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(*Sraffa* pages 11-51)

CHAPTER 1

ON VALUE.

SECTION I

The value of a commodity, or the quantity of any other commodity for which it will exchange, depends on the relative quantity of labour which is necessary for its production, and not on the greater or less compensation which is paid for that labour.

IT has been observed by Adam Smith, that "the word Value has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called value in use; the other value in exchange. The things," he continues, "which have the greatest value in use, have frequently little or no value in exchange; and, on the contrary, those which have the greatest value in exchange, have little or no value in use." Water and air are abundantly useful; they are indeed indispensable to existence, yet, under ordinary circumstances, nothing can be obtained in exchange for them. Gold, on the contrary, though of little use compared with air or water, will exchange for a great quantity of other goods.

Utility then is not the measure of exchangeable value, although it is absolutely essential to it. If a commodity were in no way useful,—in other words, if it could in no way contribute to our gratification,—it would be destitute of exchangeable value, however scarce it might be, or whatever quantity of labour might be necessary to procure it.

12 Possessing utility, commodities derive their exchangeable value from two sources: from their scarcity, and from the quantity of labour required to obtain them.

There are some commodities, the value of which is determined by their scarcity alone. No labour can increase the quantity of such goods, and therefore their value cannot be lowered by an increased supply. Some rare statues and pictures, scarce books and coins, wines of a peculiar quality, which can be made only from grapes grown on a particular soil, of which there is a very limited quantity, are all of this description. Their value is wholly independent of the quantity of labour originally necessary to produce them, and varies with the varying wealth and inclinations of those who are desirous to possess them.

original purchase-money

that was paid for all things." Again, "in that early and rude state of society, which precedes both the accumulation of stock and the appropriation of land, the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for exchanging them for one another. If among a nation of hunters, for example, it usually cost twice the labour to kill a beaver which it does to kill a deer, one beaver should naturally exchange for, or be worth two deer. It is natural that what is usually the produce of two days', or two hours' labour, should be worth double of what is usually the produce of one day's, or one hour's labour."

That this is really the foundation of the exchangeable value of all things, excepting those which cannot be increased by human industry, is a doctrine of the utmost importance in political economy; for from no source do so many errors, and so much difference of opinion in that science proceed, as from the vague ideas which are attached to the word value.

If the quantity of labour realized in commodities, regulate their exchangeable value, every increase of the quantity of labour must augment the value of that commodity on which it is exercised, as every diminution must lower it.

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^{*} Book i. chap. 5.

Adam Smith, who so accurately defined the original source of exchangeable value, and who was bound in consistency to maintain, that all things became more or less valuable in proportion as more or less labour was bestowed on their production, 14 has himself erected another standard measure of value, and speaks of things being more or less valuable, in proportion as they will exchange for more or less of this standard measure. Sometimes he speaks of corn, at other times of labour, as a standard measure; not the quantity of labour bestowed on the production of any object, but the quantity which it can command in the market: as if these were two equivalent expressions, and as if because a man's labour had become doubly efficient, and he could therefore produce twice the quantity of a commodity, he would necessarily receive twice the former quantity in exchange for it.

If this indeed were true, if the reward of the labourer were always in proportion to what he produced, the quantity of labour bestowed on a commodity, and the quantity of labour which that commodity would purchase, would be equal, and either might accurately measure the variations of other things: but they are not equal; the first is under many circumstances an invariable standard, indicating correctly the variations of other things; the latter is subject to as many fluctuations as the commodities compared with it. Adam Smith, after most ably showing the insufficiency of a variable medium, such as gold and silver, for the purpose of determining the varying value of other things, has himself, by fixing on corn or labour, chosen a medium no less variable.

Gold and silver are no doubt subject to fluctuations, from the discovery of new and more abundant mines; but such discoveries are rare, and their effects, though powerful, are limited to periods of comparatively short duration. They are subject also to fluctuation, from improvements in the skill and machinery with which the mines may be worked; as in consequence of such improvements, a greater quantity may be obtained with the same labour. They are further subject to fluctuation from the decreasing produce of the mines, after they 15 have yielded a supply to the world, for a succession of ages. But from which of these sources of fluctuation is corn exempted? Does not that also vary, on one hand, from improvements in agriculture, from improved machinery and implements used in husbandry, as well as from the discovery of new tracts of fertile land, which in other countries may be taken into cultivation, and which will affect the value of corn in every market where importation is free? Is it not on the other hand subject to be enhanced in value from prohibitions of importation, from increasing population and wealth, and the greater difficulty of obtaining the increased supplies, on account of

the additional quantity of labour which the cultivation of inferior lands requires? Is not the value of labour equally variable; being not only affected, as all other things are, by the proportion between the supply and demand, which uniformly varies with every change in the condition of the community, but also by the varying price of food and other necessaries, on which the wages of labour are expended?

In the same country double the quantity of labour may be required to produce a given quantity of food and necessaries at one time, that may be necessary at another, and a distant time; yet the labourer's reward may possibly be very little diminished. If the labourer's wages at the former period, were a certain quantity of food and necessaries, he probably could not have subsisted if that quantity had been reduced. Food and necessaries in this case will have risen 100 per cent. if estimated by the quantity of labour necessary to their production, while they will scarcely have increased in value, if measured by the quantity of labour for which they will exchange.

The same remark may be made respecting two or more countries. In America and Poland, on the land last taken into cultivation, a year's labour of any given number of men, will produce much more corn than on land similarly circumstanced 16 in England. Now, supposing all other necessaries to be equally cheap in those three countries, would it not be a great mistake to conclude, that the quantity of corn awarded to the labourer, would in each country be in proportion to the facility of production?

If the shoes and clothing of the labourer, could, by improvements in machinery, be produced by one fourth of the labour now necessary to their production, they would probably fall 75 per cent.; but so far is it from being true, that the labourer would thereby be enabled permanently to consume four coats, or four pair of shoes, instead of one, that it is probable his wages would in no long time be adjusted by the effects of competition, and the stimulus to population, to the new value of the necessaries on which they were expended. If these improvements extended to all the objects of the labourer's consumption, we should find him probably at the end of a very few years, in possession of only a small, if addition to his enjoyments, although the any, exchangeable value of those commodities, compared with any other commodity, in the manufacture of which no such improvement were made, had sustained a very considerable reduction; and though they were the produce of a very considerably diminished quantity of labour.

It cannot then be correct, to say with Adam Smith, "that as labour may sometimes purchase a greater, and sometimes a smaller quantity of goods, it is their value which varies, not that of the labour which purchases them;" and therefore, "that labour alone never varying in its own value, is alone the ultimate and real standard by which the value of all commodities can 17 at all times and places be estimated and compared;"—but it is correct to say, as Adam Smith had previously said, "that the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for exchanging them for one another;" or in other words, that it is the comparative quantity of commodities which labour will produce, that determines their present or past relative value, and not the comparative quantities of commodities, which are given to the labourer in exchange for his labour.

Two commodities vary in relative value, and we wish to know in which the variation has really taken place. If we compare the present value of one, with shoes, stockings, hats, iron, sugar, and all other commodities, we find that it will exchange for precisely the same quantity of all these things as before. If we compare the other with the same commodities, we find it has varied with respect to them all: we may then with great 18 probability infer that the variation has been in this commodity, and not in the commodities with which we have compared it. If on examining still more particularly into all the circumstances connected with the production of these various commodities, we find that precisely the same quantity of labour and capital are necessary to the production of the shoes, stockings, hats, iron, sugar, &c.; but that the same quantity as before is not necessary to produce the single commodity whose relative value is altered, probability is changed into certainty, and we are sure that the variation is in the single commodity: we then discover also the cause of its variation.

If I found that an ounce of gold would exchange for a less quantity of all the commodities above enumerated, and many others; and if, moreover, I found that by the discovery of a new and more fertile mine, or by the employment of machinery to great advantage, a given quantity of gold could be obtained with a less quantity of labour, I should be justified in saying that the cause of the alteration in the value of gold relatively to other commodities, was the greater facility of its production, or the smaller quantity of labour necessary to obtain it. In like manner, if labour fell very considerably in value, relatively to all other things, and if I found that its fall was in consequence of an abundant supply, encouraged by the great facility with which corn, and the other necessaries of the labourer, were produced, it would, I apprehend, be correct for me to say that corn and necessaries had fallen in value in consequence of less quantity of labour being necessary to produce them, and that this facility of providing for the support of the

labourer had been followed by a fall in the value of labour. No, say Adam Smith and Mr Malthus, in the case of the gold you were correct in calling its variation a fall of its value, because corn and labour had not 19 then varied; and as gold would command a less quantity of them, as well as of all other things, than before, it was correct to say that all things had remained stationary, and that gold only had varied; but when corn and labour fall, things which we have selected to be our standard measure of value, notwithstanding all the variations to which we acknowledge they are subject, it would be highly improper to say so; the correct language will be to say, that corn and labour have remained stationary, and all other things have risen in value.

Now it is against this language that I protest. I find that precisely, as in the case of the gold, the cause of the variation between corn and other things, is the smaller quantity of labour necessary to produce it, and therefore, by all just reasoning, I am bound to call the variation of corn and labour a fall in their value, and not a rise in the value of the things with which they are compared. If I have to hire a labourer for a week, and instead of ten shillings I pay him eight, no variation having taken place in the value of money, the labourer can probably obtain more food and necessaries, with his eight shillings, than he before obtained for ten: but this is owing, not to a rise in the real value of his wages, as stated by Adam Smith, and more recently by Mr Malthus, but to a fall in the value of the things on which is wages are expended, things perfectly distinct; and yet for calling this a fall in the real value of wages, I am told that I adopt new and unusual language, not reconcileable with the true principles of the science. To me it appears that the unusual and, indeed, inconsistent language, is that used by my opponents.

Suppose a labourer to be paid a bushel of corn for a week's work, when the price of corn is 80s. per quarter, and that he is paid a bushel and a quarter when the price falls to 40s. Suppose, too, that he consumes half a bushel of corn a-week 20 in his own family, and exchanges the remainder for other things, such as fuel, soap, candles, tea, sugar, salt, &c. &c.; if the three-fourths of a bushel which will remain to him, in one case, cannot procure him as much of the above commodities as half a bushel did in the other, which it will not, will labour have risen or fallen in value? Risen, Adam Smith must say, because his standard is corn, and the labourer receives more corn for a week's labour. Fallen, must the same Adam Smith say, "because the value of a thing depends on the power of purchasing other goods which the possession of that object conveys," and labour has a less power of purchasing such other goods.

SECTION II

Labour of different qualities differently rewarded. This is no cause of variation in the relative value of commodities.

IN speaking, however, of labour, as being the foundation of all value, and the relative quantity of labour as almost exclusively determining the relative value of commodities, I must not be supposed to be inattentive to the different qualities of labour, and the difficulty of comparing an hour's or a day's labour, in one employment, with the same duration of labour in another. The estimation in which different qualities of labour are held, comes soon to be adjusted in the market with sufficient precision for all practical purposes, and depends much on the comparative skill of the labourer, and intensity of the labour performed. The scale, when once formed, is liable to little variation. If a day's labour of a working jeweller be more valuable than a day's labour of a common labourer, it has long 21 ago been adjusted, and placed in its proper position in the scale of value^{*}.

^{*} "But though labour be the real measure of the exchangeable value of all commodities, it is not that by which their value is commonly estimated. It is of difficult to ascertain the proportion between two different quantities of labour. The time spent in two different sorts of work will not always alone determine this proportion. The different degrees of hardship

In comparing therefore the value of the same commodity, at different periods of time, the consideration of the comparative skill and intensity of labour, required for that particular commodity, needs scarcely to be attended to, as it operates equally at both periods. One description of labour at one time is compared with the same description of labour at another; if a tenth, a fifth, or a fourth, has been added or taken away, an effect proportioned to the cause will be produced on the relative value of the commodity.

If a piece of cloth be now of the value of two pieces of linen, and if, in ten years hence, the ordinary value of a piece of cloth should be four pieces of linen, we may safely conclude, that either more labour is required to make the cloth, or less to make the linen, or that both causes have operated.

book i. chap. 10 [actually book I chap. 5]

endured, and of ingenuity exercised, must likewise be taken into account. There may be more labour in an hour's hard work than in two hours' easy business; or in an hour's application to a trade which it cost ten years' labour to learn, stry at an ordinary and obvious employment. But it is not easy to find any accurate measure either of hardship or ingenuity. In exchanging, indeed, the different productions of different sorts of labour for one another, some allowance is commonly made for both. It is adjusted, however, not by any accurate measure, but by the higgling and bargaining of the market, according to that sort of rough equality which, though not exact, is sufficient for *Wealth of Nations*,

As the inquiry to which I wish to draw the reader's attention, relates to the effect of the variations in the relative value of commodities, and not in their absolute value, it will be of little importance to examine into the comparative degree of estimation in which the different kinds of human labour are held. We may fairly conclude, that whatever inequality there might originally have been in them, whatever the ingenuity, skill, or time necessary for the acquirement of one species of manual dexterity more than another, it continues nearly the same from one generation to another; or at least, that the variation is very inconsiderable from year to year, and therefore, can have little effect, for short periods, on the relative value of commodities.

"The proportion between the different rates both of wages and profit in the different employments of labour and stock, seems not to be much affected, as has already been observed, by the riches or poverty, the advancing, stationary, or declining state of the society. Such revolutions in the public welfare, though they affect the general rates both of wages and profit, must in the end affect them equally in all different employments. The proportion between them therefore must remain the same, and cannot well be altered, at least for any considerable time, by any such revolutions^{*}."

^{*}Wealth of Nations, book i. chap. 10

SECTION III

Not only the labour applied immediately to commodities affect their value, but the labour also which is bestowed on the complements, tools, and buildings, with which much labour is assisted.

EVEN in that early state to which Adam Smith refers, some capital, though possibly made and accumulated by the hunter 23 himself, would be necessary to enable him to kill his game. Without some weapon, neither the beaver nor the deer could be destroyed, and therefore the value of these animals would be regulated, not solely by the time and labour necessary to their destruction, but also by the time and labour necessary for providing the hunter's capital, the weapon, by the aid of which their destruction was effected.

Suppose the weapon necessary to kill the beaver, was constructed with much more labour than that necessary to kill the deer, on account of the greater difficulty of approaching near to the former animal, and the consequent necessity of its being more true to its mark; one beaver would naturally be of more value than two deer, and precisely for this reason, that more labour would, on the whole, be necessary to its destruction. Or suppose that the same quantity of labour was necessary to make both weapons, but that they were of very un-

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equal durability; of the durable implement only a small portion of its value would be transferred to the commodity, a much greater portion of the value of the less durable implement would be realized in the commodity which it contributed to produce.

24 All the implements necessary to kill the beaver and deer might belong to one class of men, and the labour employed in their destruction might be furnished by another class; still, their comparative prices would be in proportion to the actual labour bestowed, both on the formation of the capital, and on the destruction of the animals. Under different circumstances of plenty or scarcity of capital, as compared with labour, under different circumstances of plenty or scarcity of the food and necessaries essential to the support of men, those who furnished an equal value of capital for either one employment or for the other, might have a half, a fourth, or an eighth of the produce obtained, the remainder being paid as wages to those who furnished the labour. yet this division could not affect the relative value of these commodities, since whether the profits of capital were greater or less, whether they were 50, 20, or 10 per cent.. or whether the wages of labour were high or they operate equally would on low, both employments.

If we suppose the occupations of the society extended, that some provide canoes and tackle

necessary for fishing, others the seed and rude machinery first used in agriculture, still the same principle would hold true, that the exchangeable value of the commodities produced would be in proportion to the labour bestowed on their production; not on their immediate production only, but on all those implements or machines required to give effect to the particular labour to which they were applied.

If we look to a state of society in which greater improvements have been made, and in which arts and flourish. we shall still find that commerce commodities vary in value conformably with this principle: in estimating the exchangeable value of stockings, for example, we shall find that their value, comparatively with other things, depends on the total quantity of labour necessary to manufacture them, and bring them to 25 market. First, there is the labour necessary to cultivate the land on which the raw cotton is grown; secondly, the labour of conveying the cotton to the country where the stockings are to be manufactured, which includes a portion of the labour bestowed in building the ship in which it is conveyed, and which is charged in the freight of the goods; thirdly, the labour of the spinner and weaver; fourthly, a portion of the labour of the engineer, smith, and carpenter, who erected the buildings and machinery, by the help of which they are made; fifthly, the labour of the retail dealer, and

of many others, whom it is unnecessary further to particularize. The aggregate sum of these various kinds of labour, determines the quantity of other things for which these stockings will exchange, while the same consideration of the various quantities of labour which have been bestowed on those other things, will equally govern the portion of them which will be given for the stockings.

convince ourselves that this is the real То foundation of exchangeable value, let us suppose any improvement to be made in the means of abridging labour in any one of the various processes through which the raw cotton must pass, before the manufactured stockings come to the market, to be exchanged for other things; and observe the effects which will follow. If fewer men were required to cultivate the raw cotton, or if fewer sailors were in navigating, employed or shipwrights in constructing the ship, in which it was conveyed to us; if fewer hands were employed in raising the buildings and machinery, or if these, when raised, were rendered efficient, the stockings more would inevitably fall in value, and consequently command less of other things. They would fall, because a less quantity of labour was necessary to their production, and would therefore exchange for a smaller quantity of those things in which no such abridgment of labour had been made.

26 Economy in the use of labour never fails to re-

duce the relative value of a commodity, whether the saving be in the labour necessary to the manufacture of the commodity itself, or in that necessary to the formation of the capital, by the aid of which it is produced. In either case the price of stockings would fall, whether there were fewer men employed as bleachers. spinners, and weavers. persons immediately necessary to their manufacture; or as sailors, carriers, engineers, and smiths, persons more indirectly concerned. In the one case, the whole saving of labour would fall on the stockings, because that portion of labour was wholly confined to the stockings; in the other, a portion only would fall on the stockings, the remainder being applied to all those other commodities, to the production of which the buildings, machinery, and carriage, were subservient.

Suppose that in the early stages of society, the bows and arrows of the hunter were of equal value, and of equal durability, with the canoe and implements of the fisherman, both being the produce of the same quantity of labour. Under such circumstances the value of the deer, the produce of the hunter's day's labour, would be exactly equal to the value of the fish, the produce of the fisherman's day's labour. The comparative value of the fisherman's day's labour. The comparative value of the fish and the game, would be entirely regulated by the quantity of labour realized in each; whatever might be the quantity of production, or however high or low general wages or profits might be. If for example the canoes and implements of the fisherman were of the value of 100l. and were calculated to last for ten years, and he employed ten men, whose annual labour cost 100*l*, and who in one day obtained 27 by their labour twenty salmon: If the weapons employed by the hunter were also of 100*l*. value and calculated to last ten years, and if he also employed ten men, whose annual labour cost 100l. and who in one day procured him ten deer; then the natural price of a deer would be two salmon, whether the proportion of the whole produce bestowed on the men who obtained it, were large or small. The proportion which might be paid for wages, is of the utmost importance in the question of profits; for it must at once be seen, that profits would be high or low, exactly in proportion as wages were low or high; but it could not in the least affect the relative value of fish and game, as wages would be high or low at the same time in both occupations. If the hunter urged the plea of his paying a large proportion, or the value of a large proportion of his game for wages, as an inducement to the fisherman to give him more fish in exchange for his game, the latter would state that he was equally affected by the same cause; and therefore under all variations of wages and profits, under all the effects of accumulation of capital, as long as they continued by a day's labour to obtain respectively the same quantity of fish, and the same quantity of game, the

natural rate of exchange would be one deer for two salmon.

If with the same quantity of labour a less quantity of fish, or a greater quantity of game were obtained, the value of fish would rise in comparison with that of game. If, on the contrary, with the same quantity of labour a less quantity of game, or a greater quantity of fish was obtained, game would rise in comparison with fish.

If there were any other commodity which was invariable in its value, we should be able to ascertain, by comparing the value of fish and game with this commodity, how much of the 28 variation was to be attributed to a cause which affected the value of fish, and how much to a cause which affected the value of game.

Suppose money to be that commodity. If a salmon were worth 1l. and a deer 2 l. one deer would be worth two salmon. But a deer might become of the value of three salmon, for more labour might be required to obtain the deer, or less to get the salmon or both these causes might operate at the same time. If we had this invariable standard, we might easily ascertain in what degree either of these causes operated. If salmon continued to sell for 1l. whilst deer rose to 3 l. we might conclude that more labour was required to

obtain the deer. If deer continued at the same price of 2l. and salmon sold for 13s. 4d. we might then be sure that less labour was required to obtain the salmon; and if deer rose to 2l. 10s and salmon fell to 16s. 8d. we should be convinced that both causes had operated in producing the alteration of the relative value of these commodities.

No alteration in the wages of labour could produce any alteration in the relative value of these commodities; for suppose them to rise, no greater quantity of labour would be required in any of these occupations, but it would be paid for at a higher price, and the same reasons which should make the hunter and fisherman endeavour to raise the value of their game and fish, would cause the owner of the mine to raise the value of his gold. This inducement acting with the same force on all these three occupations, and the relative situation of those engaged in them being the same before and after the rise of wages, the relative value of game, fish, and gold, would continue unaltered. Wages might rise twenty per cent., and profits 29 consequently fall in a greater or less proportion, without occasioning the least alteration in the relative value of these commodities.

Now suppose, that with the same labour and fixed capital, more fish could be produced, but no more gold or game, the relative value of fish would fall in comparison with gold or game. If, instead of twenty salmon, twenty-five were the produce of one day's labour, the price of a salmon would be sixteen shillings instead of a pound, and two salmon and a half, instead of two salmon, would be given in exchange for one deer, but the price of deer would continue at 2*l*. as before. In the same manner, if fewer fish could be obtained with the same capital and labour, fish would rise in comparative value. Fish then would rise or fall in exchangeable value, only because more or less labour was required to obtain a given quantity; and it never could rise or fall beyond the proportion of the increased or diminished quantity of labour required.

If we had then an invariable standard, by which measure the variation in other commodities, we should the utmost limit to which they could permanently rise, if produced under the circumstances supposed, was proportioned the additional quantity of labour required for their production; and that unless more labour were required for their production, they could not rise in any degree whatever. A rise of wages would not raise them in money value, nor relatively to any other commodities, the production of which required no additional quantity of labour, which employed the same proportion of fixed and circulating capital, and fixed capital of the same durability. If more or less labour were required in the production of the other commodity, we have already stated that this will immediately occasion an alteration in

its relative 30 value, but such alteration is owing to the altered quantity of requisite labour, and not to the rise of wages.

SECTION IV

The principle that the quantity of labour bestowed on the production of commodities regulates their relative value, considerably modified by the employment of machinery and other fixed and durable capital.

IN the former section we have supposed the implements and weapons necessary to kill the deer and salmon, to be equally durable, and to be the result of the same quantity of labour, and we have seen that the variations in the relative value of deer and salmon depended solely on the varying quantities of labour necessary to obtain them,-but in every state of implements, buildings, society. the tools. and machinery employed in different trades may be of various degrees of durability, and may require different portions of labour to produce them. The proportions, too, in which the capital that is to support labour, and the capital that is invested in tools, machinery and buildings, may be variously combined. This difference in the degree of durability of fixed capital, and this variety in the proportions in which the two sorts of capital may be combined, introduce another cause, besides the greater or less quantity of labour necessary to produce commodities, for the variations in their relative value—this cause is the rise or fall in the value of labour.

31 The food and clothing consumed by the labourer, the buildings in which he works, the implements with which his labour is assisted, are all of a perishable nature. There is however a vast difference in the time for which these different capitals will endure: a steam-engine will last longer than a ship, a ship than the clothing of the labourer, and the clothing of the labourer longer than the food which he consumes.

According as capital is rapidly perishable, and requires to be frequently reproduced, or is of slow consumption, it is classed under the heads of circulating, or of fixed capital.^{*} A brewer, whose buildings and machinery are valuable and durable, is said to employ a large portion of fixed capital: on the contrary, a shoemaker, whose capital is chiefly employed in the payment of wages, which are expended on food and clothing, commodities more perishable than buildings and machinery, is said to employ a large proportion of his capital as circulating capital.

It is also to be observed that the circulating capital may circulate, or be returned to its em-

^{*} A division not essential, and in which the line of demarcation cannot be accurately drawn.

ployer, in very unequal times. The wheat bought by a farmer to sow is comparatively a fixed capital to the wheat purchased by a baker to make into loaves. One leaves it in the ground, and can obtain no return for a year; the other can get it ground into flour, sell it as bread to his customers, and have his capital free to renew the same, or commence any other employment in a week.

32 Two trades then may employ the same amount of capital; but it may be very differently divided with respect to the portion which is fixed, and that which is circulating.

In one trade very little capital may be employed as circulating capital, that is to say in the support of labour—it may be principally invested in machinery, implements, buildings, &c. capital of a comparatively fixed and durable character. In another trade the same amount of capital may be used, but it may be chiefly employed in the support of labour, and very little may be invested in implements, machines, and buildings. A rise in the wages of labour cannot fail to affect unequally, commodities produced under such different circumstances.

Again two manufacturers may employ the same amount of fixed, and the same amount of circulating capital; but the durability of their fixed capitals may be very unequal. One may have steam-engines of the value of 10,000*l*., the other, ships of the same value.

If men employed no machinery in production but labour only, and were all the same length of time before they brought their commodities to market, the exchangeable value of their goods would be precisely in proportion to the quantity of labour employed.

If they employed fixed capital of the same value and of the same durability, then, too, the value of the commodities produced would be the same, and they would vary with the greater or less quantity of labour employed on their production.

But although commodities produced under similar circumstances, would not vary with respect to each other, from any cause but an addition or diminution of the quantity of labour necessary to produce one or other of them, yet compared with 33 others not produced with the same proportionate quantity of fixed capital, they would vary from the other cause also which I have before mentioned, namely, a rise in the value of labour, although neither more nor less labour were employed in the production of either of them. Barley and oats would continue to bear the same relation to each other under any variation of wages. Cotton goods and cloth would do the same, if they also were produced under circumstances precisely similar to each other, but yet with a rise or fall of wages, barley might be more or less valuable compared with cotton goods, and oats compared with cloth.

Suppose two men employ one hundred men each for a year in the construction of two machines, and another man employs the same number of men in cultivating corn, each of the machines at the end of the year will be of the same value as the corn, for they will each be produced by the same quantity of labour. Suppose one of the owners of one of the machines to employ it, with the assistance of one hundred men, the following year in making cloth, and the owner of the other machine to employ his also, with the assistance likewise of one hundred men, in making cotton goods, while the farmer continues to employ one hundred men as before in the cultivation of corn. During the second year they will all have employed the same quantity of labour, but the goods and machine together of the clothier, and also of the cotton manufacturer, will be the result of the labour of two hundred men, employed for a year; or, rather, of the labour of one hundred men for two years; whereas the corn will be produced by the labour of one hundred men for one year, consequently if the corn be of the value of 500*l*. the machine and cloth of the clothier together, ought to be of the value of 1,000*l*. and the machine and cotton goods of the cotton manufacturer ought to be also of twice the value of the corn.

But they will be of more than twice the value of the corn, for 34 the profit on the clothier's and cotton manufacturer's capital for the first year has been added to their capitals, while that of the farmer has been expended and enjoyed. On account then of the different degrees of durability of their capitals, or, which is the same thing, on account of the time which must elapse before one set of commodities can be brought to market, they will be valuable, not exactly in proportion to the quantity of labour bestowed on them,—they will not be as two to one, but something more, to compensate for the greater length of time which must elapse before the most valuable can be brought to market.

Suppose that for the labour of each workman 50*l*. per annum were paid, or that 5,000*l*. capital were employed and profits were 10 per cent., the value of each of the machines as well as of the corn, at the end of the first year, would be 5,500*l*.. The second year the manufacturers and farmer will again employ 5,000*l*. each in the support of labour, and will therefore again sell their goods for 5,500l., but the men using the machines, to be on a par with the farmer, must not only obtain 5,500*l*., for the equal capitals of 5,000*l*. employed on labour, but they must obtain a further sum of 550*l*.; for the profit on 5,500*l*. which they have invested in machinery, and consequently their goods must sell for 6,050l. Here then are capitalists employing precisely the same quantity of labour annually on the production of

their commodities, and yet the goods they produce differ in value on account of the different quantities of fixed capital, or accumulated labour, employed by each respectively. The cloth and cotton goods are of the same value, because they are the produce of equal quantities of labour, and equal quantities of fixed capital; but corn is not of the same value as these commodities, because it is produced, as far as regards fixed capital, under different circumstances.

But how will their relative value be affected by a rise in the value of labour? It is evident that the relative values of cloth 35 and cotton goods will undergo no change, for what affects one must equally affect the other, under the circumstances supposed: neither will the relative values of wheat and barley undergo any change, for they are produced under the same circumstances as far as fixed and circulating capital are concerned; but the relative value of corn to cloth, or to cotton goods, must be altered by a rise of labour.

There can be no rise in the value of labour without a fall of profits. If the corn is to be divided between the farmer and the labourer, the larger the proportion that is given to the latter, the less will remain for the former. So if cloth or cotton goods be divided between the workman and his employer, the larger the proportion given to the former, the less remains for the latter. Suppose then, that owing to a rise of wages, profits fall from 10 to 9 per cent., instead of adding 550l. to the common price of their goods (to 5,500*l*.) for the profits on their fixed capital, the manufacturers would add only 9 per cent. on that sum, or 4950l., consequently the price would be 5,995l. instead of 6,050*l*. As the corn would continue to sell for 5,500*l*., the manufactured goods in which more fixed capital was employed, would fall relatively to corn or to any other goods in which a less portion of fixed capital entered. The degree of alteration in the relative value of goods, on account of a rise or fall of labour, would depend on the proportion which the fixed capital bore to the whole capital employed. All commodities which are produced by very valuable machinery, or in very valuable buildings, or which require a great length of time before they can be brought to market, would fall in relative value, while all those which were chiefly produced by labour, or which would be speedily brought to market would rise in relative value.

36 The reader, however, should remark, that this cause of the variation of commodities is comparatively slight in its effects. With such a rise of wages as should occasion a fall of one per. cent. in profits, goods produced under the circumstances I have supposed, vary in relative value only one per cent.: they fall with so great a fall of profits from 6,050*l*. to 5,995*l*. The greatest effects which could be produced on the relative prices of these

goods from a rise of wages, could not exceed 6 or 7 per cent.; for profits could not, probably, under any circumstances, admit of a greater general and permanent depression than to that amount.

Not so with the other great cause of the variation in the value of commodities, namely, the increase or diminution in the quantity of labour necessary to produce them. If to produce the corn, eighty, instead of one hundred men, should be required, the value of the corn would fall 20 per cent. or from 5,500l. to 4,400*l*. If to produce the cloth, the labour of eighty instead of one hundred men would suffice, cloth would fall from 6,050*l*. to 4,950*l*. An alteration in the permanent rate of profits, to any great amount, is the effect of causes which do not operate but in the course of years; whereas alterations in the quantity of labour necessary to produce commodities, are of daily occurrence. Every improvement in machinery, in tools, in buildings, in raising the raw material, saves labour, and enables us to produce the commodity to which the improvement is applied with more facility, and consequently its value alters. In estimating, then, the causes of the variations in the value of commodities, although it would be wrong wholly to omit the consideration of the effect produced by a rise or fall of labour, it would be equally incorrect to attach much importance to it; and consequently, in the subsequent part of

this work, though I shall occasionally refer to this cause of variation, I shall consider all the great variations which take place in the relative value of commodities to be produced by 37 the greater or less quantity of labour which may be required from time to time to produce them.

It is hardly necessary to say, that commodities which have the same quantity of labour bestowed on their production, will differ in exchangeable value, if they cannot be brought to market in the same time.

Suppose I employ twenty men at an expense of 1,000*l*. for a year in the production of a commodity, and at the end of the year I employ twenty men again for another year, at a further expense of 1,000*l*. in finishing or perfecting the same commodity, and that I bring it to market at the end of two years, if profits be 10 per cent., my commodity must sell for 2,310*l*.; for I have employed 1,000*l*. capital for one year, and 2,100*l*. capital for one year more. Another man employs precisely the same quantity of labour, but he employs it all in the first year; he employs forty men at an expense of 2,000*l*., and at the end of the first year he sells it with 10 per cent. profit, or for 2,200*l*. Here then are two commodities having precisely the same quantity of labour bestowed on them, one of which sells for 2,310l.—the other for 2,200l.

This case appears to differ from the last, but is, in fact, the same. In both cases the superior price of one commodity is owing to the greater length of time which must elapse before it can be brought to market. In the former case the machinery and cloth were more than double the value of the corn, although only double the quantity of labour was bestowed on them. In the second case, one commodity is more valuable than the other, although no more labour was employed on its production. The difference in value arises in both cases from the profits being accumulated as capital, and is only a just compensation for the time that the profits were withheld.

It appears then that the division of capital into different 38 proportions of fixed and circulating capital, employed in different trades, introduces a considerable modification to the rule, which is of application when labour is universal almost exclusively employed in production; namely, that commodities never vary in value, unless a greater or quantity of labour be bestowed on their less production, it being shown in this section that without any variation in the quantity of labour, the rise of its value merely will occasion a fall in the exchangeable value of those goods, in the production of which fixed capital is employed; the larger the amount of fixed capital, the greater will be the fall.

SECTION V

The principle that value does not vary with the rise of fall of wages, modified also by the unequal durability of capital, and by the unequal rapidity with which it is returned to its employer.

IN the last section we have supposed that of two equal capitals in two different occupations, the proportions of fixed and circulating capitals were unequal, now let us suppose them to be in the same proportion but of unequal durability. In proportion as fixed capital is less durable, it approaches to the nature of circulating capital. It will be consumed and its value reproduced in a shorter time, in order to preserve the capital of the manufacturer. We have just seen, that in proportion as fixed capital preponderates in a manufacture, when wages rise, the value of commodities produced in that relatively manufacture. is lower than that of commodities produced in manufactures where circulating capital preponderates. In proportion to the 39 less durability of fixed capital, and its approach to the nature of circulating capital, the same effect will be produced by the same cause.

If fixed capital be not of a durable nature, it will require a great quantity of labour annually to keep it in its original state of efficiency; but the labour so bestowed may be considered as really expended on the commodity manufactured, which must bear a value in proportion to such labour. If I had a machine worth 20,000*l*. which with very little labour was efficient to the production of commodities, and if the wear and tear of such machine were of trifling amount, and the general rate of profit 10 per cent., I should not require much more than 2,000*l*. to be added to the price of the goods, on account of the employment of my machine; but if the wear and tear of the machine were great, if the quantity of labour requisite to keep it in an efficient state were that of fifty men annually, I should require an additional price for my goods, equal to that which would be obtained by any other manufacturer who employed fifty men in the production of other goods, and who used no machinery at all.

But a rise in the wages of labour would not equally affect commodities produced with machinery quickly consumed. and commodities produced with machinery slowly consumed. In the production of the one, a great deal of labour would be continually transferred to the commodity produced—in the other very little would be so transferred. Every rise of wages, therefore, or, which is the same thing, every fall of profits, would lower the relative value of those commodities which were produced with a capital 40 of a durable nature, and would proportionately elevate those which were produced with capital more perishable. A fall of wages would have precisely the contrary effect.

I have already said that fixed capital is of various degrees of durability—suppose now a machine which could in any particular trade be employed to do the work of one hundred men for a year, and that it would last only for one year. Suppose too, the machine to cost 5,000*l*., and the wages annually paid to one hundred men to be 5,000*l*., it is evident that it would be a matter of indifference to the manufacturer whether he bought the machine or employed the men. But suppose labour to rise, and consequently the wages of one hundred men for a year to amount to 5,500*l*., it is obvious that the manufacturer would now no longer hesitate, it would be for his interest to buy the machine and get his work done for 5,000l.. But will not the machine rise in price, will not that also be worth 5,500*l*. in consequence of the rise of labour? It would rise in price if there were no stock employed on its construction, and no profits to be paid to the maker of it. If for example, the machine were the produce of the labour of one hundred men, working one year upon it with wages of 3500l. each, and its price were consequently 5,000*l*.; should those wages rise to 55*l*., its price would be 5,500*l*., but this cannot be the case; less than one hundred men are employed or it could not be sold for 5,000*l*., for out of the 5,000*l*. must be paid the profits of the stock which employed the men. Suppose then that only 41 eightyfive men were employed at an expense of 50l. each, or 4,250*l*. per

annum, and that the 750l. which the sale of the machine would produce over and above the wages advanced to the men, constituted the profits of the engineer's stock. When wages rose 10 per cent. he would be obliged to employ an additional capital of 4250*l*. and would therefore employ 4,675*l*. instead of 4,250*l*., on which capital he would only get a profit of 325*l*. if he continued to sell his machine for 5,000*l*.; but this is precisely the case of all manufacturers and capitalists; the rise of wages affects them all. If therefore the maker of the machine should raise the price of it in consequence of a rise of wages, an unusual quantity of capital would be employed in the construction of such machines, till their price afforded only the common rate of profits.^{*} We see then that machines would not rise in price, in consequence of a rise of wages.

The manufacturer, however, who in a general rise of wages, can have recourse to a machine which shall not increase the charge of production on his

^{*}We see here why it is that old countries are constantly impelled to employ machinery, and new countries to employ labour. With every difficulty of providing for the maintenance of men, labour necessarily rises, and with every price of labour, new temptations are offered for the use of machinery. This difficulty of providing for the maintenance of men is in constant operation in old countries, in new ones a very great increase in the population may take place without the least rise in the wages of labour. It may be as easy to provide for the 7th, 8th, and 9th million of men as for the 2nd, 3rd, and 4th.

commodity, would enjoy peculiar advantages if he could continue to charge the same price for his goods; but he, as we have already seen, would be obliged to lower the price of his commodities, or capital would flow 42 to his trade till his profits had sunk to the general level. Thus then is the public benefited by machinery: these mute agents are always the produce of much less labour than that which they displace, even when they are of the same money value. Through their influence, an increase in the price of provisions which raises wages will affect fewer persons; it will reach, as in the above instance, eightyfive men instead of a hundred, and the saving which is the consequence, shows itself in the reduced price of the commodity manufactured. Neither machines, nor the commodities made by them, rise in real value, but all commodities made by machines fall, and fall in proportion to their durability.

It will be seen, then, that in the early stages of society, before much machinery or durable capital is used, the commodities produced by equal capitals will be nearly of equal value, and will rise or fall only relatively to each other on account of more or less labour being required for their production; but after the introduction of these expensive and durable instruments, the commodities produced by the employment of equal capitals will be of very unequal value; and although they will still be liable to rise or fall relatively to each other, as more or less labour becomes necessary to their production, they will be subject to another, though a minor variation, also, from the rise or fall of wages and profits. Since goods which sell for 5,000*l*. may be the produce of a capital equal in amount to that from which are produced other goods which sell for 10,000*l*., the profits on their manufacture will 43 be the same; but those profits would be unequal, if the prices of the goods did not vary with a rise or fall in the rate of profits.

It appears, too, that in proportion to the durability of capital employed in any kind of production, the relative prices of those commodities on which such durable capital is employed, will vary inversely as wages; they will. fall as wages rise, and rise as wages fall; and, on the contrary, those which are produced chiefly by labour with less fixed capital, or with fixed capital of a less durable character than the medium in which price is estimated, will rise as wages rise, and fall as wages fall.

SECTION VI.

On an invariable measure of value.

WHEN commodities varied in relative value, it would be desirable to have the means of ascertaining which of them fell and which rose in real value, and this could be effected only by comparing them one after another with some invariable standard measure of value, which should itself be subject to none of the fluctuations to which other commodities are exposed. Of such a measure it is impossible to be possessed, because there is no commodity which is not itself exposed to 44 the same variations as the things, the value of which is to be ascertained; that is, there is none which is not subject to require more or less labour for its production. But if this cause of variation in the value of a medium could be removed—if it were possible that in the production of our money for instance, the same quantity of labour should at all times be required, still it would not be a perfect standard or invariable measure of value, because, as I have already endeavoured to explain, it would be subject to relative variations from a rise or fall of wages, on account of the different proportions of fixed capital which might be necessary to produce it, and to produce those other commodities whose alteration of value we wished to ascertain. It might be subject to variations too, from the same cause, on account of the different degrees of durability of the fixed capital employed on it, and the commodities to be compared with it—or the time necessary to bring the one to market, might be longer or shorter than the time necessary to bring the other commodities to of market. the variations which be were to determined; all which circumstances disqualify any commodity that can be thought of from being a perfectly accurate measure of value.

If, for example, we were to fix on gold as a standard, it is evident that it is but a commodity obtained under the same contingencies as every other commodity, and requiring labour and fixed capital to produce it. Like every other commodity, improvements in the saving of labour might be applied to its production, and consequently it might fall in relative value to other things merely on account of the greater facility of producing it.

If we suppose this cause of variation to be removed, and the same quantity of labour to be always required to obtain the same quantity of gold, still gold would not be a perfect measure of value, by which we could accurately ascertain the variations 45 in all other things, because it would not be produced with precisely the same combinations of fixed and circulating capital as all other things; nor with fixed capital of the same durability; nor would it require precisely the same length of time, before it could be brought to market. It would be a perfect measure of value for all things produced under the same circumstances precisely as itself, but for no others. If, for example, it were produced under the same circumstances as we have supposed necessary to produce cloth and cotton goods, it would be a perfect measure of value for those things, but not so for corn, for coals, and other commodities produced with either a less or a greater proportion of fixed capital, because, as we have shown, every alteration in the permanent rate

of profits would have some effect on the relative value of all these goods, independently of any alteration in the quantity of labour employed on their production. If gold were produced under the same circumstances as corn, even if they never changed, it would not, for the same reasons, be at all times a perfect measure of the value of cloth and cotton goods. Neither gold then, nor any other commodity, can ever be a perfect measure of value for all things; but I have already remarked, that the effect on the relative prices of things, from a variation in profits, is comparatively slight; that by far the most important effects are produced by the varying quantities of labour required for production; and therefore, if we suppose this important cause of variation removed from the production of gold, we shall probably possess as near an approximation to a standard measure of value as can be theoretically conceived. May not gold be considered as a commodity produced with such proportions of the two kinds of capital as approach nearest to the average quantity employed in the production of most commodities? May not these proportions be so nearly equally distant from the two extremes, the one where little fixed capital 46 is used, the other where little labour is employed, as to form a just mean between them?

If, then, I may suppose myself to be possessed of a standard so nearly approaching to an invariable one, the advantage is, that I shall be enabled

to speak of the variations of other things, without embarrassing myself on every occasion with the consideration of the possible alteration in the value of the medium in which price and value are estimated.

To facilitate, then, the object of this enquiry, although I fully allow that money made of gold is subject to most of the variations of other things, I shall suppose it to be invariable, and therefore all alterations in price to be occasioned by some alteration in the value of the commodity of which I may be speaking.

Before I quit this subject, it may be proper to observe, that Adam Smith, and all the writers who have followed him, have, without one exception that I know of, maintained that a rise in the price of labour would be uniformly followed by a rise in the price of all commodities. I hope I have succeeded in showing, that there are no grounds for such an opinion, and that only those commodities would rise which had less fixed capital employed upon them than the medium in which price was estimated, and that all those which had more, would positively fall in price when wages On the contrary, if wages fell, rose. those commodities only would fall, which had a less proportion of fixed capital employed on them, than the medium in which price was estimated; all those which had more, would positively rise in price.

It is necessary for me also to remark, that I have not said, because one commodity has so much labour bestowed upon it as will cost 1,000*l*. and another so much as will cost 2,000*l*. 47 that therefore one would be of the value of 1,000*l*. and the other of the value of 2,000*l*. but I have said that their value will be to each other as two to one, and that in those proportions they will be exchanged. It is of no importance to the truth of this doctrine, whether one of these commodities sells for 1,100*l*. and the other for 2,200*l*., or one for 1,500*l*. and the other for 3,000*l*.; into that question I do not at present enquire; I affirm only, that their relative values will be governed by the relative quantities of labour bestowed on their production^{*}.

^{*} Mr. Malthus remarks on this doctrine, "we have the power indeed, arbitrarily, to call the labour which has been employed upon a commodity its real value, but in so doing, we use words in a different sense from that in which they are customarily used; we confound at once the very important distinction between *cost* and *value*; and render it almost impossible to explain with clearness, the main stimulus to the production of wealth, which in fact depends upon this distinction."

Mr. Malthus appears to think that it is a part of my doctrine, that the cost and value of a thing should be the same;—it is, if he means by cost, "cost of production" including profits. In the above passage, this is what he does not mean, and therefore he has not clearly understood me.

SECTION VII

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Different effects from the alteration in the value of money, the medium in which PRICE is always expressed, or from the alteration in the value of the commodities which money purchases.

ALTHOUGH I shall, as I have already explained, have occasion to consider money as invariable in value, for the purpose of more distinctly pointing out the causes of relative variations. in the value of other things, it may be useful to notice the different effects which will follow from the prices of goods being altered by the causes to which I have already adverted, 48 namely, the different quantities of labour required to produce them, and their being altered by a variation in the value of money itself.

Money, being a variable commodity, the rise of money-wages will be frequently occasioned by a fall in the value of money. A rise of wages from this cause will, indeed, be invariably accompanied by a rise in the price of commodities; but in such cases, it will be found that labour and all commodities have not varied in regard to each other, and that the variation has been confined to money.

Money, from its being a commodity obtained

from a foreign country, from its being the general medium of exchange between all civilized countries, and from its being also distributed among those countries in proportions which are ever changing with every improvement in commerce and machinery, and with every increasing difficulty of obtaining food and necessaries for an increasing population, is subject to incessant variations. In stating the principles which regulate exchangeable value and price, we should carefully distinguish between those variations which belong to the commodity itself, and those which are occasioned by a variation in the medium in which value is estimated, or price expressed.

A rise in wages, from an alteration in the value of money, produces a general effect on price, and for that reason it produces no real effect whatever on profits. On the contrary, a rise of wages, from the circumstance of the labourer being more liberally rewarded, or from a difficulty of procuring the necessaries on which wages are expended, does not, except in some instances, produce the effect of raising price, but has a 49 great effect in lowering profits. In the one case, no greater proportion of the annual labour of the country is devoted to the support of the labourers; in the other case, a larger portion is so devoted.

It is according to the division of the whole pro-

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duce of the land of any particular farm, between the three classes of landlord, capitalist, and labourer, that we are to judge of the rise or fall of. rent, profit, and wages, and not according to the value at which that produce may be estimated in a medium which is confessedly variable.

It is not by the absolute quantity of produce obtained by either class, that we can correctly judge of the rate of profit, rent, and wages, but by the quantity of labour required to obtain that produce. By improvements in machinery and agriculture, the whole produce may be doubled; but if wages, rent, and profit be also doubled, these three will bear the same proportions to one another as before, and neither could be said to have relatively varied. But if wages partook not of the whole of this increase; if instead of being doubled, were only increased one-half; if rent instead of being doubled, were only increased threefourths, and the remaining increase went to profit, it would, I apprehend be correct for me to say, that rent and wages had fallen while profits had risen; for if we had an invariable standard by which to measure the value of this produce, we should find that a less value had fallen to the class of labourers and landlords, and a greater to the class of capitalists, than had given before. We might find, for example, that though the absolute quantity of commodities had been doubled,

they were the produce of precisely the former 50 quantity of labour. Of every hundred hats, coats, and quarters of corn produced, if

The labourers had before	••	••	25
The landlords	••	••	25
And the capitalists	••		50
			100:

And if, after these commodities were double the quantity, of every 100

The labourers had only		••	22
The landlords	••		22
And the capitalists	••	••	56
			100:

In that case I should say, that wages and rent had fallen and profits risen; though, in consequence of the abundance of commodities, the quantity paid to the labourer and landlord would have increased in the proportion of 25 to 44. Wages are to be estimated by their real value, viz. by the quantity of labour and capital employed in producing them, and not by their nominal value either in coats, hats, money, or corn. Under the circumstances I have just supposed, commodities would have fallen to half their former value, and if money had not varied, to half their former price also. If then in this medium, which had not varied in value, the wages of the labourer should be found to have fallen, it will not the less be a real fall, because they might furnish him with a greater quantity of cheap commodities than his former wages.

The variation in the value of money, however great, makes no difference in the rate of profits; for suppose the goods of the manufacturer to rise from 1,000*l*. to 2,000*l*., or 100 per cent., if his capital, on which the variations of money have as much effect as on the value of produce, if his machinery, buildings, 51 and stock in trade rise also 100 per cent., his rate of profits will be the same, and he will have the same quantity, and no more, of the produce of the labour of the country at his command.

If, with a capital of a given value, he can, by economy in labour, double the quantity of produce, and it fall to half its former price, it will bear the same proportion to the capital that produced it which it did before, and consequently profits will still be at the same rate.

If, at the same time that he doubles the quantity of produce by the employment of the same capital, the value of money is by any accident lowered one half, the produce will sell for twice the money value that it did before; but the capital employed to produce it will also be of twice its former money value; and therefore in this case too, the value of the produce will bear the same proportion to the value of the capital as it did before; and although the produce be doubled, rent, wages, and profits will only vary as the proportions vary, in which this double produce may be divided among the three classes that share it.