1. The subject on which we are now about to enter fills so important and conspicuous a position in political economy, that in the apprehension of some thinkers its boundaries confound themselves with those of the science itself. One eminent writer has proposed as a name for Political Economy, "Catallactics," or the science of exchanges: by others it has been called the Science of Values. If these denominations had appeared to me logically correct, I must have placed the discussion of the elementary laws of value at the commencement of our inquiry, instead of postponing it to the Third Part; and the possibility of so long deferring it is alone a sufficient proof that this view of the nature of Political Economy is too confined. It is true that in the preceding Books we have not escaped the necessity of anticipating some small portion of the theory of Value, especially as to the value of labour and of land. It is nevertheless evident, that of the two great departments of Political Economy, the production of wealth and its distribution, the consideration of Value has to do with the latter alone; and with that, only so far as competition, and not usage or custom, is the distributing agency. The conditions and laws of Production would be the same as they are, if the arrangements of society did not depend on Exchange, or did not admit of it. Even in the present system of industrial life, in which employments are minutely subdivided, and all concerned in production depend for their remuneration on the price of a particular commodity, exchange is not the fundamental law of the distribution of the produce, no more than roads and carriages are the essential laws of motion, but merely a part of the machinery for effecting it. To confound these ideas, seems to me, not only a logical, but a practical blunder. It is a case of the error too common in political economy, of not distinguishing between necessities arising from the nature of things, and those created by social arrangements: an error, which appears to me to be at all times producing two opposite mischiefs; on the one hand, causing political economists to class the merely temporary truths of their subject among its permanent and universal laws; and on the
other, leading many persons to mistake the permanent laws of Production (such as those on which the necessity is grounded of restraining population) for temporary accidents arising from the existing constitution of society—which those who would frame a new system of social arrangements, are at liberty to disregard.

In a state of society, however, in which the industrial system is entirely founded on purchase and sale, each individual, for the most part, living not on things in the production of which he himself hears a part, but on things obtained by a double exchange, a sale followed by a purchase—the question of Value is fundamental. Almost every speculation respecting the economical interests of a society thus constituted, implies some theory of Value: the smallest error on that subject infects with corresponding error all our other conclusions; and anything vague or misty in our conception of it, creates confusion and uncertainty in everything else. Happily, there is nothing in the laws of Value which remains for the present or any future writer to clear up; the theory of the subject is complete: the only difficulty to be overcome is that of so stating it as to solve by anticipation the chief perplexities which occur in applying it: and to do this, some minuteness of exposition, and considerable demands on the patience of the reader, are unavoidable. He will be amply repaid, however (if a stranger to these inquiries), by the ease and rapidity with which a thorough understanding of this subject will enable him to fathom most of the remaining questions of political economy.

2. We must begin by settling our phraseology. Adam Smith, in a passage often quoted, has touched upon the most obvious ambiguity of the word value; which, in one of its senses, signifies usefulness, in another, power of purchasing; in his own language, value in use and value in exchange. But (as Mr. De Quincey has remarked) in illustrating this double meaning, Adam Smith has himself fallen into another ambiguity. Things (he says) which have the greatest value in use have often little or no value in exchange; which is true, since that which can be obtained without labour or sacrifice will command no price, however useful or needful it may be. But he proceeds to add, that things which have the greatest value in exchange, as a diamond for example, may have little or no value in use. This is employing the word use, not in the sense in which political economy is concerned with it, but in that other sense in which use is opposed to pleasure. Political economy has nothing to do with the comparative estimation of different uses in the judgment of a philosopher or a moralist. The use of a thing, in political economy, means its capacity to satisfy a desire, or serve a
purpose. Diamonds have this capacity in a high degree, and unless they had it, would not bear any price. Value in use, or as Mr. De Quincey calls it, teleologic value, is the extreme limit of value in exchange. The exchange value of a thing may fall short, to any amount, of its value in use; but that it can ever exceed the value in use, implies a contradiction; it supposes that persons will give, to possess a thing, more than the utmost value which they themselves put upon it as a means of gratifying their inclinations.

The word Value, when used without adjunct, always means, in political economy, value in exchange; or as it has been called by Adam Smith and his successors, exchangeable value, a phrase which no amount of authority that can be quoted for it can make other than bad English. Mr. De Quincey substitutes the term Exchange Value, which is unexceptionable.

Exchange value requires to be distinguished from Price. The words Value and Price were used as synonymous by the early political economists, and are not always discriminated even by Ricardo. But the most accurate modern writers, to avoid the wasteful expenditure of two good scientific terms on a single idea, have employed Price to express the value of a thing in relation to money; the quantity of money for which it will exchange. By the price of a thing, therefore, we shall henceforth understand its value in money; by the value, or exchange value of a thing, its general power of purchasing; the command which its possession gives over purchaseable commodities in general.

3. But here a fresh demand for explanation presents itself. What is meant by command over commodities in general? The same thing exchanges for a great quantity of some commodities, and for a very small quantity of others. A suit of clothes exchanges for a great quantity of bread, and for a very small quantity of precious stones. The value of a thing in exchange for some commodities may be rising, for others falling. A coat may exchange for less bread this year than last, if the harvest has been bad, but for more glass or iron, if a tax has been taken off those commodities, or an improvement made in their manufacture. Has the value of the coat, under these circumstances, fallen or risen? It is impossible to say. All that can be said is, that it has fallen in relation to one thing, and risen in respect to another. But there is another case, in which no one would have any hesitation in saying what sort of change had taken place in the value of the coat: namely, if the cause in which the disturbance of exchange values originated, was something directly affecting the coat itself, and not the bread or the glass. Suppose, for example, that an invention had been made in
machinery, by which broad cloth could be woven at half the former cost. The effect of this would be to lower the value of a coat, and if lowered by this cause, it would be lowered not in relation to bread only or to glass only, but to all purchaseable things, except such as happened to be affected at the very time by a similar depressing cause. We should therefore say, that there had been a fall in the exchange value or general purchasing power of a coat. The idea of general exchange value originates in the fact, that there really are causes which tend to alter the value of a thing in exchange for things generally, that is, for all things which are not themselves acted upon by causes of similar tendency.

In considering exchange value scientifically, it is expedient to abstract from it all causes except those which originate in the very commodity under consideration. Those which originate in the commodities with which we compare it, affect its value in relation to those commodities; but those which originate in itself, affect its value in relation to all commodities. In order the more completely to confine our attention to these last, it is convenient to assume that all commodities but the one in question remain invariable in their relative values. When we are considering the causes which raise or lower the value of corn, we suppose that woollens, silks, cutlery, sugar, timber, &c., while varying in their power of purchasing corn, remain constant in the proportions in which they exchange for one another. On this assumption, any one of them may be taken as a representative of all the rest; since in whatever manner corn varies in value with respect to any one commodity, it varies in the same manner and degree with respect to every other; and the upward or downward movement of its value estimated in some one thing, is all that need be considered. Its money value, therefore, or price, will represent as well as anything else its general exchange value, or purchasing power; and from an obvious convenience, will often be employed by us in that representative character; with the proviso that money itself do not vary in its general purchasing power, but that the prices of all things, other than that which we happen to be considering, remain unaltered.

4. The distinction between Value and Price, as we have now refined them, is so obvious, as scarcely to seem in need of any illustration. But in political economy the greatest errors arise from overlooking the most obvious truths. Simple as this distinction is, it has consequences with which a reader unacquainted with the subject would do well to begin early by making himself thoroughly familiar. The following is one of the principal. There is such a thing as a general rise of prices. All
commodities may rise in their money price. But there cannot be a
general rise of values. It is a contradiction in terms. A can
only rise in value by exchanging for a greater quantity of B and
C; in which case these must exchange for a smaller quantity of A.
All things cannot rise relatively to one another. If one-half of
the commodities in the market rise in exchange value, the very
terms imply a fall of the other half; and reciprocally, the fall
implies a rise. Things which are exchanged for one another can no
more all fall, or all rise, than a dozen runners can each outrun
all the rest, or a hundred trees all overtop one another. Simple
as this truth is, we shall presently see that it is lost sight of
in some of the most accredited doctrines both of theorists and of
what are called practical men. And as a first specimen, we may
instance the great importance attached in the imagination of most
people to a rise or fall of general prices. Because when the
price of any one commodity rises, the circumstance usually
indicates a rise of its value, people have an indistinct feeling
when all prices rise, as if all things simultaneously had risen
in value, and all the possessors had become enriched. That the
money prices of all things should rise or fall, provided they all
rise or fall equally, is in itself, and apart from existing
contracts, of no consequence. It affects nobody’s wages, profits,
or rent. Every one gets more money in the one case and less in
the other; but of all that is to be bought with money they get
neither more nor less than before. It makes no other difference
than that of using more or fewer counters to reckon by. The only
thing which in this case is really altered in value is money; and
the only persons who either gain or lose are the holders of
money, or those who have to receive or to pay fixed sums of it.
There is a difference to annuitants and to creditors the one way,
and to those who are burthened with annuities, or with debts, the
contrary way. There is a disturbance, in short, of fixed money
contracts; and this is an evil, whether it takes place in the
debtor’s favour or in the creditor’s. But as to future
transactions there is no difference to any one. Let it therefore
be remembered (and occasions will often arise for calling it to
mind) that a general rise or a general fall of values is a
contradiction; and that a general rise or a general fall of
prices is merely tantamount to an alteration in the value of
money, and is a matter of complete indifference, save in so far
as it affects existing contracts for receiving and paying fixed
pecuniary amounts, and (it must be added) as it affects the
interests of the producers of money.

5. Before commencing the inquiry into the laws of value and
price, I have one further observation to make. I must give
warning, once for all, that the cases I contemplate are those in which values and prices are determined by competition alone. In so far only as they are thus determined, can they be reduced to any assignable law. The buyers must be supposed as studious to buy cheap, as the sellers to sell dear. The values and prices, therefore, to which our conclusions apply, are mercantile values and prices; such prices as are quoted in price-currents; prices in the wholesale markets, in which buying as well as selling is a matter of business; in which the buyers take pains to know, and generally do know, the lowest price at which an article of a given quality can be obtained; and in which, therefore, the axiom is true, that there cannot be for the same article, of the same quality, two prices in the same market. Our propositions will be true in a much more qualified sense, of retail prices; the prices paid in shops for articles of personal consumption. For such things there often are not merely two, but many prices, in different shops, or even in the same shop; habit and accident having as much to do in the matter as general causes. Purchases for private use, even by people in business, are not always made on business principles: the feelings which come into play in the operation of getting, and in that of spending their income, are often extremely different. Either from indolence, or carelessness, or because people think it fine to pay and ask no questions, three-fourths of those who can afford it give much higher prices than necessary for the things they consume; while the poor often do the same from ignorance and defect of judgment, want of time for searching and making inquiry, and not unfrequently from coercion, open or disguised. For these reasons, retail prices do not follow with all the regularity which might be expected, the action of the causes which determine wholesale prices. The influence of those causes is ultimately felt in the retail markets, and is the real source of such variations in retail prices as are of a general and permanent character. But there is no regular or exact correspondence. Shoes of equally good quality are sold in different shops at prices which differ considerably; and the price of leather may fall without causing the richer class of buyers to pay less for shoes. Nevertheless, shoes do sometimes fall in price; and when they do, the cause is always some such general circumstance as the cheapening of leather: and when leather is cheapened, even if no difference shows itself in shops frequented by rich people, the artizan and the labourer generally get their shoes cheaper, and there is a visible diminution in the contract prices at which shoes are delivered for the supply of a workhouse or of a regiment. In all reasoning about prices, the proviso must be understood, "supposing all parties to take care of their own interest." In
attention to these distinctions has led to improper applications of the abstract principles of political economy, and still oftener to an undue discrediting of those principles, through their being compared with a different sort of facts from those which they contemplate, or which can fairly be expected to accord with them.

Chapter 2

Of Demand and Supply in Their Relation to Value

1. That a thing may have any value in exchange, two conditions are necessary. It must be of some use; that is (as already explained) it must conduce to some purpose, satisfy some desire. No one will pay a price, or part with anything which serves some of his purposes, to obtain a thing which serves none of them. But, secondly, the thing must not only have some utility, there must also be some difficulty in its attainment. "Any article whatever," says Mr De Quincey,(1*) "to obtain that artificial sort of value which is meant by exchange value, must begin by offering itself as a means to some desirable purpose; and secondly, even though possessing incontestably this preliminary advantage, it will never ascend to an exchange value in cases where it can be obtained gratuitously and without effort; of which last terms both are necessary as limitations. For often it will happen that some desirable object may be obtained gratuitously; stoop, and you gather it at your feet; but still, because the continued iteration of this stooping exacts a laborious effort, very soon it is found, that to gather for yourself virtually is not gratuitous. In the vast forests of the Canadas, at intervals, wild strawberries may be gratuitously gathered by shiploads: yet such is the exhaustion of a stooping posture, and of a labour so monotonous, that everybody is soon glad to resign the service into mercenary hands."

As was pointed out in the last chapter, the utility of a thing in the estimation of the purchaser, is the extreme limit of its exchange value: higher the value cannot ascend; peculiar circumstances are required to raise it so high. This topic is happily illustrated by Mr. De Quincey. "Walk into almost any possible shop, buy the first article you see; what will determine its price? In the ninety-nine cases out of a hundred, simply the element D -- difficulty of attainment. The other element U, or intrinsic utility, will be perfectly inoperative. Let the thing (measured by its uses) be, for your Purposes, worth ten guineas, so that you would rather give ten guineas than lose it; yet, if
the difficulty of producing it be only worth one guinea, one
guinea is the price which it will bear. But still not the less,
though U is inoperative, can U be supposed absent? By no
possibility; for, if it had been absent, assuredly you would not
have bought the article even at the lowest price. U acts upon
you, though it does not act upon the price. On the other hand, in
the hundredth case, we will suppose the circumstances reversed:
you are on Lake Superior in a steam-boat, making your way to an
unsettled region 800 miles a-head of civilization, and
consciously with no chance at all of purchasing any luxury
whatsoever, little luxury or big luxury, for the space of ten
years to come. One fellow-passenger, whom you will part with
before sunset, has a powerful musical snuff-box; knowing by
experience the power of such a toy over your own feelings, the
magic with which at times it lulls your agitations of mind, you
are vehemently desirous to purchase it. In the hour of leaving
London you had forgot to do so; here is a final chance. But the
owner, aware of your situation not less than yourself, is
determined to operate by a strain pushed to the very uttermost
upon U, upon the intrinsic worth of the article in your
individual estimate for your individual purposes. He will not
hear of D as any controlling power or mitigating agency in the
case; and finally, although at six guineas a-piece in London or
Paris you might have loaded a waggon with such boxes, you pay
sixty rather than lose it when the last knell of the clock has
sounded, which summons you to buy now or to forfeit for ever.
Here, as before, only one element is operative; before it was D,
now it is U. But after all, D was not absent, though inoperative.
The inertness of D allowed U to put forth its total effect. The
practical compression of D being withdrawn, U springs up like
water in a pump when released from the pressure of air. Yet still
that D was present to your thoughts, though the price was
otherwise regulated, is evident; both because U and D must
coexist in order to found any case of exchange value whatever,
and because undeniably you take into very particular
consideration this D, the extreme difficulty of attainment (which
here is the greatest possible, viz. an impossibility) before you
consent to have the price racked up to U. The special D has
vanished; but it is replaced in your thoughts by an unlimited D.
Undoubtedly you have submitted to U in extremity as the
regulating force of the price; but it was under a sense of D's
latent presence. Yet D is so far from exerting any positive
force, that the retirement of D from all agency whatever on the
price-this it is which creates as it were a perfect vacuum, and
through that vacuum U rushes up to its highest and ultimate
gradation."
This case, in which the value is wholly related by the necessities or desires of the purchaser, is the case of strict and absolute monopoly; in which, the article desired being only obtainable from one person, he can exact any equivalent, short of the point at which no purchaser could be found. But it is not a necessary consequence, even of complete monopoly, that the value should be forced up to this ultimate limit; as will be seen when we have considered the law of value in so far as depending on the other element, difficulty of attainment.

2. The difficulty of attainment which determines value, is not always the same kind of difficulty. It sometimes consists in an absolute limitation of the supply. There are things of which it is physically impossible to increase the quantity beyond certain narrow limits. Such are those wines which can be grown only in peculiar circumstances of soil, climate, and exposure. Such also are ancient sculptures: pictures by old masters: rare books or coins, or other articles of antiquarian curiosity. Among such may also be reckoned houses and building-ground, in a town of definite extent (such as Venice, or any fortified town where fortifications are necessary to security): the most desirable sites in any town whatever: houses and parks peculiarly favoured by natural beauty, in places where that advantage is uncommon. Potentially, all land whatever is a commodity of this class; and might be practically so, in countries fully occupied and cultivated.

But there is another category (embracing the majority of all things that are bought and sold), in which the obstacle to attainment consists only in the labour and expense requisite to produce the commodity. Without a certain labour and expense it cannot be had: but when any one is willing to incur these, there needs be no limit to the multiplication of the product. If there were labourers enough and machinery enough, cottons, woollens, or linens might be produced by thousands of yards for every single yard now manufactured. There would be a point, no doubt, where further increase would be stopped by the incapacity of the earth to afford more of the material. But there is no need, for any purpose of political economy, to contemplate a time when this ideal limit could become a practical one.

There is a third case, intermediate between the two preceding, and rather more complex, which I shall at present merely indicate, but the importance of which in political economy is extremely great. There are commodities which can be multiplied to an indefinite extent by labour and expenditure, but not by a fixed amount of labour and expenditure. Only a limited quantity can be produced at a given cost: if more is wanted, it must be
produced at a greater cost. To this class, as has been often repeated, agricultural produce belongs; and generally all the rude produce of the earth; and this peculiarity is a source of very important consequences; one of which is the necessity of a limit to population; and another, the payment of rent.

3. These being the three classes, in one or other of which all things that are bought and sold must take their place, we shall consider them in their order. And first, of things absolutely limited in quantity, such as ancient sculptures or pictures.

Of such things it is commonly said, that their value depends upon their scarcity: but the expression is not sufficiently definite to serve our purpose. Others say, with somewhat greater precision, that the value depends on the demand and the supply. But even this statement requires much explanation, to make it a clear exponent of the relation between the value of a thing, and the causes of which that value is an effect.

The supply of a commodity is an intelligible expression: it means the quantity offered for sale; the quantity that is to be had, at a given time and place, by those who wish to purchase it. But what is meant by the demand? Not the mere desire for the commodity. A beggar may desire a diamond; but his desire, however great, will have no influence on the price. Writers have therefore given a more limited sense to demand, and have defined it, the wish to possess, combined with the power of purchasing. To distinguish demand in this technical sense, from the demand which is synonymous with desire, they call the former effectual demand. After this explanation, it is usually supposed that there remains no further difficulty, and that the value depends upon the ratio between the effectual demand, as thus defined, and the supply.

These phrases, however, fail to satisfy any one who requires clear ideas, and a perfectly precise expression of them. Some confusion must always attach to a phrase so inappropriate as that of a ratio between two things not of the same denomination. What ratio can there be between a quantity and a desire, or even a desire combined with a power? A ratio between demand and supply is only intelligible if by demand we mean the quantity demanded, and if the ratio intended is that between the quantity demanded and the quantity supplied. But again, the quantity demanded is not a fixed quantity, even at the same time and place; it varies according to the value; if the thing is cheap, there is usually a demand for more of it than when it is dear. The demand, therefore, partly depends on the value. But it was before laid down that the value depends on the demand. From this
contradiction how shall we extricate ourselves? How solve the paradox, of two things, each depending upon the other?

Though the solution of these difficulties is obvious enough, the difficulties themselves are not fanciful; and I bring them forward thus prominently, because I am certain that they obscurely haunt every inquirer into the subject who has not openly faced and distinctly realized them. Undoubtedly the true solution must have been frequently given, though I cannot call to mind any one who had given it before myself, except the eminently clear thinker and skilful expositor, J.B. Say. I should have imagined, however, that it must be familiar to all political economists, if the writings of several did not give evidence of some want of clearness on the point, and if the instance of Mr. De Quincey did not prove that the complete non-recognition and implied denial of it are compatible with great intellectual ingenuity, and close intimacy with the subject matter.

4. Meaning, by the word demand, the quantity demanded, and remembering that this is not a fixed quantity, but in general varies according to the value, let us suppose that the demand at some particular time exceeds the supply, that is, there are persons ready to buy, at the market value, a greater quantity than is offered for sale. Competition takes place on the side of the buyers, and the value rises: but how much? in the ratio (some may suppose) of the deficiency: if the demand exceeds the supply by one-third, the value rises one-third. By no means: for when the value has risen one-third, the demand may still exceed the supply; there may, even at that higher value, be a greater quantity wanted than is to be had; and the competition of buyers may still continue. If the article is a necessary of life, which, rather than resign, people are willing to pay for at any price, a deficiency of one-third may raise the price to double, triple, or quadruple.(3*) Or, on the contrary, the competition may cease before the value has risen in even the proportion of the deficiency. A rise, short of one-third, may place the article beyond the means, or beyond the inclinations, of purchasers to the full amount. At what point, then, will the rise be arrested? At the point, whatever it be, which equalizes the demand and the supply: at the price which cuts off the extra third from the demand, or brings forward additional sellers sufficient to supply it. When, in either of these ways, or by a combination of both, the demand becomes equal and no more than equal to the supply, the rise of value will stop.

The converse case is equally simple. instead of a demand beyond the supply, let us suppose a supply exceeding the demand. The competition will now be on the side of the sellers: the extra
quantity can only find a market by calling forth an additional
demand equal to itself. This is accomplished by means of
cheapness; the value falls, and brings the article within the
reach of more numerous customers, or induces those who were
already consumers to make increased purchases. The fall of value
required to re-establish equality, is different in different
cases. The kinds of things in which it is commonly greatest are
at the two extremities of the scale; absolute necessaries, or
those peculiar luxuries, the taste for which is confined to a
small class. In the case of food, as those who have already
enough do not require more on account of its cheapness, but
rather expend in other things what they save in food, the
increased consumption occasioned by cheapness, carries off, as
experience shows, only a small part of the extra supply caused by
an abundant harvest; (4*) and the fall is practically arrested
only when the farmers withdraw their corn, and hold it back in
hopes of a higher price; or by the operations of speculators who
buy corn when it is cheap, and store it up to be brought out when
more urgently wanted. Whether the demand and supply are equalized
by an increased demand, the result of cheapness, or by
withdrawing a part of the supply, equalized they are in either
case.

Thus we see that the idea of a ratio, as between demand and
supply, is out of place, and has no concern in the matter: the
proper mathematical analogy is that of an equation. Demand and
supply, the quantity demanded and the quantity supplied, will be
made equal, if unequal at any moment, competition equalizes them,
and the manner in which this is done is by an adjustment of the
value. If the demand increases, the value rises; if the demand
diminishes, the value falls; again, if the supply falls off, the
value rises; and falls if the supply is increased. The rise or
the fall continues until the demand and supply are again equal to
one another, and the value which a commodity will bring in any
market, is no other than the value which, in that market, gives a
demand just sufficient to carry off the existing or expected
supply.

This, then, is the Law of Value, with respect to all
commodities not susceptible of being multiplied at pleasure. Such
commodities, no doubt, are exceptions. There is another law for
that much larger class of things, which admit of indefinite
multiplication. But it is not the less necessary to conceive
distinctly and grasp firmly the theory of this exceptional case.
In the first place, it will be found to be of great assistance in
rendering the more common case intelligible. And in the next
place, the principle of the exception stretches wider, and
embraces more cases, than might at first be supposed.
5. There are but few commodities which are naturally and necessarily limited in supply. But any commodity whatever may be artificially so. Any commodity may be the subject of a monopoly: like tea, in this country, up to 1834; tobacco in France, opium in British India, at present. The price of a monopolized commodity is commonly supposed to be arbitrary; depending on the will of the monopolist, and limited only (as in Mr. De Quincey’s case of the musical box in the wilds of America) by the buyer’s extreme estimate of its worth to himself. This is in one sense true, but forms no exception, nevertheless, to the dependence of the value on supply and demand. The monopolist can fix the value as high as he pleases, short of what the consumer either could not or would not pay, but he can only do so by limiting the supply. The Dutch East India Company obtained a monopoly price for the produce of the Spice Islands, but to do so they were obliged, in good seasons, to destroy a portion of the crop. Had they persisted in selling all that they produced, they must have forced a market by reducing the price, so low, perhaps, that they would have received for the larger quantity a less total return than for the smaller: at least they showed that such was their opinion by destroying the surplus. Even on Lake Superior, Mr. De Quincey’s huckster could not have sold his box for sixty guineas, if he had possessed two musical boxes and desired to sell them both. Supposing the cost price of each to be six guineas, he would have taken seventy for the two in preference to sixty for one; that is, although his monopoly was the closest possible, he would have sold the boxes at thirty-five guineas each, notwithstanding that sixty was not beyond the buyer’s estimate of the article for his purposes. Monopoly value, therefore, does not depend on any peculiar principle, but is a mere variety of the ordinary case of demand and supply.

Again, though there are few commodities which are at all times and for ever unsusceptible of increase of supply, any commodity whatever may be temporarily so; and with some commodities this is habitually the case. Agricultural produce, for example, cannot be increased in quantity before the next harvest; the quantity of corn already existing in the world, is all that can be had for sometimes a year to come. During that interval, corn is practically assimilated to things of which the quantity cannot be increased. In the case of most commodities, it requires a certain time to increase their quantity; and if the demand increases, then until a corresponding supply can be brought forward, that is, until the supply can accommodate itself to the demand, the value will so rise as to accommodate the demand to the supply.

There is another case, the exact converse of this. There are
some articles of which the supply may be indefinitely increased, but cannot be rapidly diminished. There are things so durable that the quantity in existence is at all times very great in comparison with the annual produce. Gold, and the more durable metals, are things of this sort; and also houses. The supply of such things might be at once diminished by destroying them; but to do this could only be the interest of the possessor if he had a monopoly of the article, and could repay himself for the destruction of a part by the increased value of the remainder. The value, therefore, of such things may continue for a long time so low, either from excess of supply or falling off in the demand, as to put a complete stop to further production; the diminution of supply by wearing out being so slow a process, that a long time is requisite, even under a total suspension of production, to restore the original value. During that interval the value will be regulated solely by supply and demand, and will rise very gradually as the existing stock wears out, until there is again a remunerating value, and production resumes its course.

Finally, there are commodities of which, though capable of being increased or diminished to a great, and even an unlimited extent, the value never depends upon anything but demand and supply. This is the case, in particular, with the commodity Labour; of the value of which we have treated copiously in the preceding Book: and there are many cases besides, in which we shall find it necessary to call in this principle to solve difficult questions of exchange value. This will be particularly exemplified when we treat of International Values; that is, of the terms of interchange between things produced in different countries, or, to speak more generally, in distant places. But into these questions we cannot enter, until we shall have examined the case of commodities which can be increased in quantity indefinitely and at pleasure; and shall have determined by what law, other than that of Demand and Supply, the permanent or average values of such commodities are regulated. This we shall do in the next chapter.

NOTES:


2. Adam Smith, who introduced the expression "effectual demand", employed it to denote the demand of those who are willing and able to give for the commodity what he calls its natural price, that is, the price which will enable it to be permanently produced and brought to market. -- See his chapter on Natural and
Market Price (book i. ch. 7)

3. "The price of corn in this country has risen from 100 to 200 per cent and upwards, when the utmost computed deficiency of the crops has not been more than between one-sixth and one-third below an average, and when that deficiency has been relieved by foreign supplies. If there should be a deficiency of the crops amounting to one-third, without any surplus from a former year, and without any chance of relief by importation, the price might rise five, six, or even tenfold." -- Tooke's History of Prices, vol. i. pp. 13-5.


Chapter 3

Of Cost of Production in Its Relation to Value

1. When the production of a commodity is the effect of labour and expenditure, whether the commodity is susceptible of unlimited multiplication or not, there is a minimum value which is the essential condition of its being permanently produced. The value at any particular time is the result of supply and demand; and is always that which is necessary to create a market for the existing supply. But unless that value is sufficient to repay the Cost of Production, and to afford, besides, the ordinary expectation of profit, the commodity will not continue to be produced. Capitalists will not go on permanently producing at a loss. They will not even go on producing at a profit less than they can live on. Persons whose capital is already embarked, and cannot be easily extricated, will persevere for a considerable time without profit, and have been known to persevere even at a loss, in hope of better times. But they will not do so indefinitely, or when there is nothing to indicate that times are likely to improve. No new capital will be invested in an employment, unless there be an expectation not only of some profit, but of a profit as great (regard being had to the degree of eligibility of the employment in other respects) as can be hoped for in any other occupation at that time and place. When such profit is evidently not to be had, if people do not actually withdraw their capital, they at least abstain from replacing it when consumed. The cost of production, together with the ordinary profit, may therefore be called the necessary price, or value, of all things made by labour and capital. Nobody willingly produces
in the prospect of loss. Whoever does so, does it under a miscalculation, which he corrects as fast as he is able.

When a commodity is not only made by labour and capital, but can be made by them in indefinite quantity, this Necessary Value, the minimum with which the producers will be content, is also, if competition is free and active, the maximum which they can expect. If the value of a commodity is such that it repays the cost of production not only with the customary, but with a higher rate of profit, capital rushes to share in this extra gain, and by increasing the supply of the article, reduces its value. This is not a mere supposition or surmise, but a fact familiar to those conversant with commercial operations. Whenever a new line of business presents itself, offering a hope of unusual profits, and whenever any established trade or manufacture is believed to be yielding a greater profit than customary, there is sure to be in a short time so large a production or importation of the commodity, as not only destroys the extra profit, but generally goes beyond the mark, and sinks the value as much too low as it had before been raised too high; until the oversupply is corrected by a total or partial suspension of further production.

As already intimated,(1*) these variations in the quantity produced do not presuppose or require that any person should change his employment. Those whose business is thriving, increase their produce by availing themselves more largely of their credit, while those who are not making the ordinary profit, restrict their operations, and (in manufacturing phrase) work short time. In this mode is surely and speedily effected the equalization, not of profits perhaps, but of the expectations of profit, in different occupations.

As a general rule, then, things tend to exchange for one another at such values as will enable each producer to be repaid the cost of production with the ordinary profit; in other words, such as will give to all producers the same rate of profit on their outlay. But in order that the profit may be equal where the outlay, that is, the cost of production, is equal, things must on the average exchange for one another in the ratio of their cost of production: things of which the cost of production is the same, must be of the same value. For only thus will an equal outlay yield an equal return. If a farmer with a capital equal to 1000 quarters of corn, can produce 1200 quarters, yielding him a profit of 20 per cent; whatever else can be produced in the same time by a capital of 1000 quarters, must be worth, that is, must exchange for, 1200 quarters, otherwise the producer would gain either more or less than 20 per cent.

Adam Smith and Ricardo have called that value of a thing which is proportional to its cost of production, its Natural
Value (or its Natural Price). They meant by this, the point about which the value oscillates, and to which it always tends to return; the centre value, towards which, as Adam Smith expresses it, the market value of a thing is constantly gravitating; and any deviation from which is but a temporary irregularity, which, the moment it exists, sets forces in motion tending to correct it. On an average of years sufficient to enable the oscillations on one side of the central line to be compensated by those on the other, the market value agrees with the natural value; but it very seldom coincides exactly with it at any particular time. The sea everywhere tends to a level; but it never is at an exact level; its surface is always ruffled by waves, and often agitated by storms. It is enough that no point, at least in the open sea, is permanently higher than another. Each place is alternately elevated and depressed; but the ocean preserves its level.

2. The latent influence by which the values of things are made to conform in the long run to the cost of production, is the variation that would otherwise take place in the supply of the commodity. The supply would be increased if the thing continued to sell above the ratio of its cost of production, and would be diminished if it fell below that ratio. But we must not therefore suppose it to be necessary that the supply should actually be either diminished or increased. Suppose that the cost of production of a thing is cheapened by some mechanical invention, or increased by a tax. The value of the thing would in a little time, if not immediately, fall in the one case, and rise in the other; and it would do so, because if it did not, the supply would in the one case be increased, until the price fell, in the other diminished, until it rose. For this reason, and from the erroneous notion that value depends on the proportion between the demand and the supply, many persons suppose that this proportion must be altered whenever there is any change in the value of the commodity; that the value cannot fall through a diminution of the cost of production, unless the supply is permanently increased; nor rise, unless the supply is permanently diminished. But this is not the fact: there is no need that there should be any actual alteration of supply; and when there is, the alteration, if permanent, is not the cause, but the consequence of the alteration in value. If, indeed, the supply could not be increased, no diminution in the cost of production would lower the value; but there is by no means any necessity that it should. The mere possibility often suffices; the dealers are aware of what would happen, and their mutual competition makes them anticipate the result by lowering the price. Whether there will be a greater permanent supply of the commodity after its
production has been cheapened, depends on quite another question, namely, on whether a greater quantity is wanted at the reduced value. Most commonly a greater quantity is wanted, but not necessarily. "A man," says Mr De Quincey, (2*) "buys an article of instant applicability to his own purposes the more readily and the more largely as it happens to be cheaper. Silk handkerchiefs having fallen to half-price, he will buy, perhaps, in threfold quantity; but he does not buy more steam-engines because the price is lowered. His demand for steam-engines is almost always predetermined by the circumstances of his situation. So far as he considers the cost at all, it is much more the cost of working this engine than the cost upon its purchase. But there are many articles for which the market is absolutely and merely limited by a pre-existing system, to which those articles are attached as subordinate parts or members. How could we force the dials or faces of timepieces by artificial cheapness to sell more plentifully than the inner works or movements of such timepieces? Could the sale of wine-vaults be increased without increasing the sale of wine? Or the tools of shipwrights find an enlarged market whilst shipbuilding was stationary?.... Offer to a town of 3000 inhabitants a stock of hearses, no cheapness will tempt that town into buying more than one. Offer a stock of yachts, the chief cost lies in manning, victualling, repairing; no diminution upon the mere price to a purchaser will tempt into the market any man whose habits and propensities had not already disposed him to such a purchase. So of professional costume for bishops, lawyers, students at Oxford." Nobody doubts, however, that the price and value of all these things would be eventually lowered by any diminution of their cost of production; and lowered through the apprehension entertained of new competitors, and an increased supply. though the great hazard to which a new competitor would expose himself, in an article not susceptible of any considerable extension of its market, would enable the established dealers to maintain their original prices much longer than they could do in an article offering more encouragement to competition.

Again, reverse the case, and suppose the cost of production increased, as for example by laying a tax on the commodity. The value would rise; and that, probably, immediately. Would the supply be diminished? Only if the increase of value diminished the demand. Whether this effect followed, would soon appear, and if it did, the value would recede somewhat, from excess of supply, until the production was reduced, and would then rise again. There are many articles for which it requires a very considerable rise of price, materially to reduce the demand; in particular, articles of necessity, such as the habitual food of the people; in England, wheaten bread: of which there is probably
almost as much consumed, at the present cost price, as there would be with the present population at a price considerably lower. Yet it is especially in such things that dearness or high price is popularly confounded with scarcity. Food may be dear from scarcity, as after a bad harvest; but the dearness (for example) which is the effect of taxation, or of corn laws, has nothing whatever to do with insufficient supply: such causes do not much diminish the quantity of food in a country. it is other things rather than food that are diminished in quantity by them, since, those who pay more for food not having so much to expend otherwise, the production of other things contracts itself to the limits of a smaller demand.

It is, therefore, strictly correct to say, that the value of things which can be increased in quantity at pleasure, does not depend (except accidentally, and during the time necessary for production to adjust itself,) upon demand and supply: on the contrary, demand and supply depend upon it. There is a demand for a certain quantity of the commodity at its natural or cost value, and to that the supply in the long run endeavours to conform. When at any time it fails of so conforming, it is either from miscalculation, or from a change in some of the elements of the problem: either in the natural value, that is, in the cost of production: or in the demand, from an alteration in public taste or in the number or wealth of the consumers. These causes of disturbance are very liable to occur, and when any one of them does occur, the market value of the article ceases to agree with the natural value. The real law of demand and supply, the equation between them, still holds good: if a value different from the natural value be necessary to make the demand equal to the supply, the market value will deviate from the natural value; but only for a time; for the permanent tendency of supply is to conform itself to the demand which is found by experience to exist for the commodity when selling at its natural value. If the supply is either more or less than this, it is so accidentally, and affords either more or less than the ordinary rate of profit; which, under free and active competition, cannot long continue to be the case.

To recapitulate: demand and supply govern the value of all things which cannot be indefinitely increased; except that even for them, when produced by industry, there is a minimum value, determined by the cost of production. But in all things which admit of indefinite multiplication, demand and supply only determine the perturbations of value, during a period which cannot exceed the length of time necessary for altering the supply. While thus ruling the oscillations of value, they themselves obey a superior force, which makes value gravitate
towards Cost of Production, and which would settle it and keep it there, if fresh disturbing influences were not continuity arising to make it again deviate. To pursue the same strain of metaphor, demand and supply always rush to an equilibrium, but the condition of stable equilibrium is when things exchange for each other according to their cost of production, or, in the expression we have used, when things are at their Natural Value.

NOTES:


Chapter 4

Ultimate Analysis of Cost of Production

1. The component elements of Cost of Production have been set forth in the First Part of this enquiry. (1*) The principal of them, and so much the principal as to be nearly the sole, we found to be Labour. What the production of a thing costs to its producer, or its series of producers, is the labour expended in producing it. If we consider as the producer the capitalist who makes the advances, the word Labour may be replaced by the word Wages: what the produce costs to him, is the wages which he has had to pay. At the first glance indeed this seems to be only a part of his outlay, since he has not only paid wages to labourers, but has likewise provided them with tools, materials, and perhaps buildings. These tools, materials, and buildings, however, were produced by labour and capital; and their value, like that of the article to the production of which they are subservient, depends on cost of production, which again is resolvable into labour. The cost of production of broadcloth does not wholly consist in the wages of weavers, which alone are directly paid by the cloth manufacturer. It consists also of the wages of spinners and woolcombers, and, it may be added, of shepherds, all of which the clothier has paid for in the price of yarn. It consists too of the wages of builders and brickmakers, which he has reimbursed in the contract price of erecting his factory. It partly consists of the wages of machine-makers, iron-founders, and miners. And to these must be added the wages of the carriers who transported any of the means and appliances of the production to the place where they were to be used, and
the product itself to the place where it is to be sold.

The value of commodities, therefore, depends principally (we shall presently see whether it depends solely) on the quantity of labour required for their production; including in the idea of production, that of conveyance to the market. "In estimating," says Ricardo, (2*) "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 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.

"To convince ourselves that this is the real 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 employed in navigating, 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 more efficient; the stockings would inevitably fall in value, and 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 abridgement of labour had been made.

"Economy in the use of labour never fails to reduce 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."

2. It will have been observed that Ricardo expresses himself as if the quantity of labour which it costs to produce a commodity and bring it to market, were the only thing on which its value depended. But since the cost of production to the capitalist is not labour but wages, and since wages may be either greater or less, the quantity of labour being the same; it would seem that the value of the product cannot be determined solely by the quantity of labour, but by the quantity together with the remuneration; and that values must partly depend on wages.

In order to decide this point, it must be considered, that value is a relative term: that the value of a commodity is not a name for an inherent and substantive quality of the thing itself, but means the quantity of other things which can be obtained in exchange for it. The value of one thing, must always be understood relatively to some other thing, or to things in general. Now the relation of one thing to another cannot be altered by any cause which affects them both alike. A rise or fall of general wages is a fact which affects all commodities in the same manner, and therefore affords no reason why they should exchange for each other in one rather than in another proportion. To suppose that high wages make high values, is to suppose that there can be such a thing as general high values. But this is a contradiction in terms: the high value of some things is synonymous with the low value of others. The mistake arises from not attending to values, but only to prices. Though there is no such thing as a general rise of values, there is such a thing as a general rise of prices. As soon as we form distinctly the idea of values, we see that high or low wages can have nothing to do with them: but that high wages make high prices, is a popular and widely-spread opinion. The whole amount of error involved in this proposition can only be seen thoroughly when we come to the theory of money; at present we need only say that if it be true, there can be no such thing as a real rise of wages; for if wages could not rise without a proportional rise of the price of everything, they could not, for any substantial purpose, rise at
all. This surely is a sufficient reductio ad absurdum, and shows the amazing folly of the propositions which may and do become, and long remain, accredited doctrines of popular political economy. It must be remembered too that general high prices, even supposing them to exist, can be of no use to a producer or dealer, considered as such; for if they increase his money returns, they increase in the same degree all his expenses. There is no mode in which capitalists can compensate themselves for a high cost of labour, through any action on values or prices. It cannot be prevented from taking its effect on low profits. If the labourers really get more, that is, get the produce of more labour, a smaller percentage must remain for profit. From this Law of Distribution, resting as it does on a law of arithmetic, there is no escape. The mechanism of Exchange and Price may hide it from us, but is quite powerless to alter it.

3. Although, however, general wages, whether high or low, do not affect values, yet if wages are higher in one employment than another, or if they rise and fall permanently in one employment without doing so in others, these inequalities do really operate upon values. The causes which make wages vary from one employment to another, have been considered in a former chapter. When the wages of an employment permanently exceed the average rate, the value of the thing produced will, in the same degree, exceed the standard determined by mere quantity of labour. Things, for example, which are made by skilled labour, exchange for the produce of a much greater quantity of unskilled labour; for no reason but because the labour is more highly paid. If, through the extension of education, the labourers competent to skilled employment were so increased in number as to diminish the difference between their wages and those of common labour, all things produced by labour of the superior kind would fall in value, compared with things produced by common labour, and these might be said therefore to rise in value. We have before remarked that the difficulty of passing from one class of employments to a class greatly superior, has hitherto caused the wages of all those classes of labourers who are separated from one another by any very marked barrier, to depend more than might be supposed upon the increase of the population of each class considered separately; and that the inequalities in the remuneration of labour are much greater than could exist if the competition of the labouring people generally could be brought practically to bear on each particular employment. It follows from this that wages in different employments do not rise or fall simultaneously, but are, for short and sometimes even for long periods, nearly independent of one another. All such disparities
evidently alter the relative costs of production of different commodities, and will therefore be completely represented in their natural or average value.

It thus appears that the maxim laid down by some of the best political economists, that wages do not enter into value, is expressed with greater latitude than the truth warrants, or than accords with their own meaning. Wages do enter into value. The relative wages of the labour necessary for producing different commodities, affect their value just as much as the relative quantities of labour. It is true, the absolute wages paid have no effect upon values; but neither has the absolute quantity of labour. If that were to vary simultaneously and equally in all commodities, values would not be affected. If, for instance, the general efficiency of all labour were increased, so that all things without exception could be produced in the same quantity as before with a smaller amount of labour, no trace of this general diminution of cost of production would show itself in the values of commodities. Any change which might take place in them would only represent the unequal degrees in which the improvement affected different things; and would consist in cheapening those in which the saving of labour had been the greatest, while those in which there had been some, but a less saving of labour, would actually rise in value. In strictness, therefore, wages of labour have as much to do with value as quantity of labour: and neither Ricardo nor any one else has denied the fact. In considering, however, the causes of variations in value, quantity of labour is the thing of chief importance; for when that varies, it is generally in one or a few commodities at a time, but the variations of wages (except passing fluctuations) are usually general, and have no considerable effect on value.

4. Thus far of labour, or wages, as an element in cost of production. But in our analysis, in the First Book, of the requisites of production, we found that there is another necessary element in it besides labour. There is also capital; and this being the result of abstinence, the produce, or its value, must be sufficient to remunerate, not only all the labour required, but the abstinence of all the persons by whom the remuneration of the different classes of labourers was advanced. The return for abstinence is Profit. And profit, we have also seen, is not exclusively the surplus remaining to the capitalist after he has been compensated for his outlay, but forms, in most cases, no unimportant part of the outlay itself. The flax-spinner, part of whose expenses consists of the purchase of flax and of machinery, has had to pay, in their price, not only the wages of the labour by which the flax was grown and the
machinery made, but the profits of the grower, the flax-dresser, the miner, the ironfounder, and the machine-maker. All these profits, together with those of the spinner himself, were again advanced by the weaver, in the price of his material, linen yarn: and along with them the profit of a fresh set of machine-makers, and of the miners and iron-workers who supplied them with their metallic material. All these advances form part of the cost of production of linen. Profits, therefore, as well as wages, enter into the cost of production which determines the value of the produce.

Value, however, being purely relative, cannot depend upon absolute profits, no more than upon absolute wages, but upon relative profits only. High general profits cannot, any more than high general wages, be a cause of high values, because high general values are an absurdity and a contradiction. In so far as profits enter into the cost of production of all things, they cannot affect the value of any. It is only by entering in a greater degree into the cost of production of some things than of others, that they can have any influence on value.

For example, we have seen that there are causes which necessitate a permanently higher rate of profit in certain employments than in others. There must be a compensation for superior risk, trouble, and disagreeableness. This can only be obtained by selling the commodity at a value above that which is due to the quantity of labour necessary for its production. If gunpowder exchanged for other things in no higher ratio than that of the labour required from first to last for producing it, no one would set up a powder-mill. Butchers are certainly a more prosperous class than bakers, and do not seem to be exposed to greater risks, since it is not remarked that they are oftener bankrupts. They seem, therefore, to obtain higher profits, which can only arise from the more limited competition caused by the unpleasantness, and to a certain degree, the unpopularity, of their trade. But this higher profit implies that they sell their commodity at a higher value than that due to their labour and outlay. All inequalities of profit which are necessary and permanent, are represented in the relative values of the commodities.

5. Profits, however, may enter more largely into the conditions of production of one commodity than of another, even though there be no difference in the rate of profit between the two employments. The one commodity may be called upon to yield profit during a longer period of time than the other. The example by which this case is usually illustrated is that of wine. Suppose a quantity of wine, and a quantity of cloth, made by
equal amounts of labour, and that labour paid at the same rate. The cloth does not improve by keeping; the wine does. Suppose that, to attain the desired quality, the wine requires to be kept five years. The producer or dealer will not keep it, unless at the end of five years he can sell it for as much more than the cloth, as amounts to five years' profit, accumulated at compound interest. The wine and the cloth were made by the same original outlay. Here then is a case in which the natural values, relatively to one another, of two commodities, do not conform to their cost of production alone, but to their cost of production plus something else. Unless, indeed, for the sake of generality in the expression, we include the profit which the wine-merchant foregoes during the five years, in the cost of production of the wine: looking upon it as a kind of additional outlay, over and above his other advances, for which outlay he must be indemnified at last.

All commodities made by machinery are assimilated, at least approximately, to the wine in the preceding example. In comparison with things made wholly by immediate labour, profits enter more largely into their cost of production. Suppose two commodities, A and B, each requiring a year for its production, by means of a capital which we will on this occasion denote by money, and suppose to be 1000l. A is made wholly by immediate labour, the whole 1000l. being expended directly in wages. B is made by means of labour which costs 500l. and a machine which cost 500l., and the machine is worn out by one year's use. The two commodities will be exactly of the same value; which, if computed in money, and if profits are 20 per cent per annum, will be 1200l. But of this 1200l., in the case of A, only 200l., or one-sixth, is profit: while in the case of B there is not only the 200l., but as much of 500l. (the price of the machine) as consisted of the profits of the machine-maker; which, if we suppose the machine also to have taken a year for its production, is again one-sixth. So that in the case of A only one-sixth of the entire return is profit, whilst in B the element of profit comprises not only a sixth of the whole, but an additional sixth of a large part.

The greater the proportion of the whole capital which consists of machinery, or buildings, or material, or anything else which must be provided before the immediate labour can commence, the more largely will profits enter into the cost of production. It is equally true, though not so obvious at first sight, that greater durability in the portion of capital which consists of machinery or buildings, has precisely the same effect as a greater amount of it. As we just supposed one extreme case, of a machine entirely worn out by a year's use, let us now
suppose the opposite and still more extreme case of a machine which lasts for ever, and requires no repairs. In this case, which is as well suited for the purpose of illustration as if it were a possible one, it will be unnecessary that the manufacturer should ever be repaid the 500l. which he gave for the machine, since he has always the machine itself, worth 500l.; but he must be paid, as before, a profit on it. The commodity B, therefore, which in the case previously supposed was sold for 1200l. of which sum 1000l. were to replace the capital and 200l. were profit, can now be sold for 700l., being 500l. to replace wages, and 200l. profit on the entire capital. Profit, therefore, enters into the value of B in the ratio of 200l. out of 700l., being two-sevenths of the whole, or 28 4/7 per cent, while in the case of A, as before, it enters only in the ratio of one-sixth, or 16 2/3 per cent. The case is of course purely ideal, since no machinery or other fixed capital lasts for ever; but the more durable it is, the nearer it approaches to this ideal case, and the more largely does profit enter into the return. If, for instance, a machine worth 500l. loses one-fifth of its value by each year's use, 100l. must be added to the return to make up this loss, and the price of the commodity will be 800l. Profit therefore will enter into it in the ratio of 200l. to 800l., or one-fourth, which is still a much higher proportion than one-sixth, or 200l. in 1200l., as in case A. From the unequal proportion in which, in different employments, profits enter into the advances of the capitalist, and therefore into the returns required by him, two consequences follow in regard to value. One is, that commodities do not exchange in the ratio simply of the quantities of labour required to produce them; not even if we allow for the unequal rates at which different kinds of labour are permanently remunerated. We have already illustrated this by the example of wine: we shall now further exemplify it by the case of commodities made by machinery. Suppose, as before, an article A made by a thousand pounds' worth of immediate labour. But instead of B, made by 500l. worth of immediate labour and a machine worth 500l., let us suppose C, made by 500l. worth of immediate labour with the aid of a machine which has been produced by another 500l. worth of immediate labour: the machine requiring a year for making, and worn out by a year's use; profits being as before 20 per cent. A and C are made by equal quantities of labour, paid at the same rate: A costs 1000l. worth of direct labour; C, only 500l. worth, which however is made up to 1000l. by the labour expended in the construction of the machine. If labour, or its remuneration, were the sole ingredient of cost of production, these two things would exchange for one another. But will they do so? Certainly not. The machine having
been made in a year by an outlay of 500l., and profits being 20
per cent, the natural price of the machine is 600l.: making an
additional 100l. which must be advanced, over and above his other
expenses, by the manufacturer of C, and repaid to him with a
profit of 20 per cent. While, therefore, the commodity A is sold
for 1200l., C cannot be permanently sold for less than 1320l.

A second consequence is, that every rise or fall of general
profits will have an effect on values. Not indeed by raising or
lowering them generally, (which, as we have so often said, is a
contradiction and an impossibility): but by altering the
proportion in which the values of things are affected by the
unequal lengths of time for which profit is due. When two things,
though made by equal labour, are of unequal value because the one
is called upon to yield profit for a greater number of years or
months than the other; this difference of value will be greater
when profits are greater, and less when they are less. The wine
which has to yield five years' profit more than the cloth, will
surpass it in value much more if profits are 40 per cent, than if
they are only 20. The commodities A and C, which, though made by
equal quantities of labour, were sold for 1200l. and 1320l., a
difference of 10 per cent, would, if profits had been only half
as much, have been sold for 1100l. and 1155l., a difference of
only 5 per cent.

It follows from this, that even a general rise of wages, when
it involves a real increase in the cost of labour, does in some
degree influence values. It does not affect them in the manner
vulgarly supposed, by raising them universally. But an increase
in the cost of labour, lowers profits; and therefore lowers in
natural value the things into which profits enter in a greater
proportion than the average, and raises those into which they
enter in a less proportion than the average. All commodities in
the production of which machinery bears a large part, especially
if the machinery is very durable, are lowered in their relative
value when profits fall; or, what is equivalent, other things are
raised in value relatively to them. This truth is sometimes
expressed in a phraseology more plausible than sound, by saying
that a rise of wages raises the value of things made by labour,
in comparison with those made by machinery. But things made by
machinery, just as much as any other things, are made by labour,
namely, the labour which made the machinery itself: the only
difference being that profits enter somewhat more largely into
the production of things for which machinery is used, though the
principal item of the outlay is still labour. It is better,
therefore, to associate the effect with fall of profits than with
rise of wages; especially as this last expression is extremely
ambiguous, suggesting the idea of an increase of the labourer's
real remuneration, rather than of what is alone to the purpose here, namely, the cost of labour to its employer.

6. Besides the natural and necessary elements in cost of production-labour and profits—there are others which are artificial and casual, as for instance a tax. The tax on malt is as much a part of the cost of production of that article as the wages of the labourers. The expenses which the law imposes, as well as those which the nature of things imposes, must be reimbursed with the ordinary profit from the value of the produce, or the things will not continue to be produced. But the influence of taxation on value is subject to the same conditions as the influence of wages and of profits. It is not general taxation, but differential taxation, that produces the effect. If all productions were taxed so as to take an equal percentage from all profits, relative values would be in no way disturbed. If only a few commodities were taxed, their value would rise: and if only a few were left untaxed, their value would fall. If half were taxed and the remainder untaxed, the first half would rise and the last would fall relatively to each other. This would be necessary in order to equalize the expectation of profit in all employments, without which the taxed employments would ultimately, if not immediately, be abandoned. But general taxation, when equally imposed, and not disturbing the relations of different productions to one another, cannot produce any effect on values.

We have thus far supposed that all the means and appliances which enter into the cost of production of commodities, are things whose own value depends on their cost of production. Some of them, however, may belong to the class of things which cannot be increased ad libitum in quantity, and which therefore, if the demand goes beyond a certain amount, command a scarcity value. The materials of many of the ornamental articles manufactured in Italy are the substances called rosso, giallo, and verde antico, which, whether truly or falsely I know not, are asserted to be solely derived from the destruction of ancient columns and other ornamental structures; the quarries from which the stone was originally cut being exhausted, or their locality forgotten. A material of such a nature, if in much demand, must be at a scarcity value; and this value enters into the cost of production, and consequently into the value, of the finished article. The time seems to be approaching when the more valuable furs will come under the influence of a scarcity value of the material. Hitherto the diminishing number of the animals which produce them, in the wildernesses of Siberia, and on the coasts of the Esquimaux Sea, has operated on the value only through the
greater labour which has become necessary for securing any given quantity of the article, since, without doubt, by employing labour enough, it might still be obtained in much greater abundance for some time longer.

But the case in which scarcity value chiefly operates in adding to cost of production, is the case of natural agents. These, when unappropriated, and to be had for the taking, do not enter into cost of production, save to the extent of the labour which may be necessary to fit them for use. Even when appropriated, they do not (as we have already seen) bear a value from the mere fact of the appropriation, but only from scarcity, that is, from limitation of supply. But it is equally certain that they often do bear a scarcity value. Suppose a fall of water, in a place where there are more mills wanted than there is water-power to supply them, the use of the fall of water will have a scarcity value, sufficient either to bring the demand down to the supply, or to pay for the creation of an artificial power, by steam or otherwise, equal in efficiency to the water-power.

A natural agent being a possession in perpetuity, and being only serviceable by the products resulting from its continued employment, the ordinary mode of deriving benefit from its ownership is by an annual equivalent, paid by the person who uses it, from the proceeds of its use. This equivalent always might be, and generally is, termed rent. The question, therefore, respecting the influence which the appropriation of natural agents produces on values, is often stated in this form: Does Rent enter into Cost of Production? and the answer of the best political economists is in the negative. The temptation is strong to the adoption of these sweeping expressions, even by those who are aware of the restrictions with which they must be taken; for there is no denying that they stamp a general principle more firmly on the mind, than if it were hedged round in theory with all its practical limitations. But they also puzzle and mislead, and create an impression unfavourable to political economy, as if it disregarded the evidence of facts. No one can deny that rent sometimes enters into cost of production. If I buy or rent a piece of ground, and build a cloth manufactory on it, the ground-rent forms legitimately a part of my expenses of production, which must be repaid by the product. And since all factories are built on ground, and most of them in places where ground is peculiarly valuable, the rent paid for it must, on the average, be compensated in the values of all things made in factories. In what sense it is true that rent does not enter into the cost of production or affect the value of agricultural produce, will be shown in the succeeding chapter.
NOTES:

1. Supra, pp. 31-2.

2. Principles of Political Economy and Taxation, ch. 1, sect. 3.

3. Some of these quarries, I believe, have been rediscovered, and are again worked.

Chapter 7

Of Money

1. Having proceeded thus far in ascertaining the general laws of Value, without introducing the idea of Money (except occasionally for illustration,) it is time that we should now superadd that idea, and consider in what manner the principles of the mutual interchange of commodities are affected by the use of what is termed a Medium of Exchange.

In order to understand the manifold functions of a Circulating Medium, there is no better way than to consider what are the principal inconveniences which we should experience if we had not such a medium. The first and most obvious would be the want of a common measure for values of different sorts. If a tailor had only coats, and wanted to buy bread or a horse, it would be very troublesome to ascertain how much bread he ought to obtain for a coat, or how many coats he should give for a horse. The calculation must be recommenced on different data, every time he bartered his coats for a different kind of article; and there could be no current price, or regular quotations of value. Whereas now each thing has a current price in money, and he gets over all difficulties by reckoning his coat at 4l. or 5l., and a four-pound loaf at 6d. or 7d. As it is much easier to compare different lengths by expressing them in a common language of feet and inches, so it is much easier to compare values by means of a common language of pounds, shillings, and pence. In no other way can values be arranged one above another in a scale; in no other can a person conveniently calculate the sum of his possessions; and it is easier to ascertain and remember the relations of many things to one thing, than their innumerable cross relations with one another. This advantage of having a common language in which values may be expressed, is, even by itself, so important, that some such mode of expressing and computing them would probably be used even if a pound or a shilling did not express any real
thing, but a mere unit of calculation. It is said that there are African tribes in which this somewhat artificial contrivance actually prevails. They calculate the value of things in a sort of money of account, called macutes. They say, one thing is worth ten macutes, another fifteen, another twenty. (1*) There is no real thing called a macute: it is a conventional unit, for the more convenient comparison of things with one another.

This advantage, however, forms but an inconsiderable part of the economical benefits derived from the use of money. The inconveniences of barter are so great, that without some more commodious means of effecting exchanges, the division of employments could hardly have been carried to any considerable extent. A tailor, who had nothing but coats, might starve before he could find any person having bread to sell who wanted a coat: besides, he would not want as much bread at a time as would be worth a coat, and the coat could not be divided. Every person, therefore, would at all times hasten to dispose of his commodity in exchange for anything which, though it might not be fitted to his own immediate wants, was in great and general demand, and easily divisible, so that he might be sure of being able to purchase with it whatever was offered for sale. The primary necessaries of life possess these properties in a high degree. Bread is extremely divisible, and an object of universal desire. Still, this is not the sort of thing required: for, of food, unless in expectation of a scarcity, no one wishes to possess more at once, than is wanted for immediate consumption; so that a person is never sure of finding an immediate purchaser for articles of food; and unless soon disposed of, most of them perish. The thing which people would select to keep by them for making purchases, must be one which, besides being divisible and generally desired, does not deteriorate by keeping. This reduces the choice to a small number of articles.

2. By a tacit concurrence, almost all nations, at a very early period, fixed upon certain metals, and especially gold and silver, to serve this purpose. No other substances unite the necessary qualities in so great a degree, with so many subordinate advantages. Next to food and clothing, and in some climates even before clothing, the strongest inclination in a rude state of society is for personal ornament, and for the kind of distinction which is obtained by rarity or costliness in such ornaments. After the immediate necessities of life were satisfied, every one was eager to accumulate as great a store as possible of things at once costly and ornamental; which were chiefly gold, silver, and jewels. These were the things which it most pleased every one to possess, and which there was most
certainty of finding others willing to receive in exchange for any kind of produce. They were among the most imperishable of all substances. They were also portable, and containing great value in small bulk, were easily hid; a consideration of much importance in an age of insecurity. Jewels are inferior to gold and silver in the quality of divisibility; and are of very various qualities, not to be accurately discriminated without great trouble. Gold and silver are eminently divisible, and when pure, always of the same quality; and their purity may be ascertained and certified by a public authority. Accordingly, though furs have been employed as money in some countries, cattle in others, in Chinese Tartary cubes of tea closely pressed together, the shell called cowries on the coast of Western Africa, and in Abyssinia at this day blocks of rock salt; though even of metals, the less costly have sometimes been chosen, as iron in Lacedaemon from an ascetic policy, copper in the early Roman republic from the poverty of the people; gold and silver have been generally preferred by nations which were able to obtain them, either by industry, commerce, or conquest. To the qualities which originally recommended them, another came to be added, the importance of which only unfolded itself by degrees. Of all commodities, they are among the least influenced by any of the causes which produce fluctuations of value. No commodity is quite free from such fluctuations. Gold and silver have sustained, since the beginning of history, one great permanent alteration of value, from the discovery of the American mines; and some temporary variations, such as that which, in the last great war, was produced by the absorption of the metals in hoards, and in the military chests of the immense armies constantly in the field. In the present age the opening of new sources of supply, so abundant as the Ural mountains, California, and Australia, may be the commencement of another period of decline, on the limits of which it would be useless at present to speculate. But on the whole, no commodities are so little exposed to causes of variation. They fluctuate less than almost any other things in their cost of production. And from their durability, the total quantity in existence is at all times so great in proportion to the annual supply, that the effect on value even of a change in the cost of production is not sudden: a very long time being required to diminish materially the quantity in existence, and even to increase it very greatly not being a rapid process. Gold and silver, therefore, are more fit than any other commodity to be the subject of engagements for receiving or paying a given quantity at some distant period. If the engagement were made in corn, a failure of crops might increase the burthen of the payment in one year to fourfold what was intended, or an
exuberant harvest sink it in another to one-fourth. If stipulated in cloth, some manufacturing invention might permanently reduce the payment to a tenth of its original value. Such things have occurred even in the case of payments stipulated in gold and silver; but the great fall of their value after the discovery of America, is, as yet, the only authenticated instance; and in this case the change was extremely gradual, being spread over a period of many years.

When gold and silver had become virtually a medium of exchange, by becoming the things for which people generally sold, and with which they generally bought, whatever they had to sell or to buy; the contrivance of coining obviously suggested itself. By this process the metal was divided into convenient portions, of any degree of smallness, and bearing a recognised proportion to one another; and the trouble was saved of weighing and assaying at every change of possessors, an inconvenience which on the occasion of small purchases would soon have become insupportable. Governments found it their interest to take the operation into their own hands, and to interdict all coining by private persons; indeed, their guarantee was often the only one which would have been relied on, a reliance however which very often it ill deserved; profligate governments having until a very modern period seldom scrupled, for the sake of robbing their creditors, to confer on all other debtors a licence to rob theirs, by the shallow and impudent artifice of lowering the standard; that least covert of all modes of knavery, which consists in calling a shilling a pound, that a debt of one hundred pounds may be cancelled by the payment of a hundred shillings. It would have been as simple a plan, and would have answered the purpose as well, to have enacted that "a hundred" should always be interpreted to mean five, which would have affected the same reduction in all pecuniary contracts, and would not have been at all more shameless. Such strokes of policy have not wholly ceased to be recommended, but they have ceased to be practised; except occasionally through the medium of paper money, in which case the character of the transaction, from the greater obscurity of the subject, is a little less barefaced.

3. Money, when its use has grown habitual, is the medium through which the incomes of the different members of the community are distributed to them, and the measure by which they estimate their possessions. As it is always by means of money that people provide for their different necessities, there grows up in their minds a powerful association leading them to regard money as wealth in a more peculiar sense than any other article; and even those who pass their lives in the production of the most
useful objects, acquire the habit of regarding those objects as chiefly important by their capacity of being exchanged for money. A person who parts with money to obtain commodities, unless he intends to sell them, appears to the imagination to be making a worse bargain than a person who parts with commodities to get money: the one seems to be spending his means, the other adding to them. Illusions which, though now in some measure dispelled, were long powerful enough to overmaster the mind of every politician, both speculative and practical, in Europe.

It must be evident, however, that the mere introduction of a particular mode of exchanging things for one another, by first exchanging a thing for money, and then exchanging the money for something else, makes no difference in the essential character of transactions. It is not with money that things are really purchased. Nobody’s income (except that of the gold or silver miner) is derived from the precious metals. The pounds or shillings which a person receives weekly or yearly, are not what constitutes his income; they are a sort of tickets or orders which he can present for payment at any shop he pleases, and which entitle him to receive a certain value of any commodity that he makes choice of. The farmer pays his labourers and his landlord in these tickets, as the most convenient plan for himself and them: but their real income is their share of his corn, cattle, and hay, and it makes no essential difference whether he distributes it to them directly, or sells it for them and gives them the price: but as they would have to sell it for money if he did not, and as he is a seller at any rate, it best suits the purposes of all, that he should sell their share along with his own, and leave the labourers more leisure for work and the landlord for being idle. The capitalists, except those who are producers of the precious metals, derive no part of their income from those metals, since they only get them by buying them with their own produce: while all other persons have their incomes paid to them by the capitalists, or by those who have received payment from the capitalists, and as the capitalists have nothing, from the first, except their produce, it is that and nothing else which supplies all incomes furnished by them. There cannot, in short, be intrinsically a more insignificant thing, in the economy of society, than money, except in the character of a contrivance for sparing time and labour. It is a machine for doing quickly and commodiously, what would be done, though less quickly and commodiously, without it: and like many other kinds of machinery, it only exerts a distinct and independent influence of its own when it gets out of order.

The introduction of money does not interfere with the operation of any of the Laws of Value laid down in the preceding
chapters. The reasons which make the temporary or market value of things depend on the demand and supply, and their average and permanent values upon their cost of production, are as applicable to a money system as to a system of barter. Things which by barter would exchange for one another, will, if sold for money, sell for an equal amount of it, and so will exchange for one another still, though the process of exchanging them will consist of two operations instead of only one. The relations of commodities to one another remain unaltered by money: the only new relation introduced, is their relation to money itself; how much or how little money they will exchange for; in other words, how the Exchange Value of money itself is determined. And this is not a question of any difficulty, when the illusion is dispelled, which caused money to be looked upon as a peculiar thing, not governed by the same laws as other things. Money is a commodity, and its value is determined like that of other commodities, temporarily by demand and supply, permanently and on the average by cost of production. The illustration of these principles, considered in their application to money, must be given in some detail, on account of the confusion which, in minds not scientifically instructed on the subject, envelopes the whole matter; partly from a lingering remnant of the old misleading associations, and partly from the mass of vapoury and baseless speculation with which this, more than any other topic of political economy, has in latter times become surrounded. I shall therefore treat of the Value of Money in a chapter apart.

NOTES:


Chapter 8

Of the Value of Money, as Dependent on Demand and Supply

1. It is unfortunate that in the very outset of the subject we have to clear from our path a formidable ambiguity of language. The Value of Money is to appearance an expression as precise, as free from possibility of misunderstanding, as any in science. The value of a thing, is what it will exchange for: the value of money, is what money will exchange for: the purchasing power of money. If prices are low, money will buy much of other
things, and is of high value; if prices are high, it will buy little of other things, and is of low value. The value of money is inversely as general prices: falling as they rise, and rising as they fall.

But unhappily the same phrase is also employed, in the current language of commerce, in a very different sense. Money, which is so commonly understood as the synonyme of wealth, is more especially the term in use to denote it when it is the subject of borrowing. When one person lends to another, as well as when he pays wages or rent to another, what he transfers is not the mere money, but a right to a certain value of the produce of the country, to be selected at pleasure; the lender having first bought this right, by giving for it a portion of his capital. What he really lends is so much capital; the money is the mere instrument of transfer. But the capital usually passes from the lender to the receiver through the means either of money, or of an order to receive money, and at any rate it is in money that the capital is computed and estimated. Hence, borrowing capital is universally called borrowing money; the loan market is called the money market: those who have their capital disposable for investment on loan are called the monied class: and the equivalent given for the use of capital, or in other words, interest, is not only called the interest of money, but, by a grosser perversion of terms, the value of money. This misapplication of language, assisted by some fallacious appearances which we shall notice and clear up hereafter,(1*) has created a general notion among persons in business, that the Value of Money, meaning the rate of interest, has an intimate connexion with the Value of Money in its proper sense, the value or purchasing power of the circulating medium. We shall return to this subject before long: at present it is enough to say, that by Value I shall always mean Exchange Value, and by money the medium of exchange, not the capital which is passed from hand to hand through that medium.

2. The value or purchasing power of money depends, in the first instance, on demand and supply. But demand and supply, in relation to money, present themselves in a somewhat different shape from the demand and supply of other things.

The supply of a commodity means the quantity offered for sale. But it is not usual to speak of offering money for sale. People are not usually said to buy or sell money. This, however, is merely an accident of language. In point of fact, money is bought and sold like other things, whenever other things are bought and sold for money. Whoever sells corn, or tallow, or cotton, buys money. Whoever buys bread, or wine, or clothes,
sells money to the dealer in those articles. The money with which people are offering to buy, is money offered for sale. The supply of money, then, is the quantity of it which people are wanting to lay out: that is, all the money they have in their possession, except what they are hoarding, or at least keeping by them as a reserve for future contingencies. The supply of money, in short, is all the money in circulation at the time.

The demand for money, again, consists of all the goods offered for sale. Every seller of goods is a buyer of money, and the goods he brings with him constitute his demand. The demand for money differs from the demand for other things in this, that it is limited only by the means of the purchaser. The demand for other things is for so much and no more; but there is always a demand for as much money as can be got. Persons may indeed refuse to sell, and withdraw their goods from the market, if they cannot get for them what they consider a sufficient price. But this is only when they think that the price will rise, and that they shall get more money by waiting. If they thought the low price likely to be permanent, they would take what they could get. It is always a sine qua non with a dealer to dispose of his goods.

As the whole of the goods in the market compose the demand for money, so the whole of the money constitutes the demand for goods. The money and the goods are seeking each other for the purpose of being exchanged. They are reciprocally supply and demand to one another. It is indifferent whether, in characterizing the phenomena, we speak of the demand and supply of goods, or the supply and the demand of money. They are equivalent expressions.

We shall proceed to illustrate this proposition more fully. And in doing this, the reader will remark a great difference between the class of questions which now occupy us, and those which we previously had under discussion respecting Values. In considering Value, we were only concerned with causes which acted upon particular commodities apart from the rest. Causes which affect all commodities alike, do not act upon values. But in considering the relation between goods and money, it is with the causes that operate upon all goods whatever, that we are specially concerned. We are comparing goods of all sorts on one side, with money on the other side, as things to be exchanged against each other.

Suppose, everything else being the same, that there is an increase in the quantity of money, say by the arrival of a foreigner in a place, with a treasure of gold and silver. When he commences expending it (for this question it matters not whether productively or unproductively), he adds to the supply of money, and by the same act, to the demand for goods. Doubtless he adds,
in the first instance, to the demand only for certain kinds of goods, namely, those which he selects for purchase; he will immediately raise the price of those, and so far as he is individually concerned, of those only. If he spends his funds in giving entertainments, he will raise the prices of food and wine. If he expends them in establishing a manufactory, he will raise the prices of labour and materials. But at the higher prices, more money will pass into the hands of the sellers of these different articles; and they, whether labourers or dealers, having more money to lay out, will create an increased demand for all the things which they are accustomed to purchase: these accordingly will rise in price, and so on until the rise has reached everything. I say everything, though it is of course possible that the influx of money might take place through the medium of some new class of consumers, or in such a manner as to alter the proportions of different classes of consumers to one another, so that a greater share of the national income than before would thenceforth be expended in some articles, and a smaller in others; exactly as if a change had taken place in the tastes and wants of the community. If this were the case, then until production had accommodated itself to this change in the comparative demand for different things, there would be a real alteration in values, and some things would rise in price more than others, while some perhaps would not rise at all. These effects, however, would evidently proceed, not from the mere increase of money, but from accessory circumstances attending it. We are now only called upon to consider what would be the effect of an increase of money, considered by itself. Supposing the money in the hands of individuals to be increased, the wants and inclinations of the community collectively in respect to consumption remaining exactly the same; the increase of demand would reach all things equally, and there would be an universal rise of prices. We might suppose, with Hume, that some morning, every person in the nation should wake and find a gold coin in his pocket: this example, however, would involve an alteration of the proportions in the demand for different commodities; the luxuries of the poor would, in the first instance be raised in price, in a much greater degree than other things. Let us rather suppose, therefore, that to every pound, or shilling, or penny, in the possession of any one, another pound, shilling, or penny, were suddenly added. There would be an increased money demand, and consequently an increased money value, or price, for things of all sorts. This increased value would do no good to any one; would make no difference, except that of having to reckon pounds, shillings, and pence, in higher numbers. It would be an increase of values only as estimated in money, a thing only wanted to buy
other things with; and would not enable any one to buy more of them than before. Prices would have risen in a certain ratio, and the value of money would have fallen in the same ratio.

It is to be remarked that this ratio would be precisely that in which the quantity of money had been increased. If the whole money in circulation was doubled, prices would be doubled. If it was only increased one-fourth, prices would rise one-fourth. There would be one-fourth more money, all of which would be used to purchase goods of some description. When there had been time for the increased supply of money to reach all markets, or (according to the conventional metaphor) to permeate all the channels of circulation, all prices would have risen one-fourth. But the general rise of price is independent of this diffusing and equalizing process. Even if some prices were raised more, and others less, the average rise would be one-fourth. This is a necessary consequence of the fact, that a fourth more money would have been given for only the same quantity of goods. General prices, therefore, would in any case be a fourth higher.

The very same effect would be produced on prices if we suppose the goods diminished, instead of the money increased: and the contrary effect if the goods were increased or the money diminished. If there were less money in the hands of the community, and the same amount of goods to be sold, less money altogether would be given for them, and they would be sold at lower prices: lower, too, in the precise ratio in which the money was diminished. So that the value of money, other things being the same, varies inversely as its quantity: every increase of quantity lowering the value, and every diminution raising it, in a ratio exactly equivalent.

This, it must be observed, is a property peculiar to money. We did not find it to be true of commodities generally, that every diminution of supply raised the value exactly in proportion to the deficiency, or that every increase lowered it in the precise ratio of the excess. Some things are usually affected in a greater ratio than that of the excess or deficiency, others usually in a less: because, in ordinary cases of demand, the desire, being for the thing itself, may be stronger or weaker: and the amount of what people are willing to expend on it, being in any case a limited quantity, may be affected in very unequal degrees by difficulty or facility of attainment. But in the case of money, which is desired as the means of universal purchase, the demand consists of everything which people have to sell; and the only limit to what they are willing to give, is the limit set by their having nothing more to offer. The whole of the goods being in any case exchanged for the whole of the money which comes into the market to be laid out, they will sell for less or
more of it, exactly according as less or more is brought.

3. From what precedes, it might for a moment be supposed, that all the goods on sale in a country at any one time, are exchanged for all the money existing and in circulation at that same time: or in other words, that there is always in circulation in a country, a quantity of money equal in value to the whole of the goods then and there on sale. But this would be a complete misapprehension. The money laid out is equal in value to the goods it purchases; but the quantity of money laid out is not the same thing with the quantity in circulation. As the money passes from hand to hand, the same piece of money is laid out many times, before all the things on sale at one time are purchased and finally removed from the market: and each pound or dollar must be counted for as many pounds or dollars, as the number of times it changes hands in order to effect this object. The greater part of the goods must also be counted more than once, not only because most things pass through the hands of several sets of manufacturers and dealers before they assume the form in which they are finally consumed, but because in times of speculation (and all times are so, more or less) the same goods are often bought repeatedly, to be resold for a profit, before they are bought for the purpose of consumption at all.

If we assume the quantity of goods on sale, and the number of times those goods are resold, to be fixed quantities, the value of money will depend upon its quantity, together with the average number of times that each piece changes hands in the process. The whole of the goods sold (counting each resale of the same goods as so much added to the goods) have been exchanged for the whole of the money, multiplied by the number of purchases made on the average by each piece. Consequently, the amount of goods and of transactions being the same, the value of money is inversely as its quantity multiplied by what is called the rapidity of circulation. And the quantity of money in circulation, is equal to the money value of all the goods sold, divided by the number which expresses the rapidity of circulation.

The phrase, rapidity of circulation, requires some comment. It must not be understood to mean, the number of purchases made by each piece of money in a given time. Time is not the thing to be considered. The state of society may he such, that each piece of money hardly performs more than one purchase in a year: but if this arises from the small number of transactions—from the small amount of business done, the want of activity in traffic, or because what traffic there is, mostly takes place by barter -- it constitutes no reason why prices should be lower, or the value of money higher. The essential point is, not how often the same
money changes hands in a given time, but how often it changes hands in order to perform a given amount of traffic. We must compare the number of purchases made by the money in a given time, not with the time itself, but with the goods sold in that same time. If each piece of money changes hands on an average ten times while goods are sold to the value of a million sterling, it is evident that the money required to circulate those goods is 100,000l. And conversely, if the money in circulation is 100,000l., and each piece changes hands by the purchase of goods ten times in a month, the sales of goods for money which take place every month must amount on the average to 1,000,000l.

Rapidity of circulation being a phrase so ill adapted to express the only thing which it is of any importance to express by it, and having a tendency to confuse the subject by suggesting a meaning extremely different from the one intended, it would be a good thing if the phrase could be got rid of, and another substituted, more directly significant of the idea meant to be conveyed. Some such expression as "the efficiency of money," though not unexceptionable, would do better; as it would point attention to the quantity of work done, without suggesting the idea of estimating it by time. Until an appropriate term can be devised, we must be content when ambiguity is to be apprehended, to express the idea by the circumlocution which alone conveys it adequately, namely, the average number of purchases made by each piece in order to effect a given pecuniary amount of transactions.

4. The proposition which we have laid down respecting the dependence of general prices upon the quantity of money in circulation, must be understood as applying only to a state of things in which money, that is, gold or silver, is the exclusive instrument of exchange, and actually passes from hand to hand at every purchase, credit in any of its shapes being unknown. When credit comes into play as a means of purchasing, distinct from money in hand, we shall hereafter find that the connexion between prices and the amount of the circulating medium is much less direct and intimate, and that such connexion as does exist, no longer admits of so simple a mode of expression. But on a subject so full of complexity as that of currency and prices, it is necessary to lay the foundation of our theory in a thorough understanding of the most simple cases, which we shall always find lying as a groundwork or substratum under those which arise in practice. That an increase of the quantity of money raises prices, and a diminution lowers them, is the most elementary proposition in the theory of currency, and without it we should have no key to any of the others. In any state of things,
however, except the simple and primitive one which we have supposed, the proposition is only true other things being the same: and what those other things are, which must be the same, we are not yet ready to pronounce. We can, however, point out, even now, one or two of the cautions with which the principle must be guarded in attempting to make use of it for the practical explanation of phenomena; cautions the more indispensable, as the doctrine, though a scientific truth, has of late years been the foundation of a greater mass of false theory, and erroneous interpretation of facts, than any other proposition relating to interchange. From the time of the resumption of cash payments by the Act of 1819, and especially since the commercial crisis of 1825, the favourite explanation of every rise or fall of prices has been "the currency," and like most popular theories, the doctrine has been applied with little regard to the conditions necessary for making it correct.

For example, it is habitually assumed that whenever there is a greater amount of money in the country, or in existence, a rise of prices must necessity follow. But this is by no means an inevitable consequence. In no commodity is it the quantity in existence, but the quantity offered for sale, that determines the value. Whatever may be the quantity of money in the country, only that part of it will affect prices, which goes into the market of commodities, and is there actually exchanged against goods. Whatever increases the amount of this portion of the money in the country, tends to raise prices. But money hoarded does not act on prices. Money kept in reserve by individuals to meet contingencies which do not occur, does not act on prices. The money in the coffer of the Bank, or retained as a reserve by private bankers, does not act on prices until drawn out, nor even then unless drawn out to be expended in commodities.

It frequently happens that money, to a considerable amount, is brought into the country, is there actually invested as capital, and again flows out, without having ever once acted upon the markets of commodities, but only upon the market of securities, or, as it is commonly though improperly called, the money market. Let us return to the case already put for illustration, that of a foreigner landing in the country with a treasure. We supposed him to employ his treasure in the purchase of goods for his own use, or in setting up a manufactory and employing labourers; and in either case he would, caeteris paribus, raise prices. But instead of doing either of these things, he might very probably prefer to invest his fortune at interest; which we shall suppose him to do in the most obvious way, by becoming a competitor for a portion of the stock, exchequer bills, railway debentures, mercantile bills, mortgages,
&c., which are at all times in the hands of the public. By doing this he would raise the prices of those different securities, or in other words would lower the rate of interest; and since this would disturb the relation previously existing between the rate of interest on capital in the country itself, and that in foreign countries, it would probably induce some of those who had floating capital seeking employment, to send it abroad for foreign investment rather than buy securities at home at the advanced price. As much money might thus go out as had previously come in, while the prices of commodities would have shown no trace of its temporary presence. This is a case highly deserving of attention: and it is a fact now beginning to be recognised, that the passage of the precious metals from country to country is determined much more than was formerly supposed, by the state of the loan market in different countries, and much less by the state of prices.

Another point must be adverted to, in order to avoid serious error in the interpretation of mercantile phenomena. If there be, at any time, an increase in the number of money transactions, a thing continually liable to happen from differences in the activity of speculation, and even in the time of year (since certain kinds of business are transacted only at particular seasons): an increase of the currency which is only proportional to this increase of transactions, and is of no longer duration, has no tendency to raise prices. At the quarterly periods when the public dividends are paid at the Bank, a sudden increase takes place of the money in the hands of the public: an increase estimated at from a fifth to two-fifths of the whole issues of the Bank of England. Yet this never has any effect on prices; and in a very few weeks, the currency has again shrunk into its usual dimensions, by a mere reduction in the demands of the public (after so copious a supply of ready money) for accommodation from the Bank in the way of discount or loan. In like manner the currency of the agricultural districts fluctuates in amount at different seasons of the year. It is always lowest in August: "it rises generally towards Christmas, and obtains its greatest elevation about Lady-day, when the farmer commonly lays in his stock, and has to pay his rent and summer taxes," and when he therefore makes his principal applications to country bankers for loans. "Those variations occur with the same regularity as the season, and with just as little disturbance of the markets as the quarterly fluctuations of the notes of the Bank of England. As soon as the extra payments have been completed, the superfluous" currency, which is estimated at half a million, "as certainly and immediately is reabsorbed and disappears." (2*)

If extra currency were not forthcoming to make these extra
payments, one of three things must happen. Either the payments
must be made without money, by a resort to some of those
contrivances by which its use is dispensed with; or there must be
an increase in the rapidity of circulation, the same sum of money
being made to perform more payments; or if neither of these
things took place, money to make the extra payments must be
withdrawn from the market for commodities, and prices,
consequently, must fall. An increase of the circulating medium,
conformable in extent and duration to the temporary stress of
business, does not raise prices, but merely prevents this fall.

The sequel of our investigation will point out many other
qualifications with which the proposition must be received, that
the value of the circulating medium depends on the demand and
supply, and is in the inverse ratio of the quantity;
qualifications which, under a complex system of credit like that
existing in England, render the proposition an extremely
incorrect expression of the fact.

NOTES:

1. Infra, chap. xxiii.

2. Fullarton on the Regulation of Currencies, 2nd edit., pp.
   87-9.