certain portion of wealth; only the things consumed, and the persons consuming, are different. There is, in the one case, a wearing out of tools, a destruction of material, and a quantity of food and clothing supplied to labourers, which they destroy by use: in the

other case, there is a consumption, that is to say a destruction, of wines, equipages, and furniture. Thus far, the consequence to the national wealth has been much the same; an equivalent quantity of it has been destroyed in both cases. But in the spending, this first stage is also the final stage; that particular amount of the produce of labour has disappeared, and there is nothing left; while on the contrary the saving person, during the whole time that the destruction was going on, has had labourers at work repairing it; who are ultimately found to have replaced, with an increase, the equivalent of what has been consumed. And as this operation admits of being repeated indefinitely without any fresh act of saving, a saving once made becomes a fund to maintain a corresponding number of labourers in perpetuity, reproducing annually their own maintenance with a profit.

It is the intervention of money which obscures, to an unpractised apprehension, the true character of these phenomena. Almost all expenditure being carried on by means of money, the money comes to be looked upon as the main feature in the transaction, and since that does not perish, but only changes hands, people overlook the destruction which takes place in the case of unproductive expenditure. The money being merely transferred, they think the wealth also has only been handed over from the spendthrift to other people. But this is simply confounding money with wealth. The wealth which has been destroyed was not the money, but the wines, equipages, and furniture which the money purchased; and these having been destroyed without return, society collectively is poorer by the amount. It may be said, perhaps, that wines, equipages, and furniture, are not subsistence, tools, and materials, and could not in any case have been applied to the support of labour; that they are adapted for no other than unproductive consumption, and that the detriment to the wealth of the community was when they were produced, not when they were consumed. I am willing

to allow this, as far as is necessary for the argument, and the remark would be very pertinent if these expensive luxuries were drawn from an existing stock, never to be replenished. But since, on the contrary, they continue to be produced as long as there are consumers for them, and are produced in increased quantity to meet an increased demand; the choice made by a consumer to expend five thousand a year in luxuries, keeps a corresponding number of labourers employed from year to year in producing things which can be of no use to production; their services being lost so far as regards the increase of the national wealth, and the tools, materials, and food which they annually consume being so much subtracted from the general stock of the community applicable to productive purposes. In proportion as any class is improvident or luxurious, the industry of the country takes the direction of producing luxuries for their use; while not only the employment for productive labourers is diminished, but the subsistence and instruments which are the means of such employment do actually exist in smaller quantity.

Saving, in short, enriches, and spending impoverishes, the community along with the individual; which is but saying in other words, that society at large is richer by what it expends in maintaining and aiding productive labour, but poorer by what it consumes in its enjoyments*.

* It is perhaps worth while to direct attention to several circumstances which to a certain extent diminish the detriment caused to the general wealth by the prodigality of individuals, or raise up a compensation, more or less ample, as a consequence of the detriment itself. One of these is that spendthrifts do not really succeed in consuming all they spend. Their habitual carelessness as to expenditure causes them to be cheated and robbed on all quarters, often by persons of frugal habits. Large accumulations are continually made by the agents, stewards, and even domestic servants, of improvident persons of fortune; and they pay much higher prices for all purchases than people of careful habits, which accounts for their being popular as customers. They are, therefore, actually not able to get into their possession and destroy a quantity of wealth by any means equivalent to the fortune which they dissipate.

§ 6. To return to our fundamental theorem. Everything which is produced is consumed; both what is saved and what is said to be spent; and the former quite as rapidly as the latter. All the ordinary forms of language tend to disguise this. When men talk of the ancient wealth of a country, of riches inherited from ancestors, and similar expressions, the idea suggested is, that the riches so transmitted were produced long ago, at the time when they are

Much of it is merely transferred to others, by whom a part may be saved. Another thing to be observed is, that the prodigality of some may reduce others to a forced economy. Suppose a sudden demand for some article of luxury, caused by the caprice of a prodigal, which not having been calculated on beforehand, there has been no increase of the usual supply. The price will rise; and may rise beyond the means or the inclinations of some of the habitual consumers, who may in consequence forego their accustomed indulgence, and save the amount. If they do not, but continue to expend as great a value as before on the commodity, the dealers in it obtain, for only the same quantity of the article, a return increased by the whole of what the spendthrift has paid; and thus the amount which he loses is transferred bodily to them, and may be added to their capital: his increased personal consumption being made up by the privations of the other purchasers, who have obtained less than usual of their accustomed gratification for the same equivalent. On the other hand, a counter-process must be going on somewhere, since the prodigal must have diminished his purchases in some other quarter to balance the augmentation in this; he has perhaps called in funds employed in sustaining productive labour, and the dealers in subsistence and in the instruments of production have had commodities left on their hands, or have received, for the usual amount of commodities, a less than usual return. But such losses of income or capital, by industrious persons, except when of extraordinary amount, are generally made up by increased pinching and privation; so that the capital of the community may not be on the whole impaired, and the prodigal may have had his self-indulgence at the expense not of the permanent resources, but of the temporary pleasures and comforts of others. For in every case the community are poorer by what any one spends, unless others are in consequence led to curtail their spending. There are yet other and more recondite ways in which the profusion of some may bring about its compensation in the extra savings of others; but these cannot be considered until that part of the Fourth Book, which treats of the limiting principle to the accumulation of capital.

said to have been first acquired, and that no portion of the capital of the country was produced this year, except as much as may have been this year added to the total amount. The fact is far otherwise. The greater part, in value, of the wealth now existing in England has been produced by human hands within the last twelve months. A very small proportion indeed of that large aggregate was in existence ten years ago;—of the present productive capital of the country scarcely any part, except farm-houses and factories, and a few ships and machines; and even these would not in most cases have survived so long, if fresh labour had not been employed within that period in putting them into repair. The land subsists, and the land is almost the only thing that subsists. Everything which is produced perishes, and most things very quickly. Most kinds of capital are not fitted by their nature to be long preserved. There are a few, and but a few productions, capable of a very prolonged existence. Westminster Abbey has lasted many centuries, with occasional repairs; some ancient sculptures have existed above two thousand years; the Pyramids perhaps double or treble that time. But these were objects devoted to unproductive use. If we except bridges and aqueducts (to which may sometimes be added tanks and embankments,) there are few instances of any edifice applied to industrial purposes which has been of great duration; such buildings do not hold out against wear and tear, nor is it good economy to construct them of the solidity necessary for permanency. Capital is kept in existence from age to age not by preservation but by perpetual reproduction: every part of it is used and destroyed, generally very soon after it is produced, but those who consume it are employed meanwhile in producing more. The growth of capital is similar to the growth of population. Every individual who is born, dies, but in each year the number born exceeds the number who die: the population, therefore, always increases, although not one person of those composing it was alive until a very recent date.

§ 7. This perpetual consumption and reproduction of capital affords the explanation of what has so often excited wonder, the great rapidity with which countries recover from a state of devastation; the disappearance, in a short time, of all traces of the mischiefs done by earthquakes, floods, hurricanes, and the ravages of war. An enemy lays waste a country by fire and sword, and destroys or carries away nearly all the moveable wealth existing in it: all the inhabitants are ruined, and yet in a few years after, everything is much as it was before. This *vis medicatrix nature* has been a subject of sterile astonishment, or has been cited to exemplify the wonderful strength of the principle of saving, which can repair such enormous losses in so brief an interval. There is nothing at all wonderful in the matter. What the enemy have destroyed, would have been destroyed in a little time by the inhabitants themselves: the wealth which they so rapidly reproduce, would have needed to be reproduced and would have been reproduced in any case, and probably in as short an interval. Nothing is changed, except that during the reproduction they have not now the advantage of consuming what had been produced previously. The possibility of a rapid repair of their disasters, mainly depends on whether the country has been depopulated. If its effective population have not been extirpated at the time, and are not starved afterwards; then, with the same skill and knowledge which they had before, with their land and its permanent improvements undestroyed, and the more durable buildings probably unimpaired, or only partially injured, they have nearly all the requisites for their former amount of production. If there is as much of food left to them, or of valuables to buy food, as enables them by any amount of privation to remain alive and in working condition, they will in a short time have raised as great a produce, and acquired collectively as great wealth and as great a capital, as before; by the mere continuance of that ordinary amount of exertion which they are accustomed to employ in their occu-

pations. Nor does this evince any strength in the principle of saving, in the popular sense of the term, since what takes place is not intentional abstinence but involuntary privation.

Yet so fatal is the habit of thinking through the medium of only one set of technical phrases, and so little reason have studious men to value themselves on being exempt from the very same mental infirmities which beset the vulgar, that this simple explanation was never given (so far as I am aware) by any political economist before Dr. Chalmers; a writer many of whose opinions I think erroneous, but who has always the merit of studying phenomena at first hand, and expressing them in a language of his own, which often uncovers aspects of the truth that the received phraseologies only tend to hide.

§ 8. The same author carries out this train of thought to some important conclusions on another closely connected subject, that of government loans for war purposes or other unproductive expenditure. These loans, being drawn from capital (in lieu of taxes, which would generally have been paid from income, and made up in part or altogether by increased economy) must, according to the principles we have laid down, tend to impoverish the country: yet the years in which expenditure of this sort has been on the greatest scale, have often been years of great apparent prosperity: the wealth and resources of the country, instead of diminishing, have given every sign of rapid increase during the process, and of greatly expanded dimensions after its close. This was confessedly the case with Great Britain during the last Continental war; and it would take some space to enumerate all the unfounded theories in political economy, to which that fact gave rise, and to which it secured temporary credence; almost all tending to exalt unproductive expenditure, at the expense of productive. Without entering into all the causes which operated and

which commonly do operate to prevent these extraordinary drafts on the productive resources of a country from being so much felt as it might seem reasonable to expect, we will suppose the most unfavourable case possible: that the whole amount borrowed and destroyed by the government, was abstracted by the lender from a productive employment in which it had actually been invested. The capital, therefore, of the country, is this year diminished by so much. But unless the amount abstracted is something enormous, there is no reason in the nature of the case why next year the national capital should not be as great as ever. The loan cannot have been taken from that portion of the capital of the country which consists of tools, machinery, and buildings. It must have been wholly drawn from the portion employed in paying labourers: and the labourers will suffer accordingly. But if none of them are starved; if their wages can bear such an amount of reduction, or if charity interposes between them and absolute destitution, there is no reason that their labour should produce less in the next year than in the year before. If they produce as much as usual, having been paid less by so many millions sterling, those millions are gained by their employers. The breach made in the capital of the country is thus instantly repaired, but repaired by the privations and often the real misery of the labouring class. Here is ample reason why such periods, even in the most unfavourable circumstances, may easily be times of great gain to those whose prosperity usually passes, in the estimation of society, for national prosperity. To see the hideous wrong side of the picture, we must look beneath.

This leads to the vexed question, to which Dr. Chalmers has very particularly adverted; whether the funds required by a government for extraordinary unproductive expenditure, are best raised by loans, the interest only being provided by taxes, or whether taxes should be at once laid on to the whole amount; which is called in the financial vocabulary

raising the whole of the supplies within the year. Dr. Chalmers is strongly for the latter method. He says, the common notion is that in calling for the whole amount in one year, you require what is either impossible, or very inconvenient; that the people cannot, without great hardship, pay the whole at once out of their yearly income; and that it is much better to require of them a small payment every year in the shape of interest, than so great a sacrifice once for all. To which his answer is, that the sacrifice is made equally in either case. Whatever is spent, cannot but be drawn from yearly income. The whole and every part of the wealth existing in the country, forms, or helps to form, the yearly income of somebody. The privation which it is supposed must result from taking the amount in the shape of taxes, is not avoided by taking it in a loan. The suffering is not averted, but only thrown upon the labouring classes, the least able, and who least ought, to bear it: while all the inconveniences, physical, moral, and political, produced by maintaining taxes for the perpetual payment of the interest, are incurred in pure loss. Whenever capital is withdrawn from production, or from the fund destined for production, to be lent to the state and expended unproductively, that whole sum is withheld from the labouring classes; the loan, therefore, is in truth paid off the same year; the whole of the sacrifice necessary for paying it off is actually made; only it is paid to the wrong persons, and therefore does not extinguish the claim; and paid by the very worst of taxes, a tax exclusively on the labouring class. And after having, in this most painful and unjust of ways, gone through the whole effort necessary for extinguishing the debt, the country remains charged with it, and with the payment of its interest in perpetuity.

These views appear to me strictly just, in so far as the value absorbed in loans would otherwise have been employed in productive industry within the country. The practical state of the case, however, seldom exactly corresponds with

this supposition. The loans of the less wealthy countries are made chiefly with foreign capital, which would not, perhaps, have been brought in to be invested on any less security than that of the government: while those of rich and prosperous countries are generally made not with funds withdrawn from productive employment, but with the new accumulations constantly making from income, and often with a part of them which if not so taken, would have migrated to colonies or sought other investments abroad. In these cases (which will be more particularly examined hereafter*) the sum wanted may be obtained without detriment to the labourers, or derangement of the national industry, and even, perhaps, with an advantage to both, in comparison with raising the amount by taxation, since taxes, especially when heavy, are almost always partly paid at the expense of what would otherwise have been saved and added to capital. Moreover, in a country which makes so great yearly additions to its wealth, that a part can be taken and expended unproductively without diminishing capital, or even preventing a considerable increase, it is evident that even if the whole of what is so taken would have become capital, and obtained employment in the country, the effect on the labouring classes is far less prejudicial, and the case against the loan system much less strong, than in the case first supposed. This brief anticipation of a discussion which will find its proper place elsewhere, appeared necessary to prevent false inferences from the premises previously laid down.

§ 9. We now pass to a fourth fundamental theorem respecting Capital, which is, perhaps, oftener overlooked or misconceived than even any of the foregoing. What supports and employs productive labour, is the capital expended in setting it to work, and not the demand of purchasers for the produce of the labour when completed. Demand for

* *Infra*, book iv. chap. iv. v.

commodities is not demand for labour. The demand for commodities determines in what particular branch of production the labour and capital shall be employed; it determines the *direction* of the labour; but not the more or less of the labour itself, or of the maintenance or payment of the labour. That depends on the amount of the capital, or other funds directly devoted to the sustenance and remuneration of labour.

Suppose, for instance, that there is a demand for velvet; a fund ready to be laid out in buying velvet, but no capital to establish the manufacture. It is of no consequence how great the demand may be; unless capital is attracted into the occupation, there will be no velvet made, and consequently none bought; unless, indeed, the desire of the intending purchaser for it is so strong, that he employs part of the price he would have paid for it, in making advances to work-people, that they may employ themselves in making velvet; that is, unless he converts part of his income into capital, and invests that capital in the manufacture. Let us now reverse the hypothesis, and suppose that there is plenty of capital ready for making velvet, but no demand. Velvet will not be made; but there is no particular preference on the part of capital for making velvet. Manufacturers and their labourers do not produce for the pleasure of their customers, but for the supply of their own wants, and having still the capital and the labour, which are the essentials of production, they can either produce something else which is in demand, or if there be no other demand, they themselves have one, and can produce the things which they want for their own consumption. So that the capital cannot be dispensed with—the purchasers can. I am of course not taking into consideration the effects of a sudden change. If the demand ceases unexpectedly, after the commodity to supply it is already produced, this introduces a different element into the question: the capital has actually been consumed in producing something which nobody wants or uses, and it has therefore perished, and the employment which

it gave to labour is at an end, not because there is no longer a demand, but because there is no longer a capital. This case therefore does not test the principle. The proper test is, to suppose that the change is gradual and foreseen, and is attended with no waste of capital, the manufacture being discontinued by merely not replacing the machinery as it wears out, and not reinvesting the money as it comes in from the sale of the produce. The capital is thus ready for a new employment, in which it will maintain as much labour as before. The manufacturer and his work-people lose the benefit of the skill and knowledge which they had acquired in the particular business, and which can only be partially of use to them in any other; and that is the amount of loss to the community by the change. But the labourers can still work, and the capital which previously employed them will, either in the same hands, or by being lent to others, employ either those labourers or an equivalent number in some other occupation.

This truth, that purchasing produce is not employing labour; that the demand for labour is constituted by the wages which precede the production, and not by the demand which may exist for the commodities resulting from the production; is a proposition which greatly needs all the illustration it can receive. It is, to common apprehension, a paradox; and even among political economists of reputation, I can hardly point to any, except Mr. Ricardo and M. Say, who have kept it constantly and steadily in view. Almost all others occasionally express themselves as if a person who buys commodities, the produce of labour, was an employer of labour, and created a demand for it as really, and in the same sense, as if he bought the labour itself directly, by the payment of wages. It is no wonder that political economy advances slowly, when such a question as this still remains open, at its very threshold. I am desirous of impressing on the reader that a demand for commodities does not in any manner constitute a demand for labour, but only determines into a particular channel a portion, more or less considerable, of

the demand already existing. It determines that a part of the labour and capital of the community shall be employed in producing certain things instead of other things. The demand for labour is constituted solely by the funds directly set apart for the use of labourers.

For the better illustration of our principle, let us put the following case. A consumer may expend his income either in buying services or commodities; he may employ part of it in hiring journeymen bricklayers to build a house, or excavators to dig artificial lakes, or labourers to make plantations and lay out pleasure grounds; or, instead of this, he may expend the same value in buying velvet and lace. The question is, whether the difference between these two modes of expending his income affects the interest of the labouring classes. It is plain that in the first of the two cases he employs labourers, who will be out of employment, or at least out of that employment, in the opposite case. But those from whom I differ say that this is of no consequence, because in buying velvet and lace he equally employs labourers, namely, those who make the velvet and lace. This, according to the principle we laid down, is an error, and I proceed to shew still more clearly that it is so. The consumer does not with his own funds pay to the weavers and lacemakers their day's wages. He buys the finished commodity, which has been produced by labour and capital, the labour not being paid nor the capital furnished by him, but pre-existing. Suppose that he had been in the habit of expending this portion of his income in hiring journeymen bricklayers, who laid out the amount of their wages in food and clothing, which were also produced by labour and capital. He, however, determines to prefer velvet, for which he thus creates an extra demand. This demand cannot be satisfied without an extra supply, nor can the supply be produced without an extra capital: where, then, is the capital to come from? There is nothing in the consumer's change of purpose which makes the capital of the country greater than it otherwise was. It appears,

then, that the increased demand for velvet could not for the present be supplied, were it not that the very circumstance which gave rise to it has set at liberty a capital of the exact amount required. The very sum which the consumer now employs in buying velvet formerly passed into the hands of journeymen bricklayers, who expended it in food and necessaries, which they now either go without, or squeeze, by their competition, from the shares of other labourers. The labour and capital, therefore, which formerly produced necessaries for the use of these bricklayers, are deprived of their market, and must look out for other employment; and they find it in making velvet for the new demand. I do not mean that the very same labour and capital which produced the necessaries turn themselves to producing the velvet; but, in some one or other of a hundred modes, they take the place of that which does. There was capital in existence to do one of two things—to make the velvet, or to produce necessaries for the journeymen bricklayers; but not to do both. It was at the option of the consumer which of the two should happen; and if he chooses the velvet, they go without the necessaries.

It must not be inferred from this, that it is, or that I am bound to think it, advantageous to the labouring class, that consumers should expend their income in services, rather than in commodities. The difference does not lie there, but in their employing it or not in the direct payment or maintenance of labour, without the intervention of another capital. The detriment to the labourers would have been the same, if the consumer had persisted in building a house, but instead of engaging labourers himself and paying them, had given an order to a builder, and settled the account after the work was finished. For in this manner of proceeding, the consumer no longer himself maintains the labour, but attracts the capital of another person from some other place or occupation to do it, and therefore does not open a new employment for labour, but merely changes the course of

an existing employment. Thus, in whatever manner the question is stated, we are brought back to the conclusion, that a demand delayed until the work is completed, and furnishing no advances but only reimbursing advances made by others, contributes nothing to the demand for labour; and that what is so expended, is, in all its effects, so far as regards the employment of the labouring class, a mere nullity: it does not and cannot create any employment except at the expense of other employment which existed before*.

The error, nevertheless, is a most natural one, and has first appearances strongly on its side. Although a demand for velvet does nothing more in regard to the employment for labour and capital, than to determine so much of the employment that already existed, into that particular channel instead of any other; still, to the producers already engaged in the velvet manufacture, and not intending to quit it, this is of the utmost importance. To them a falling off in the demand is a real loss, and one which, even if none of their goods finally perish unsold, may mount to any height, up to that which would make them choose as the smaller evil, to retire from the business. On the contrary, an increased demand enables them to extend their transactions—to make a profit upon a larger capital, if they have it, or can borrow

* The grounds of a proposition, when well understood, usually give a tolerable indication of the limitations of it. There is a case in which a demand for commodities *may* create employment for labour, namely, when the labourer is already fed, without being fully employed. Work which can be done in the spare hours of persons subsisted from some other source, can (as we before remarked) be undertaken without withdrawing capital from other occupations, beyond the amount (often very small) required to repay the expense of tools and materials. The reason of our principle thus failing, the principle itself fails, and employment of this kind may, by the springing up of a demand for the commodity, be called into existence without depriving labour of an equivalent amount of employment in another quarter. The demand does not even in this case operate on labour any otherwise than through the medium of an existing capital, but it affords an inducement which causes that capital to set in motion a greater amount of labour than it did before.

it; and, turning over their capital more rapidly, they will employ their labourers more constantly, or employ a greater number than before. So that an increased demand for a commodity does really, in the particular department, often cause a greater employment to be given to labour by the same capital. The mistake lies in not perceiving that in the cases supposed, this advantage is given to labour and capital in one department, only by being withdrawn from another; and that when the change has produced its natural effect of attracting into the employment additional capital proportional to the increased demand, the advantage itself ceases.

The demand for commodities is a consideration of importance rather in the theory of exchange, than in that of production. Looking at things in the aggregate, and permanently, the remuneration of the producer is derived from the productive power of his own capital. The sale of the produce for money, and the subsequent expenditure of the money in buying other commodities, are a mere exchange of equivalent values, for mutual accommodation. It is true that, the division of employments being one of the principal means of increasing the productive power of labour, the power of exchanging gives rise to a great increase of the produce; but even then it is production, not exchange, which remunerates labour and capital. We cannot too strictly represent to ourselves the operation of exchange, whether conducted by barter or through the medium of money, as the mere mechanism by which each person transforms the remuneration of his labour or of his capital into the particular shape in which it is most convenient to him to possess it; but in no wise the source of the remuneration itself.

§ 10. The preceding principles demonstrate the fallacy of many popular arguments and doctrines which are continually reproducing themselves in new forms. For example, it has been contended, and by some from whom better things might have been expected, that the argument for the income

tax, grounded on its falling on the higher and middle classes only, and sparing the poor, is an error; some have gone so far as to say, an imposture; because in taking from the rich what they would have expended among the poor, the tax injures the poor as much as if it had been directly levied from them. Of this doctrine we now know what to think. So far, indeed, as what is taken from the rich in taxes, would, if not so taken, have been saved, and converted into capital, or even expended in the maintenance and wages of servants or of any class of unproductive labourers, to that extent the demand for labour is no doubt diminished, and the poor injuriously affected, by any tax on the rich; and as these effects are almost always produced in a greater or less degree, it is impossible so to tax the rich as that no portion whatever of the tax can fall on the poor. But even here the question arises, whether the government, after receiving the amount, will not lay out as great a portion of it in the direct purchase of labour, as the tax-payers would have done. In regard to all that portion of the tax, which, if not paid to the government, would have been consumed in the form of commodities (or even expended in services if the payment has been advanced by a capitalist), this, according to the principles we have investigated, falls definitively on the rich, and not at all on the poor. There is exactly the same demand for labour, so far as this portion is concerned, after the tax, as before it. The capital which hitherto employed the labourers of the country, remains, and is still capable of employing the same number. There is the same amount of produce paid in wages, or allotted to defray the feeding and clothing of labourers.

If those against whom I am now contending were in the right, it would be impossible to tax anybody except the poor. If it is taxing the labourers, to tax what is laid out in the produce of labour, the labouring classes pay all the taxes. The same argument, however, equally proves, that it is impossible to tax the labourers at all; since the tax, being laid

out either in labour or in commodities, comes all back to them; so that taxation has the singular property of falling on nobody. On the same showing, it would do the labourers no harm to take from them all they have, and distribute it among the other members of the community. It would all be "spent among them," which on this theory comes to the same thing. The error is produced by not looking directly at the realities of the phenomena, but attending only to the outward mechanism of paying and spending. If we look at the effects produced not on the money, which merely changes hands, but on the commodities which are used and consumed, we see that, in consequence of the income-tax, the classes who pay it do really diminish their consumption. Exactly so far as they do this, they are the persons on whom the tax falls. It is defrayed out of what they would otherwise have used and enjoyed. So far, on the other hand, as the burthen falls, not on what they would have consumed, but on what they would have saved to maintain production, or spent in maintaining or paying unproductive labourers, to that extent the tax forms a deduction from what would have been used and enjoyed by the labouring classes. But if the government, as is probably the fact, expends fully as much of the amount as the tax-payers would have done in the direct employment of labour, as in hiring sailors, soldiers, and policemen, or in paying off debt, by which last operation it even increases capital; the labouring classes not only do not lose any employment by the tax, but may possibly gain some, and the whole of the tax falls exclusively where it was intended.

All that portion of the produce of the country which any one actually and literally consumes for his own use, does not contribute in the smallest degree to the maintenance of labour. No one is benefitted by mere consumption, except the person who consumes. And a person cannot both consume his income himself, and make it over to be consumed by others. Taking away a certain portion by

taxation cannot deprive both him and them of it, but only him *or* them. To know which is the sufferer, we must understand whose consumption will have to be retrenched in consequence: this, whoever it be, is the person on whom the tax really falls.

CHAPTER VI.

ON CIRCULATING AND FIXED CAPITAL.

§ 1. To complete our explanations on the subject of capital, it is necessary to say something of the two species into which it is usually divided. The distinction is very obvious, and though not named, has been often adverted to, in the two preceding chapters: but it is now proper to define it accurately, and to point out a few of its consequences.

Of the capital engaged in the production of any commodity, there is a part which, after being once used, exists no longer as capital; is no longer capable of rendering service to production, or at least not the same service, or to the same sort of production. Such, for example, is the portion of capital which consists of materials. The tallow and alkali of which soap is made, once used in the manufacture, are destroyed as alkali and tallow; and cannot be employed any further in the soap manufacture, although, in their altered condition, as soap, they are capable of being used as a material or an instrument in other branches of manufacture. In the same division must be placed the portion of capital which is paid as the wages, or consumed as the subsistence, of labourers. That part of the capital of a cotton spinner which he pays away to his work-people, once so paid exists no longer as his capital, or as a cotton spinner's capital: such portion of it as the workmen consume, no longer exists as capital at all: even if they save any part, it exists not as the same but as a fresh capital, the result of a second act of accumulation. Capital which in this manner fulfils the whole of its office in the production in which it is engaged, by a single use, is called Circulating Capital. The term,

which is not very appropriate, is derived from the circumstance, that this portion of capital requires to be constantly renewed by the sale of the finished product, and when renewed is perpetually parted with in buying materials and paying wages; so that it does its work not by being kept, but by changing hands.

Another large portion of capital, however, consists in instruments of production, of a more or less permanent character; which produce their effect not by being parted with, but by being kept; and the efficacy of which is not exhausted by a single use. To this belong buildings, machinery, and all or most things known by the name of implements or tools. The durability of some of these is considerable, and their function as productive instruments is prolonged through many repetitions of the productive operation. In this class must likewise be included capital sunk (as the expression is) in permanent improvements of land. So also the capital expended once for all, in the commencement of an undertaking, to prepare the way for subsequent operations: the expense of opening a mine, for example; of cutting canals, of making roads or docks. Other examples might be added, but these are sufficient. Capital which exists in any of these durable shapes, and the return to which is spread over a period of corresponding duration, is called Fixed Capital.

Of fixed capital, some kinds require to be occasionally or periodically renewed. Such are all implements and buildings: they require, at intervals, partial renewal by means of repairs, and are at last entirely worn out, and cannot be of any further service as buildings and implements, but fall back into the class of materials. In other cases, the capital does not, unless as a consequence of some unusual accident, require entire renewal: but there is always some outlay needed, either regularly or at least occasionally, to keep it up. A dock or a canal, once made, does not require, like a machine, to be made again, unless purposely destroyed, or

unless an earthquake or some similar catastrophe has filled it up: but regular and frequent outlays are necessary to keep it in repair. The cost of opening a mine needs not be incurred a second time; but unless some one goes to the expense of keeping the mine clear of water, it is soon rendered useless. The most permanent of all kinds of fixed capital is that employed in giving increased productiveness to a natural agent, such as land. The draining of marshy or inundated tracts like the Bedford level, the reclaiming of land from the sea, or its protection by embankments, are improvements calculated for perpetuity; but drains and dykes require frequent repairs. The same character of perpetuity belongs to the improvement of land by subsoil draining, which adds so much to the productiveness of the clay soils; or by permanent manures, that is, by the addition to the soil, not of the substances which enter into the composition of vegetables, and which are therefore consumed by vegetation, but of those which merely alter the relation of the soil to air and water; as sand and lime on the heavy soils, clay and marl on the light. Even such works, however, require some, though it may be very little, occasional outlay to maintain their full effect.

These improvements, however, by the very fact of their deserving that title, produce an increase of return, which, after defraying all expenditure necessary for keeping them up, still leaves a surplus. This surplus forms the return to the capital sunk in the first instance, and that return does not, as in the case of machinery, terminate by the wearing out of the machine, but continues for ever. The land, thus increased in productiveness, bears a value in the market, proportional to the increase: and hence it is usual to consider the capital which was invested, or sunk, in making the improvement, as still existing in the increased value of the land. There must be no mistake, however. The capital, like all other capital, has been consumed. It was consumed in maintaining the labourers who executed the improvement, and in the wear

and tear of the tools by which they were assisted. But it was consumed productively, and has left a permanent result in the improved productiveness of an appropriated natural agent, the land. We may call the increased produce the joint result of the land and of a capital fixed in the land. But as the capital, having in reality been consumed, cannot be withdrawn, its productiveness is thenceforth indissolubly blended with that arising from the original qualities of the soil; and the remuneration for the use of it thenceforth depends, not upon the laws which govern the returns to labour and capital, but upon those which govern the recompense for natural agents. What these are, we shall see hereafter*.

§ 2. There is a great difference between the effects of circulating and those of fixed capital, on the amount of the gross produce of the country. Circulating capital being destroyed as such, or at any rate finally lost to the owner, by a single use; and the product resulting from that one use being the only source from which the owner can replace the capital, or obtain any remuneration for its productive employment; the product must of course be sufficient for those purposes, or in other words, the result of a single use must be a reproduction equal to the whole amount of the circulating capital used, and a profit besides. This, however, is by no means necessary in the case of fixed capital. Since machinery, for example, is not wholly consumed by one use, it is not necessary that it should be wholly replaced from the product of that use. The machine answers the purpose of its owner if it brings in, during each interval of time, enough to cover the expense of repairs, and the deterioration in value which the machine has sustained during the same time, with a surplus sufficient to yield the ordinary profit on the entire value of the machine.

From this it follows that all increase of fixed capital,

* *Infra*, book ii. chap. xvi. *On Rent*.

when taking place at the expense of circulating, must be, at least temporarily, prejudicial to the interests of the labourers. This is true not of machinery alone, but of all improvements by which capital is sunk; that is, rendered permanently incapable of being applied to the maintenance and remuneration of labour. Suppose that a person farms his own land, with a capital of two thousand quarters of corn, employed in maintaining labourers during one year (for simplicity we omit the consideration of seed and tools), whose labour produces him annually two thousand four hundred quarters, being a profit of twenty per cent. This profit we shall suppose that he annually consumes, carrying on his operations from year to year on the original capital of two thousand quarters. Let us now suppose that by the expenditure of half his capital he effects a permanent improvement of his land, which is executed by half his labourers, and occupies them for a year, after which he will only require, for the effectual cultivation of his land, half as many labourers as before. The remainder of his capital he employs as usual. In the first year there is no difference in the condition of the labourers, except that part of them have received the same pay for trenching or tile-draining or manuring the land, which they previously obtained for ploughing, sowing, and reaping. At the end of the year, however, the improver has not as before a capital of two thousand quarters of corn. Only one thousand quarters of his capital have been reproduced in the usual way: he has now only those thousand quarters and his improvement. He will employ, in the next and in each following year, only half the number of labourers, and will divide among them only half the former quantity of subsistence. The loss would soon be made up to them if the improved land, with the diminished quantity of labour, produced two thousand four hundred quarters as before, because so enormous an accession of gain would probably induce the improver to save a part, add it to his capital, and become a larger employer of labour. But this may not, and often will not, be the case; for (supposing,

as we may do, that the improvement will last indefinitely, without any outlay worth mentioning to keep it up) the improver will have gained largely by his improvement if the land now yields, not two thousand four hundred, but one thousand five hundred quarters; since this will replace the one thousand quarters forming his present circulating capital, with a profit of twenty-five per cent (instead of twenty as before) on the whole capital, fixed and circulating together. The improvement, therefore, may be a very profitable one to him, and yet very injurious to the labourers.

It will perhaps be objected that agricultural improvements do not operate in the manner supposed—do not enable a part of the labour previously employed on the land to be dispensed with—but only enable the same labour to raise a greater produce. This is true of some kinds of agricultural improvement; but the contrary is true of others. Suppose, however, that the case were as the objection assumes it to be. Suppose, too, that the greater produce, which by means of the improvement can be raised from the soil with the same labour, is all wanted, and will find purchasers. The improver will in that case require the same number of labourers as before, at the same wages. But where will he find the means of paying them? He has no longer his original capital of two thousand quarters disposable for the purpose. One thousand of them are lost and gone—consumed in making the improvement. If he is to employ as many labourers as before, and pay them as highly, he must borrow, or obtain from some other source, a thousand quarters, to supply the deficit. But these thousand quarters already maintained, or were destined to maintain, an equivalent quantity of labour. They are not a fresh creation; their destination is only changed from one productive employment to another; and though the agriculturist has made up the deficiency in his own circulating capital, the breach in the circulating capital of the community remains unrepaired.

I cannot assent to the argument relied on by most of

those who contend that machinery can never be injurious to the labouring class, namely, that by cheapening production it creates such an increased demand for the commodity, as enables, ere long, a greater number of persons than ever to find employment in producing it. The fact, though too broadly stated, is, no doubt, often true. The copyists who were thrown out of employment by the invention of printing, were doubtless soon outnumbered by the compositors and pressmen who took their place: and the number of labouring persons now occupied in the cotton manufacture is many times greater than were so occupied previously to the inventions of Hargreaves and Arkwright, which shows that besides the enormous fixed capital now embarked in the manufacture, it also employs a far larger circulating capital than at any former time. But if this capital was drawn from other employments; if the funds which took the place of the capital sunk in costly machinery, were supplied not by an additional saving consequent on the improvements, but by drafts on the general capital of the community; what better are the labouring classes for the mere transfer? In what manner is the loss they sustained by the conversion of circulating into fixed capital, made up to them by a mere shifting of part of the remainder of the circulating capital from its old employments to a new one?

All attempts to make out that the labouring classes as a collective body *cannot* suffer by the introduction of machinery, or by the sinking of capital in permanent improvements, are, I conceive, necessarily fallacious. That they would suffer in the particular department of industry to which the change applies, is generally admitted, and obvious to common sense; but it is often said that though employment is withdrawn from labour in one department, an exactly equivalent employment is opened for it in others, because what the consumers save in the increased cheapness of one particular article enables them to augment their consumption of others, thereby increasing the demand for other kinds of labour. This is plausible, but, as

we saw in the last chapter, involves a fallacy; demand for commodities being a totally different thing from demand from labour. It is true, the consumers have now additional money to buy other things, but this will not create the other things, unless there is capital to produce them; and the improvement has not set at liberty any capital, if even it has not absorbed some from other employments. The supposed increase of production and of employment for labour in other departments therefore will not take place; and the increased demand for commodities by some consumers, will be balanced by a cessation of demand on the part of others, namely the labourers who were superseded by the improvement, and who will now be maintained, if at all, by sharing, either in the way of competition or of charity, in what was previously consumed by other people.

§ 3. Nevertheless, I do not believe that as things are actually transacted, improvements in production are often, if ever, injurious, even temporarily, to the labouring classes in the aggregate. They would be so if they took place suddenly to a great amount, because much of the capital sunk must necessarily in that case be provided from funds already employed as circulating capital. But improvements are always introduced very gradually, and are seldom or never made by withdrawing circulating capital from actual production, but are made by the employment of the annual increase. I doubt if there would be found a single example of a great increase of fixed capital, at a time and place where circulating capital was not rapidly increasing likewise. It is not in poor or backward countries that great and costly improvements in production are made. To sink capital in land for a permanent return—to introduce expensive machinery—are acts involving immediate sacrifice for distant objects; and indicate, in the first place, tolerably complete security of property; in the second, a considerable activity of industrial enterprise; and in the third, a high standard of what has

been called the “effective desire of accumulation:” which three things are the elements of a society rapidly progressive in its amount of capital. Although, therefore, the labouring classes must suffer, not only if the increase of fixed capital takes place at the expense of circulating, but even if it is so large and rapid as to retard that ordinary increase to which the growth of population has habitually adapted itself; yet, in point of fact, this is very unlikely to happen, since there is probably no country whose fixed capital increases in a ratio more than proportional to its circulating. If the whole of the railways which have lately obtained the sanction of Parliament, were constructed in the times fixed for the completion of each, this improbable contingency would, most likely, be realized; but this very case is even now affording an example of the difficulties which oppose the diversion into new channels of any considerable portion of the capital that supplies the old: difficulties generally much more than sufficient to prevent enterprises that involve the sinking of capital, from extending themselves with such rapidity as to impair the sources of the existing employment for labour.

To these considerations must be added, that even if improvements did for a time decrease the aggregate produce and the circulating capital of the community, they would not the less tend in the long run to augment both. They increase the return to capital; and of this increase the benefit must necessarily accrue either to the capitalist in greater profits, or to the consumer in diminished prices; affording, in either case, an augmented fund from which accumulation may be made, while enlarged profits also hold out an increased inducement to accumulation. In the case we before selected, in which the immediate result of the improvement was to diminish the gross produce from two thousand four hundred quarters to one thousand five hundred, yet the profit of the capitalist being now five hundred quarters instead of four hundred, the extra one hundred quarters, if regularly saved,

will in a few years replace the one thousand quarters subtracted from his circulating capital. Now, the extension of business which almost certainly follows in any department in which an improvement has been made, affords a strong inducement to those engaged in it to add to their capital; and hence, at the slow pace at which improvements are usually introduced, a great part of the capital which the improvement ultimately absorbs, is drawn from the increased profits and increased savings which it has itself called forth.

This tendency of improvements in production to cause increased accumulation, and thereby ultimately to increase the gross produce, even if temporarily diminishing it, will assume a still more decided character if it should appear that there are assignable limits both to the accumulation of capital, and to the increase of production from the land, which limits once attained, all further increase of produce must stop; but that improvements in production, whatever may be their other effects, tend to throw one or both of these limits farther off. Now, these are truths which will appear in the clearest light, in a subsequent stage of our investigation. It will be seen, that the quantity of capital which will, or even which can, be accumulated in any country, and the amount of gross produce which will, or even which can, be raised, bear a proportion to the state of the arts of production there existing; and that every improvement, even if for the time it diminish the circulating capital and the gross produce, ultimately makes room for a larger amount of both, than could possibly have existed otherwise. It is this which is the conclusive answer to the objections against machinery; and the proof thence arising of the ultimate benefit of mechanical inventions to the human race, will hereafter be seen to be conclusive*. But this does not discharge governments from the obligation of alleviating, and if possible preventing, the evils of which this source

* *Infra*, book iv. chap. v.

of ultimate benefit is or may be productive to an existing generation. If the sinking or fixing of capital in machinery or useful works, were ever to proceed at such a pace as to impair materially the funds for the maintenance of labour, it would be incumbent on legislators to take measures for moderating its rapidity: and since improvements which do not diminish employment on the whole, almost always throw some particular class of labourers out of it, there cannot be a more legitimate object of the legislator's care than the interests of those who are thus sacrificed to the gains of their fellow citizens and of posterity.

To return to the theoretical distinction between fixed and circulating capital. Since all wealth which is destined to be employed for reproduction comes within the designation of capital, there are parts of capital which do not agree with the definition of either species of it; for instance, the stock of finished goods which a manufacturer or dealer at any time possesses unsold in his warehouses. But this, though capital as to its destination, is not yet capital in actual exercise; it is not engaged in production, but has first to be sold or exchanged, that is, converted into an equivalent value of some other commodities; and therefore is not yet either fixed or circulating capital, but will become either one or the other, or be eventually divided between them. With the proceeds of his finished goods, a manufacturer will partly pay his work-people, partly replenish his stock of the materials of his manufacture, and partly provide new buildings and machinery, or repair the old; but how much will be devoted to one purpose, and how much to another, depends on the nature of the manufacture, and the requirements of the particular moment.

It should be observed further, that the portion of capital which is consumed in the form of seed or material, although, unlike fixed capital, it requires to be at once replaced from the gross produce, stands yet in the same relation to the employment of labour, as fixed capital does. What is ex-

pended in materials, is as much withdrawn from the maintenance and remuneration of labourers, as what is fixed in machinery; and if capital now expended in wages were diverted to the providing of materials, the effect on the labourers would be as prejudicial as if it were converted into fixed capital. This, however, is a kind of change which never takes place. The tendency of improvements in production is always to economize, never to increase, the expenditure of seed or material for a given produce; and the interest of the labourers has no detriment to apprehend from this source.

CHAPTER VII.

ON WHAT DEPENDS THE DEGREE OF PRODUCTIVENESS
OF PRODUCTIVE AGENTS.

§ 1. WE have concluded our general survey of the requisites of production. We have found that they may be reduced to three: labour, capital, and the materials and motive forces afforded by nature. Of these, labour and the raw material of the globe are primary and indispensable. Natural motive powers may be called in to the assistance of labour, and are a help, but not an essential, of production. The remaining requisite, capital, is itself the product of labour: its instrumentality in production is therefore, in reality, that of labour in an indirect shape. It does not the less require to be specified separately. A previous application of labour to produce the capital required for consumption during the work, is no less essential than the application of labour to the work itself. Of capital, again, one, and by far the largest portion, conduces to production only by sustaining in existence the labour which produces: the remainder, namely, the instruments and materials, contribute to it directly, in the same manner with natural agents and the materials supplied by nature.

We now advance to the second great question in political economy; on what the degree of productiveness of these agents depends. For it is evident that their productive efficacy varies greatly at various times and places. With the same population and extent of territory, some countries have a much larger amount of production than others, and the same country at one time a greater amount than itself at another. Compare England either with a similar extent of territory in Russia, or with an equal population of Russians.

Compare England now with England in the middle ages; Sicily, Northern Africa, or Syria at present, with the same countries in the time of their greatest prosperity, before the Roman conquest. Some of the causes which contribute to this difference of productiveness, are obvious; others not so much so. We proceed to specify several of them.

§ 2. The most evident cause of superior productiveness, is what are called natural advantages. These are various. Fertility of soil is one of the principal. In this there are great varieties, from the deserts of Arabia to the alluvial plains of the Ganges, the Niger, and the Mississippi. A favourable climate is even more important than a rich soil. There are countries capable of being inhabited, but too cold to be compatible with agriculture. Their inhabitants cannot pass beyond the nomadic state; they must live, like the Laplanders, by the domestication of the rein-deer, if not by hunting or fishing like the miserable Esquimaux. There are countries where oats will ripen, but not wheat, such as the North of Scotland; others where wheat can be grown, but from excess of moisture and want of sunshine, affords but a precarious crop; as in parts of Ireland. With each advance towards the south, or, in the European temperate region, towards the east, some new branch of agriculture becomes first possible, then advantageous; the vine, maize, figs, olives, silk, rice, dates, successively present themselves, until we come to the sugar, coffee, cotton, spices, &c., of climates which also afford, of the more common agricultural products, and with only a slight degree of cultivation, two or even three harvests in a year. Nor is it in agriculture alone that differences of climate are important. Their influence is felt in many other branches of production: in the durability of all work which is exposed to the air; of buildings, for example. If the temples of Karnac and Luxor had not been injured by men, they might have subsisted in their original perfection almost for ever, for the inscriptions on some of them, though

anterior to all authentic history, are fresher than is in our climate an inscription fifty years old: while at St. Petersburg the most massive works, solidly executed in granite hardly a generation ago, are already, as travellers tell us, almost in a state to require reconstruction, from alternate exposure to summer heat and intense frost. The superiority of the woven fabrics of Southern Europe over those of England in the richness and clearness of many of their colours, is ascribed to the superior quality of the atmosphere, for which neither the knowledge of chemists nor the skill of dyers has been able to provide, in our hazy and damp climate, a complete equivalent.

Another part of the influence of climate consists in lessening the physical requirements of the producers. In hot regions mankind can exist in comfort with less perfect housing, less clothing; fuel, that essential necessary of life in cold climates, they can almost dispense with, except for industrial uses. They also require less aliment; as experience had proved, long before theory had accounted for it by ascertaining that most of what we consume as food is not required for the actual nutrition of the organs, but for keeping up the animal heat, and for supplying the necessary stimulus to the vital functions, which in hot climates is almost sufficiently supplied by air and sunshine. Much, therefore, of the labour elsewhere expended to procure the mere necessaries of life, not being required, more remains disposable for its higher uses and its enjoyments; if the character of the inhabitants does not rather induce them to use up these advantages in over-population, or in the indulgence of repose.

Among natural advantages, besides soil and climate, must be mentioned abundance of mineral productions, in convenient situations, and capable of being worked with moderate labour. Such are the coal-fields of Great Britain, which do so much to compensate its inhabitants for the disadvantages of climate; and the scarcely inferior resources possessed

by this country and the United States, in a copious supply of an easily reduced iron ore, at no great depth below the earth's surface, and in close proximity to coal deposits available for working it. In mountain and hill districts the abundance of natural water-power makes considerable amends for the usually inferior fertility of those regions. But perhaps a greater advantage than all these is a maritime situation, especially when accompanied with good natural harbours; and, next to it, great navigable rivers. These advantages consist indeed wholly in saving of cost of carriage. But few who have not considered the subject, have any adequate notion how great an extent of economical advantage this comprises; nor, without having considered the influence exercised on production by exchanges, and by what is called the division of labour, can it be fully estimated. So important is it, that it often does more than counterbalance sterility of soil, and almost every other natural inferiority; especially in that early stage of industry in which labour and science have not yet provided artificial means of communication, capable of rivalling the natural. In the ancient world, and in the middle ages, the most prosperous communities were not those which had the largest territory or the most fertile soil, but rather those which had been forced by natural sterility to make the utmost possible use of a convenient maritime situation; as Athens, Tyre, Marseilles, Venice, the free cities on the Baltic, and the like.

§ 3. So much for natural advantages; the value of which, *ceteris paribus*, is too obvious to be ever underrated. But experience testifies that natural advantages scarcely ever do for a community, no more than fortune and station do for an individual, anything like what it lies in their nature, or in their capacity to do. The greatest advantages gratuitously bestowed generally become disadvantages. Neither now nor in former ages have the nations possessing the best climate and soil, been either the richest or the most powerful; but (in

so far as regards the mass of the people,) generally among the poorest, though, in the midst of poverty, probably on the whole the most enjoying. Human life in those countries can be supported on so little, that the poor seldom suffer from anxiety, and in climates in which mere existence is a pleasure, the luxury which they prefer is that of repose. Energy, at the call of passion, they possess in abundance, but not that which is manifested in sustained and persevering labour: and as they seldom concern themselves enough about remote objects to establish good political institutions, the incentives to industry are further weakened by imperfect protection of its fruits. Successful production, like most other kinds of success, depends more on the qualities of the human agents, than on the circumstances in which they work: and it is difficulties, not facilities, that nourish bodily and mental energy. Accordingly the tribes of mankind who have overrun and conquered others, and compelled them to labour for their benefit, have been mostly reared amidst hardship. They have either been bred in the forests of northern climates, or the deficiency of natural hardships has been supplied, as among the Greeks and Romans, by the artificial ones of a rigid military discipline. From the time when the circumstances of modern society permitted the discontinuance of that discipline, the South has no longer produced conquering nations; military vigour, as well as speculative thought and industrial energy, have all had their principal seats in the less favoured North.

As the second, therefore, of the causes of superior productiveness, we may rank the greater energy of labour. By this is not to be understood occasional, but regular and habitual energy. No one undergoes, without murmuring, a greater amount of occasional fatigue and hardship, or has his bodily powers, and such faculties of mind as he possesses, kept longer at their utmost stretch, than the North American Indian: yet his indolence is proverbial, whenever he has a brief respite from the pressure of present wants. Individuals, or races, do not differ so much

in the efforts they are able and willing to make under strong immediate incentives, as in their capacity of present exertion for a distant object; and in the thoroughness of their application to work on ordinary occasions. In this last quality the English, and perhaps the Anglo-Americans, appear at present to surpass every other people. This efficiency of labour is connected with their whole character; with their defects, as much as with their good qualities. The majority of Englishmen and Americans have no life but in their work; that alone stands between them and ennui. Either from original temperament, climate, or want of developement, they are too deficient in senses to enjoy mere existence in repose; and scarcely any pleasure or amusement is pleasure or amusement to them. Except, therefore, those who are alive to some of the nobler interests of humanity (a small minority in all countries), they have little to distract their attention from work, or to divide the dominion over them with the one propensity which is the passion of those who have no other, and the satisfaction of which comprises all that they imagine of success in life—the desire of growing richer, and getting on in the world. This last characteristic belongs chiefly to those who are in a condition superior to day labourers; but the absence of any taste for amusement, or enjoyment of repose, is common to all classes. Whether from this or any other cause, the national steadiness and persistency of labour extends to the most improvident of the English working classes—those who never think of saving, or improving their condition. It has become the habit of the country; and life in England is more governed by habit, and less by personal inclination and will, than in any other country, except perhaps China or Japan. The effect is, that where hard labour is the thing required, there are no labourers like the English; though in natural intelligence, and even in manual dexterity, they have many superiors.

Energy of labour, though not an unqualified good, nor one which it is desirable to nourish at the expense of other

valuable attributes of human nature, is yet, in a certain measure, a necessary condition of any great improvement among mankind. To civilize a savage, he must be inspired with new wants and desires, even if not of a very elevated kind, provided that their gratification can be a motive to bodily and mental exertion. If the negroes of Jamaica and Demerara, after their emancipation, had contented themselves, as it was predicted they would do, with the necessaries of life, and abandoned all labour beyond the little which in a tropical climate, with a thin population and an abundance of the richest land, is sufficient to support existence, they would have sunk into a condition more barbarous, though less unhappy, than their previous state of slavery. The motive which was most relied on for inducing them to work was their love of fine clothes and personal ornaments. No one will stand up for this taste as in itself worthy of being cultivated, and in most societies its indulgence tends to impoverish rather than to enrich; but in the state of mind of the negroes it may have been the only incentive that could make them voluntarily undergo systematic labour, and so acquire or maintain habits of industry which may be converted to more valuable ends. As much as the industrial spirit required to be stimulated in their case, so much does it require to be moderated in such countries as England and the United States. There, it is not the desire of wealth that needs to be taught, but the use of wealth, and appreciation of the objects of desire which wealth cannot purchase, or for attaining which it is not required. Every real improvement in the character of the English or Americans, whether it consist in giving them higher aspirations, or only more numerous and better pleasures, must necessarily moderate the all-engrossing torment of their industrialism; must diminish, therefore, so far as it depends on that cause alone, the aggregate productiveness of their labour. There is no need, however, that it should diminish that strenuous and business-like application to the matter in hand, which is one of their most precious

characteristics. "Whoever" (says Mr. Laing*) "looks into the social economy of an English or Scotch manufacturing district, in which the population has become thoroughly imbued with the spirit of productiveness, will observe that it is not merely the expertness, despatch, and skill of the operative himself, that are concerned in the prodigious amount of his production in a given time, but the labourer who wheels coal to his fire, the girl who makes ready his breakfast, the whole population, in short, from the potboy who brings his beer, to the banker who keeps his employer's cash, are inspired with the same alert spirit, are in fact working to his hand with the same quickness and punctuality as he works himself. English workmen taken to the Continent always complain that they cannot get on with their work as at home, because of the slow, unpunctual, pipe-in-mouth working habits of those who have to work to their hands, and on whom their own activity and productiveness mainly depend."

Foreigners are generally quite unaware that to these qualities in English industry the wealth and power which they seek to emulate are in reality owing, and not to the "ships, colonies, and commerce" which these qualities have called into being, and which, even if annihilated, would leave England the richest country in the world. An Englishman, of almost every class, is the most efficient of all labourers, because, to use a common phrase, his heart is in his work. But it is surely quite possible to put heart into his work without being incapable of putting it into anything else. The desirable medium is one which mankind have not often known how to hit: when they do labour, to do it with all their might, and especially with all their mind; but to devote to labour, for mere pecuniary gain, fewer hours in the day, fewer days in the year, and fewer years of life.

* *Notes of a Traveller*, p. 290.

§ 4. The third element which determines the productiveness of the labour of a community is the skill and knowledge therein existing; whether it be the skill and knowledge of the labourers themselves, or of those who direct their labour. No illustration is requisite to show how the efficacy of industry is promoted by the manual dexterity of those who perform mere routine processes; by the intelligence of those engaged in operations in which the mind has a considerable part; and by the amount of knowledge of natural powers and of the properties of objects which is turned to the purposes of industry. That the productiveness of the labour of a people is limited by their knowledge of the arts of life, is self-evident; and that any progress in those arts, any improved application of the objects or powers of nature to industrial uses, enables the same quantity and intensity of labour to raise a greater produce.

One principal department of these improvements consists in the invention and use of tools and machinery. The manner in which these serve to increase production and to economize labour, needs not be specially detailed in a work like the present: it will be found explained and exemplified, in a manner at once scientific and popular, in Mr. Babbage's well-known "Economy of Machinery and Manufactures." An entire chapter of Mr. Babbage's book is composed of instances of the efficacy of machinery in "exerting forces too great for human power, and executing operations too delicate for human touch." But to find examples of work which could not be performed at all by unassisted labour, we need not go so far. Without pumps, worked by steam-engines or otherwise, the water which collects in mines could not in many situations be got rid of at all, and the mines, after being worked to a little depth, must be abandoned: without ships or boats, the sea could never have been crossed; without tools of some sort, trees could not be cut down nor rocks excavated; a plough, or at least a spade, is necessary to any tillage of the ground. Very simple and rude instruments, however,

are sufficient to render literally possible most works hitherto executed by man; and subsequent inventions have chiefly served to enable the work to be performed in greater perfection, and, above all, with a greatly diminished quantity of labour: the labour thus saved becoming disposable for other employment.

The use of machinery is far from being the only mode in which the effects of knowledge in aiding production are exemplified. In agriculture and horticulture, machinery has done little of importance beyond the invention and progressive improvement of the plough and a few other simple instruments. The greatest agricultural inventions have consisted in the direct application of more judicious processes to the land itself and the plants growing on it: such as rotation of crops, to avoid the necessity of leaving the land uncultivated for one season in every two or three; improved manures, to renovate its fertility when exhausted by cropping; conversion of bogs and marshes into cultivable land; such modes of pruning, and of training and propping up plants and trees, as experience has shewn to deserve the preference; in the case of the more expensive cultures, planting the seeds or roots further apart, and more completely pulverizing the soil in which they are placed, &c. In manufactures and commerce, some of the most important improvements consist in economizing time; in making the return follow more speedily upon the labour and outlay. There are others of which the advantage consists in economy of material.

§ 5. But the effects of the increased knowledge of a community in increasing its wealth, need the less illustration as they have become familiar to the most uneducated, from such conspicuous instances as railways and steam ships. A thing not yet, perhaps, so well understood and recognized, is the economical value of the general diffusion of intelligence among the people. The number of persons fitted to direct and superintend any industrial enterprise, or even to execute

any process which cannot be reduced almost to an affair of memory and routine, is always far short of the demand; as is evident from the enormous difference between the salaries paid to such persons, and the wages of ordinary labour. The deficiency of practical good sense, which renders the majority of the labouring class, in this and many other countries, such bad calculators—which makes, for instance, their domestic economy so improvident, lax, and irregular—must disqualify them for any but a low grade of intelligent labour, and render their industry far less productive than with equal energy it otherwise might be. The importance, even in this limited aspect, of popular education, is well worthy of the attention of politicians, especially in England; since competent observers, accustomed to employ labourers of various nations, testify that in the workmen of other countries they often find great intelligence wholly apart from instruction, but that if an English labourer is anything but a hewer of wood and drawer of water, he is indebted to education (though often to self-education) for it*.

* Extracts from the evidence of Mr. Escher, of Zurich, (an engineer and cotton manufacturer employing nearly two thousand working men of many different nations), annexed to the Report of the Poor Law Commissioners in 1840, on the training of pauper children.

“The Italians’ quickness of perception is shown in rapidly comprehending any new descriptions of labour put into their hands, in a power of quickly comprehending the meaning of their employer, of adapting themselves to new circumstances, much beyond what any other classes have. The French workmen have the like natural characteristics, only in a somewhat lower degree. The English, Swiss, German, and Dutch workmen, we find have all much slower natural comprehension. As workmen *only*, the preference is undoubtedly due to the English; because as we find them they are all trained to special branches, on which they have had comparatively superior training and have concentrated all their thoughts. As men of business or of general usefulness, and as men with whom an employer would best like to be surrounded, I should, however, decidedly prefer the Saxons and the Swiss, but more especially the Saxons, because they have had a very careful general education, which has extended their

The moral qualities of the labourers are fully as important, to the efficiency and worth of their labour, as the intellectual. Independently of the effects of intemperance upon their bodily and mental faculties, and of flighty, unsteady habits upon the energy and continuity of their work (points so easily understood as not to require being insisted upon), it is well

capacities beyond any special employment, and rendered them fit to take up, after a short preparation, any employment to which they may be called. If I have an English workman engaged in the erection of a steam engine, he will understand that, and nothing else; and for other circumstances or other branches of mechanics, however closely allied, he will be comparatively helpless to adapt himself to all the circumstances that may arise, to make arrangements for them, and give sound advice or write clear statements and letters on his work in the various related branches of mechanics."

On the connexion between mental cultivation and moral trustworthiness in the labouring class, the same witness says, "The better educated workmen we find are distinguished by superior moral habits in every respect. In the first place, they are entirely sober; they are discreet in their enjoyments, which are of a more rational and refined kind; they have a taste for much better society, which they approach respectfully, and consequently find much readier admittance to it; they cultivate music; they read; they enjoy the pleasures of scenery, and make parties for excursions into the country; they are economical, and their economy extends beyond their own purse to the stock of their master; they are consequently honest and trustworthy." And in answer to a question respecting the English workmen, "Whilst in respect to the work to which they have been specially trained they are the most skilful, they are in conduct the most disorderly, debauched, and unruly, and least respectable and trustworthy of any nation whatsoever whom we have employed (and in saying this I express the experience of every manufacturer on the Continent to whom I have spoken, and especially of the English manufacturers, who make the loudest complaints). These characteristics of depravity do not apply to the English workmen who have received an education, but attach to the others in the degree in which they are in want of it. When the uneducated English workmen are released from the bonds of iron discipline in which they have been restrained by their employers in England, and are treated with the urbanity and friendly feeling which the more educated workmen on the Continent expect and receive from their employers, they, the English workmen, completely lose their balance: they do not understand their

worthy of meditation, how much of the aggregate effect of their labour depends on their trustworthiness. All the labour expended in watching that they fulfil their engagement, or in verifying that they have fulfilled it, is so much withdrawn from the real business of production, to be devoted to a subsidiary function rendered needful not by the necessity of things but by the dishonesty of men. Nor are the greatest outward precautions comparable in efficacy to the monitor within. The advantage that it is to mankind to be able to trust one another, penetrates into every crevice and cranny of human life: the economical is perhaps the smallest part of it, yet even this is incalculable. To consider only the direct waste of wealth occasioned to society by human improbity; there is in all rich communities a predatory population, who live by pillaging or overreaching other people; their numbers cannot be authentically ascertained, but on the lowest estimate, in a country like England, it is very large. The support of these persons is a direct burthen on the national industry. The police, and the whole apparatus of punishment, and of criminal and partly of civil justice, are a second burthen rendered necessary by the first. The highly paid profession of lawyers are required and supported principally by the dishonesty of mankind. As the standard of integrity in a community is higher, so are all these expenses less. But this positive saving is far outweighed by the increased spirit, the feeling of power and confidence, with which works of all sorts are planned and carried on by those who feel that all whose aid is required will do their part faithfully according to their contracts. Conjoint action is possible just in proportion as human beings can rely on each other.

position, and after a certain time become totally unmanageable and useless. The educated English workmen in a short time comprehend their position, and adopt an appropriate behaviour."

The entire evidence of this intelligent and experienced employer of labour is deserving of attention; as well as much testimony on similar points by other witnesses, contained in the same volume.

There are countries in Europe, of first-rate industrial capabilities, where the most serious impediment to conducting business concerns on a large scale, is the rarity of persons who are supposed fit to be trusted with the receipt and expenditure of large sums of money. There are nations whose commodities are looked shily upon by merchants, because they cannot depend on finding the quality of the article conformable to that of the sample. Such short-sighted frauds are far from unexampled even in English exports. Every one has heard of "devil's dust:" and among other instances given by Mr. Babbage is one in which a branch of export trade was for a long time actually stopped by the forgeries and frauds which had occurred in it. On the other hand, the substantial advantage derived in business transactions from proved trustworthiness, is not less remarkably exemplified in the same work. "At one of our largest towns, sales and purchases on a very extensive scale are made daily in the course of business without any of the parties ever exchanging a written document." Spread over a whole year's transactions, how great a return, in saving of time, trouble, and expense, is brought in to the producers and dealers of such a town from their own integrity. "The influence of established character in producing confidence operated in a very remarkable manner at the time of the exclusion of British manufactures from the Continent during the last war. One of our largest establishments had been in the habit of doing extensive business with a house in the centre of Germany; but on the closing of the continental ports against our manufactures, heavy penalties were inflicted on all those who contravened the Berlin and Milan decrees. The English manufacturer continued, nevertheless, to receive orders, with directions how to consign them, and appointments for the time and mode of payment, in letters, the handwriting of which was known to him, but which were never signed, except by the Christian name of one of the firm, and even in some instances they were without any

signature at all. These orders were executed, and in no instance was there the least irregularity in the payments*."

* Some minor instances noticed by Mr. Babbage may be cited, in further illustration of the waste occasioned to society through the inability of its members to trust one another.

"The cost to the purchaser, is the price he pays for any article, added to the cost of verifying the fact of its having that degree of goodness for which he contracts. In some cases the goodness of the article is evident on mere inspection; and in those cases there is not much difference of price at different shops. The goodness of loaf sugar, for instance, can be discerned almost at a glance; and the consequence is, that the price is so uniform, and the profit upon it so small, that no grocer is at all anxious to sell it; whilst, on the other hand, tea, of which it is exceedingly difficult to judge, and which can be adulterated by mixture so as to deceive the skill even of a practised eye, has a great variety of different prices, and is that article which every grocer is most anxious to sell to his customers. The difficulty and expense of verification are in some instances so great as to justify the deviation from well-established principles. Thus it is a general maxim that Government can purchase any article at a cheaper rate than that at which they can manufacture it themselves. But it has, nevertheless, been considered more economical to build extensive flour-mills, (such as those at Deptford,) and to grind their own corn, than to verify each sack of purchased flour, and to employ persons in devising methods of detecting the new modes of adulteration which might be continually resorted to." A similar want of confidence might deprive a nation, such as the United States, of a large export trade in flour.

Again: "Some years since, a mode of preparing old clover and trefoil seeds by a process called *doctoring* became so prevalent as to excite the attention of the House of Commons. It appeared in evidence before a Committee, that the old seed of the white clover was doctored by first wetting it slightly, and then drying it by the fumes of burning sulphur; and that the red clover seed had its colour improved by shaking it in a sack with a small quantity of indigo; but this being detected after a time, the *doctors* then used a preparation of logwood, fined by a little copperas, and sometimes by verdigris; thus at once improving the appearance of the old seed, and diminishing, if not destroying, its vegetative power, already enfeebled by age. Supposing no injury had resulted to good seed so prepared, it was proved that from the improved appearance, the market price would be enhanced by this process from five to twenty-five shillings a hundred weight. But the greatest evil arose from the circumstance of these processes rendering old and worthless seed equal in appearance to the best. One witness had tried some doctored seed, and found that not above one

§ 6. Among the secondary causes which determine the productiveness of productive agents, the most important is Security. By security I mean the completeness of the protection which society affords to its members. This consists of protection *by* the government and protection *against* the government. The latter is the more important. Where a person known to possess anything worth taking away, can expect nothing but to have it torn from him, with every circumstance of tyrannical violence, by the agents of a rapacious government, it is not likely that many will exert themselves

grain in a hundred grew, and that those which did vegetate died away afterwards; whilst about eighty or ninety per cent of good seed usually grows. The seed so treated was sold to retail dealers in the country, who of course endeavoured to purchase at the cheapest rate, and from them it got into the hands of the farmers, neither of these classes being capable of distinguishing the fraudulent from the genuine seed. Many cultivators in consequence diminished their consumption of the article, and others were obliged to pay a higher price to those who had skill to distinguish the mixed seed, and who had integrity and character to prevent them from dealing in it."

The same writer states that Irish flax, though in natural quality inferior to none, sells, or did lately sell, in the market at a penny to twopence per pound less than foreign or British flax; part of the difference arising from negligence in its preparation, but part from the cause mentioned in the evidence of Mr. Corry, many years Secretary to the Irish Linen Board: "The owners of the flax, who are almost always people in the lower classes of life, believe that they can best advance their own interests by imposing on the buyers. Flax being sold by weight, various expedients are used to increase it; and every expedient is injurious, particularly the damping of it; a very common practice which makes the flax afterwards heat. The inside of every bundle (and the bundles all vary in bulk) is often full of pebbles, or dirt of various kinds, to increase the weight. In this state it is purchased and exported to Great Britain."

It was given in evidence before a Committee of the House of Commons that the lace trade at Nottingham had greatly fallen off from the making of fraudulent and bad articles: that "a kind of lace called *single-press* was manufactured" (I still quote Mr. Babbage) "which, although good to the eye, became nearly spoiled in washing by the slipping of the threads; that not one person in a thousand could distinguish the difference between *single-press* and *double-press* lace; that even workmen and manufacturers were obliged to employ a magnifying-glass for that purpose; and that in another similar article, called *warp-lace*, such aid was essential."

to produce much more than necessaries. This is the acknowledged explanation of the poverty of many fertile tracts of Asia, which were once prosperous and populous. From this to the degree of security enjoyed in the best governed parts of Europe, there are numerous gradations. In France, before the Revolution, a vicious system of taxation on the land, and still more the absence of redress against the arbitrary exactions which were made under colour of the taxes, rendered it the interest of every cultivator to appear poor, and therefore to cultivate badly. The only insecurity which is altogether paralyzing to the active energies of producers, is that arising from the government, or from persons invested with its authority. Against all other depredators there is a hope of defending oneself. Greece and the Greek colonies in the ancient world, Flanders and Italy in the middle ages, by no means enjoyed what any one with modern ideas would call security: the state of society was most unsettled and turbulent; person and property were exposed to a thousand dangers. But they were free countries; they were neither arbitrarily oppressed, nor systematically plundered by their governments. Against other enemies the individual energy which their institutions called forth, enabled them to make successful resistance: their labour, therefore, was eminently productive, and their riches, while they remained free, were constantly on the increase. The Roman despotism, putting an end to wars and internal conflicts throughout the empire, relieved the subject population from much of the former insecurity: but because it left them under the grinding yoke of its own rapacity, they became enervated and impoverished until they were an easy prey to barbarous but free invaders. They would neither fight nor labour, because they were no longer suffered to enjoy that for which they fought and laboured.

Much of the security of person and property in modern nations is the effect of manners and opinion rather than of law. There are countries in Europe where the monarch is

nominally absolute, but where, from the restraints imposed by established usage, no subject feels practically in the smallest danger of having his possessions arbitrarily seized or a contribution levied on them by the government. There must however be in such governments much petty plunder and other tyranny by subordinate agents, for which redress is not obtained, owing to the want of publicity which is the ordinary character of absolute governments. In England the people are tolerably well protected, both by institutions and manners, against the agents of government; but, for the security they enjoy against other evil doers, they are very little indebted to their institutions. The laws cannot be said to afford protection to property when they afford it only at such a cost as renders submission to injury in general the better calculation. The security of property in England is owing (except as regards open violence) to opinion, and the fear of exposure, much more than to the law and the courts of justice. Of late, indeed, law has thrown a part of its weight into the other scale, by a course of legislation on the subject of insolvent debtors, which is almost a direct encouragement to repudiation of engagements.

Independently of all imperfection in the bulwarks which society purposely throws round what it recognizes as property, there are various other modes in which defective institutions impede the employment of the productive resources of a country to the best advantage. We shall have occasion for noticing many of these in the progress of our subject. It is sufficient here to remark, that the efficiency of industry may be expected to be great, in proportion as the fruits of industry are insured to the person exerting it; and that all social arrangements are conducive to useful exertion, according as they provide that the reward of every one for his labour shall be proportioned as much as possible to the benefit which it produces. All laws or usages which favour one class or sort of persons to the disadvantage of others; which chain up the efforts of any part of the community in

pursuit of their own good, or stand between those efforts and their natural fruits—are (independently of all other grounds of condemnation) violations of the fundamental principles of economical policy; and tend to make the aggregate productive powers of the community productive in a less degree than they would otherwise be.