# BOOK III.

## EXCHANGE.

# BOOK III.

## EXCHANGE,

(CONTINUED.)

### CHAPTER VII.

#### 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 4*l.* or 5*l.*, and a four-pound loaf at 6*d.* or 7*d.* As it is much easier to compare different lengths by expressing them in a common language called feet and inches, so it is much easier to compare values by means of a common language called 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*. 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

* Montesquieu, *Esprit des Lois*, liv. xxii. ch. 8.



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 shells 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 Lacedæmon from an ascetic policy, copper in the early Roman republic from the poverty of the people; gold and silver have been everywhere 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 a new source of supply, so abundant as the mines of the Ural mountains and of Siberia, 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 are more constant 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 being no 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 been known to occur even in the case of payments stipulated in gold and silver; but the great fall of their value after the discovery of America, is 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 recognized 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 never scrupled, for the sake of robbing their creditors, to confer on all other debtors a license 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 a 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 effected 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 direct, 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 machinery 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 pre-

ceding 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 something, 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 systematically 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.

# CHAPTER VIII.

## 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 a synonyme of wealth, is more especially the term in use to denote it when borrowing is spoken of. 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*, 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 come 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

* Infra, ch. xxiii.



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 quâ 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 characterising the phenomena, we speak of the demand and the 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 especially 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 of 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, although 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 be 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 100,000*l*. And conversely, if the money in circulation is 100,000*l*., 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 1,000,000*l*.

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 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 for the present 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 true.

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 necessarily 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 markets for commodities, and is there actually exchanged against goods. Whatever increases the amount of this portion of the money in the country, certainly 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 coffers 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 employed 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, *cæteris paribus*, raise prices. But instead of doing of 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 advance of 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 recognized, 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*."

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 explanations and 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.

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

# CHAPTER IX.

## OF THE VALUE OF MONEY, AS DEPENDENT ON COST OF PRODUCTION.

§ 1. But money, no more than commodities in general, has its value definitively determined by demand and supply. The ultimate regulator of its value is Cost of Production.

We are supposing, of course, that things are left to themselves. Governments have not always left things to themselves. They have undertaken to prevent the quantity of money from adjusting itself according to spontaneous laws, and have endeavoured to regulate it at their pleasure; generally with a view of keeping a greater quantity of money in the country, than would otherwise have remained there. It was, until lately, the policy of all governments to interdict the exportation and the melting of money; while, by encouraging the exportation and impeding the importation of other things, they endeavoured to have a stream of money constantly flowing in. By this course they gratified two prejudices: they drew, or thought that they drew, more money into the country, which they believed to be tantamount to more wealth; and they gave, or thought that they gave, to all producers and dealers, high prices, which, though no real advantage, people are always inclined to suppose to be one.

In this attempt to regulate the value of money artificially by means of the supply, governments have never succeeded in the degree, or even in the manner, which they intended. Their prohibitions against exporting or melting the coin have never been effectual. A commodity of such small bulk in proportion to its value is so easily smuggled, and still more easily melted, that it has been impossible by the most stringent measures to prevent these operations. All the risk

which it was in the power of governments to attach to them, was outweighed by a very moderate profit*. In the more indirect mode of aiming at the same purpose, by throwing difficulties in the way of making the returns for exported goods in any other commodity than money, they have not been quite so unsuccessful. They have not, indeed, succeeded in making money flow continuously into the country; but they have to a certain extent been able to keep it at a higher than its natural level; and have, thus far, removed the value of money from exclusive dependence on the causes which fix the values of things not artificially interfered with.

We are however to suppose a state, not of artificial regulation, but of freedom. In that state, and assuming no charge to be made for coinage, the value of money will conform to the value of the bullion of which it is made. A pound weight of gold or silver in coin, and the same weight in an ingot, will precisely exchange for one another. On the supposition of freedom, the metal cannot be worth more in the state of bullion than of coin; for as it can be melted without any loss of time, and with hardly any expense, this would of course be done until the quantity in circulation was so much diminished as to equalize its value with that of the same weight in bullion. It may be thought however that the coin, though it cannot be of less, may be, and being a manufactured article will naturally be, of greater value than the bullion contained in it, on the same principle on which linen cloth is of more value than an equal weight of linen yarn. This would be true, were it not that Government, in this country and in some others, coins money gratis for any one who furnishes the metal. The labour and ex-

* The effect of the prohibition cannot, however, have been so entirely insignificant as it has been supposed to be by writers on the subject. The facts adduced by Mr. Fullarton, in the note to page 7 of his work on the Regulation of Currencies, shew that it required a greater percentage of difference in value between coin and bullion than has commonly been imagined, to bring the coin to the melting-pot.



pense of coinage, when not charged to the possessor, do not raise the value of the article. If Government opened an office where, on delivery of a given weight of yarn, it returned the same weight of cloth to any one who asked for it, cloth would be worth no more in the market than the yarn it contained. As soon as coin is worth a fraction more than the value of the bullion, it becomes the interest of the holders of bullion to send it to be coined. If Government, however, throws the expense of coinage, as is reasonable, upon the holder, by making a charge to cover the expense, (which is done by giving back rather less in coin than has been received in bullion, and is called levying a seignorage), the coin will rise, to the extent of the seignorage, above the value of the bullion. If the mint kept back one per cent, to pay the expense of coinage, it would be against the interest of the holders of bullion to have it coined, until the coin was more valuable than the bullion by at least that fraction. The coin, therefore, would be kept one per cent higher in value, which could only be by keeping it one per cent less in quantity, than if its coinage were gratuitous.

The Government might attempt to obtain a profit by the transaction, and might lay on a seignorage calculated for that purpose; but whatever they took for coinage beyond its expenses, would be so much profit on private coining. Coining, though not so easy an operation as melting, is far from a difficult one, and, when the coin produced is of full weight and standard fineness, is very difficult to detect. If, therefore, a profit could be made by coining good money, it would certainly be done; and the attempt to make seignorage a source of revenue would be defeated. Any attempt to keep the value of the coin at an artificial elevation, not by a seignorage, but by refusing to coin, would be frustrated in the same manner*.

* In England, although there is no seignorage on gold coin, (the Mint returning in coin the same weight of pure metal which it receives in bul-

§ 2. The value of money, then, conforms permanently, and, in a state of freedom, almost immediately, to the value of the metal of which it is made; with the addition, or not, of the expenses of coinage, according as those expenses are borne by the individual or by the state. This simplifies extremely the question which we have here to consider: since gold and silver bullion are commodities like any others, and their value depends, like that of other things, on their cost of production.

To the majority of civilized countries, gold and silver are foreign products: and the circumstances which govern the values of foreign products, present some questions which we are not yet ready to examine. For the present therefore we must suppose the country which is the subject of our inquiries, to be supplied with gold and silver by its own mines, reserving for future consideration how far our conclusions require modification, to adapt them to the more usual case.

Of the three classes into which commodities are divided—those absolutely limited in supply, those which may be had in unlimited quantity at a given cost of production, and those which may be had in unlimited quantity, but at an increasing cost of production—the precious metals, being the produce of mines, belong to the third class. Their natural value, therefore, is proportional to their cost of production in the most unfavourable existing circumstances, that is, at the worst mine which it is necessary to work in order to obtain the required supply. A pound weight of gold, will, in the country of the mines, exchange on the average for as much of every other

lion) there is a delay of a few weeks after the bullion is deposited, before the coin can be obtained, occasioning a loss of interest, which, to the holder, is equivalent to a trifling seignorage. From this cause, the value of coin is in general slightly above that of the bullion it contains. An ounce of gold, according to the quantity of metal in a sovereign, should be worth 3*l.* 17*s.* 10½*d.*; but it was usually quoted at 3*l.* 17*s.* 6*d.*, until the Bank Charter Act of 1844 made it imperative on the Bank to give its notes for all bullion offered to it at the rate of 3*l.* 17*s.* 9*d.*



commodity, as is produced at a cost equal to its own; meaning by its own cost, the cost of producing it at the worst mines which the existing demand makes it necessary to work. The average value of gold is made to conform to its natural value in the same manner as the values of other things are made to conform to their natural value. Suppose that it were selling above its natural value; that is, above the value which is an equivalent for the labour and expense of mining, and for the risks attending a branch of industry in which nine out of ten experiments are failures. A part of the mass of floating capital which is on the look-out for investment, would take the direction of mining enterprise; the supply would thus be increased, and the value would fall. If, on the contrary, it were selling below its natural value, miners would not be obtaining the ordinary profit; they would slacken their works; if the depreciation was great, some of the inferior mines would perhaps stop working altogether: and a falling off in the annual supply, preventing the annual wear and tear from being completely compensated, would by degrees reduce the quantity, and restore the value.

When examined more closely, the following are the details of the process. If gold is above its natural or cost value—the coin, as we have seen, conforming in its value to the bullion—money will be of high value, and the prices of all things, labour included, will be low. These low prices will lower the expenses of all producers: but as their returns will also be lowered, no advantage will be obtained by any producer, except the producer of gold: whose returns from his mine, not depending on price, will be the same as before, and his expenses being less, he will obtain extra profits, and will be stimulated to increase his production. *E converso* if the metal is below its natural value: since this is as much as to say that prices are high, and the money expenses of all producers unusually great: for this, however, all other producers will be compensated by increased money returns: the miner alone will extract from his mine no more metal than before,

while his expenses will be greater: his profits therefore being diminished or annihilated, he will diminish his production, if not abandon his employment.

In this manner it is that the value of money is made to conform to the cost of production of the metal of which it is made. It may be well however to repeat (what has been said before) that the adjustment takes a long time to effect, in the case of a commodity so generally desired and at the same time so durable as the precious metals. Being so largely used not only as money but for plate and ornament, there is at all times a very large quantity of these metals in existence: while they are so slowly worn out, that a comparatively small annual production is sufficient to keep up the supply, and to make any addition to it which may be required by the increase of goods to be circulated, or by the increased demand for gold and silver articles by wealthy consumers. Even if this small annual supply were stopt entirely (which it never is, the richer mines continuing to be worked, though at some diminution of rent) it would require many years to reduce the quantity so much as to make any very material difference in prices. The quantity may be increased, much more rapidly than it can be diminished; but the increase must be very great before it can make itself much felt over such a mass of the precious metals as exists in the whole commercial world. And hence the effects of all changes in the conditions of production of the precious metals are at first, and continue to be for many years, questions of quantity only, with little reference to cost of production.

§ 3. Since, however, the value of money really conforms, like that of other things, although more slowly, to its cost of production, some political economists have objected altogether to the statement that the value of money depends on its quantity combined with the rapidity of circulation; which, they think, is assuming a law for money that does not exist for any other commodity, when the truth is that it is



governed by the very same laws. To this we may answer, in the first place, that the statement in question assumes no peculiar law. It is simply the law of demand and supply, which is acknowledged to be applicable to all commodities, and which, in the case of money as of most other things, is controlled, but not set aside, by the law of cost of production, since cost of production would have no effect on value if it could have none on supply. But, secondly, there really is, in one respect, a closer connexion between the value of money and its quantity, than between the values of other things and their quantity. The value of other things conforms to the changes in the cost of production, without requiring, as a condition, that there should be any actual alteration of the supply: the potential alteration is sufficient; and if there even be an actual alteration, it is but a temporary one, except in so far as the altered value may make a difference in the demand, and so require an increase or diminution of supply, as a consequence, not a cause, of the alteration in value. Now this is also true of gold and silver, considered as articles of expenditure for ornament and luxury; but it is not true of money. If the cost of production of gold were reduced one-fourth, by the discovery of more fertile mines, it might happen that there would not be more of it bought for plate, gilding, or jewellery, than before; and if so, though the value would fall, the quantity extracted from the mines for these purposes would be no greater than previously. Not so with the portion used as money: that portion could not fall in value one-fourth, unless actually increased one-fourth; for, at prices one-fourth higher, one-fourth more money would be required to make the accustomed purchases; and if this were not forthcoming, some of the commodities would be without purchasers, and prices could not be kept up. Alterations, therefore, in the cost of production of the precious metals, do not act upon the value of money except just in proportion as they increase or diminish its quantity; which cannot be said of any other commodity. It would

therefore, I conceive, be an error, both scientifically and practically, to discard the proposition which asserts a connexion between the value of money and its quantity.

It is evident, however, that the cost of production, in the long run, regulates the quantity; and that every country (temporary fluctuations excepted) will possess, and have in circulation, just that quantity of money, which will perform all the exchanges required of it, consistently with maintaining a value conformable to its cost of production. The prices of things will, on the average, be such that money will exchange for its own cost in all other goods: and, precisely because the quantity cannot be prevented from affecting the value, the quantity itself will be kept at the amount consistent with that standard of prices—at the amount necessary for performing, at those prices, all the business required of it.

"The quantity wanted will depend partly on the cost of producing gold, and partly on the rapidity of its circulation. The rapidity of circulation being given, it would depend on the cost of production: and the cost of production being given, the quantity of money would depend on the rapidity of its circulation*." After what has been already said, I hope that neither of these propositions stands in need of any further illustration.

Money, then, like commodities in general, having a value dependent on, and proportional to, its cost of production; the theory of money is, by the admission of this principle, stript of a great part of the mystery which apparently surrounded it. We must not forget, however, that this doctrine only applies to the places in which the precious metals are actually produced; and that we have yet to enquire whether the law of the dependence of value on cost of production applies to the exchange of things produced at distant places. But

* From some printed, but not published, Lectures of Mr. Senior: in which the great differences in the business done by money, as well as in the rapidity of its circulation, in different states of society and civilization, are interestingly illustrated.



however this may be, our propositions with respect to value will require no other alteration, where money is an imported commodity, than that of substituting for the cost of its production, the cost of obtaining it in the country. Every foreign commodity is bought by giving for it some domestic production; and the labour and capital which a foreign commodity costs to us, is the labour and capital expended in producing the quantity of our own goods which we give in exchange for it. What this quantity depends upon,—what determines the proportions of interchange between the productions of one country and those of another,—is indeed a question of somewhat greater complexity than those we have hitherto considered. But this at least is indisputable, that within the country itself the value of imported commodities is determined by the value, and consequently by the cost of production, of the equivalent given for them; and money, where it is an imported commodity, is subject to the same law.

# CHAPTER X.

## OF A DOUBLE STANDARD, AND SUBSIDIARY COINS.

§ 1. ALTHOUGH the qualities necessary to fit any commodity for being used as money are very rarely united in any considerable perfection, there are two commodities which possess them in an eminent, and nearly an equal degree; the two precious metals, as they are called; gold and silver. Some nations have accordingly attempted to compose their circulating medium of these two metals indiscriminately.

There is an obvious convenience in making use of the more costly metal for larger payments, and the cheaper one for smaller; and the only question relates to the mode in which this can best be done. The mode most frequently adopted has been to establish between the two metals a fixed proportion; to decide, for example, that a gold coin called a sovereign should be equivalent to twenty of the silver coins called shillings: both the one and the other being called, in the ordinary money of account of the country, by the same denomination, a pound; and it being left free to every one who has a pound to pay, either to pay it in the one metal or in the other.

At the time when the valuation of the two metals relatively to each other, say twenty shillings to the sovereign, or twenty-one shillings to the guinea, was first made, the proportion probably corresponded, as nearly as it could be made to do, with the ordinary relative values of the two metals, grounded on their cost of production; and if those natural or cost values always continued to bear the same ratio to one another, the arrangement would be unobjectionable. This, however, is far from being the fact. Gold and silver, though the least variable in value of all commodities, are not invariable, and do not always vary simultaneously. Silver, for example, was lowered in permanent value more than gold, by the discovery of the American mines; and those small variations of value which take place occasionally, do not affect both metals alike. Suppose such a variation to take place: the value of the two metals relatively to one another no longer agreeing with their rated proportion, one or other of them will now be rated below its bullion value, and there will a profit to be made by melting it.



Suppose, for example, that gold rises in value relatively to silver, so that the quantity of gold in a sovereign is now worth more than the quantity of silver in twenty shillings. Two consequences will ensue. No debtor will any longer find it his interest to pay in gold. He will always pay in silver, because twenty shillings are a legal tender for a debt of one pound, and he can procure silver convertible into twenty shillings for less gold than that contained in a sovereign. The other consequence will be that unless a sovereign can be sold for more than twenty shillings, all the sovereigns will be melted, since as bullion they will purchase a greater number of shillings than they exchange for as coin. The converse of all this would happen if silver, instead of gold, were the metal which had risen in comparative value. A sovereign would not now be worth so much as twenty shillings, and whoever had a pound to pay would prefer paying it by a sovereign; while the silver coins would be collected for the purpose of being melted, and sold as bullion for gold at their real value, that is, above the legal valuation. The money of the community, therefore, would never really consist of both metals, but of the one only which, at the particular time, best suited the interest of debtors; and the standard of the currency would be constantly liable to change from the one metal to the other, at a loss to the public, on each change, of the expense of coinage on the metal which fell out of use.

It appears, therefore, that the value of money is liable to more frequent fluctuations when both metals are a legal

tender at a fixed valuation, than when the exclusive standard of the currency is either gold or silver. Instead of being only affected by variations in the cost of production of one metal, it is subject to derangement from those of two. The particular kind of variation to which a currency is rendered more liable by having two legal standards, is a fall of value, or what is commonly called a depreciation; since practically that one of the two metals will always be the standard, of which the real has fallen below the rated value. If the tendency of the metals be to rise in value, all payments will be made in the one which has risen least; and if to fall, then in that which has fallen most.

§ 2. The plan of a double standard is still occasionally brought forward by here and there a writer or orator as a great improvement in currency. It is probable that, with most of its adherents, its chief merit is its tendency to a sort of depreciation, there being at all times abundance of supporters for any mode, either open or covert, of lowering the standard. Some, however, are influenced by an exaggerated estimate of an advantage which to a certain extent is real, that of being able to have recourse, for replenishing the circulation, to the united stock of gold and silver in the commercial world, instead of being confined to one of them, which, from accidental absorption, may not be obtainable with sufficient rapidity. The advantage without the disadvantages of a double standard, seems to be best obtained by those nations, with whom one only of the two metals is a legal tender, but the other also is coined, and allowed to pass for whatever value the market assigns to it. This is the case in France. Silver alone is (I believe) a legal tender, and all sums are expressed and accounts kept in francs, a silver coin. Gold is also coined, for convenience, but does not pass at a fixed valuation: the twenty francs marked on a napoleon are merely nominal, napoleons being never to be bought for that sum, but always bearing a small premium,



or agio as it is called; though, as the agio is very trifling, (the bullion value differing very little from twenty francs) it is seldom possible to pass a napoleon for more than that sum in ordinary retail transactions. Silver, then, is the real money of the country, and gold coin only a merchandize; but though not a legal tender, it answers all the real purposes of one, since no creditor is at all likely to refuse receiving it at the market price, in payment of his debt.

When this plan is adopted, it is naturally the more costly metal which is left to be bought and sold as an article of commerce. But nations which, like England, adopt the more costly of the two as their standard, resort to a different expedient for retaining them both in circulation, namely, to make silver a legal tender, but only for small payments. In England no one can be compelled to receive silver in payment for a larger amount than forty shillings. With this regulation there is necessarily combined another, namely, that silver coin should be rated, in comparison with gold, somewhat above its intrinsic value; that there should not be, in twenty shillings, as much silver as is worth a sovereign: for if there were, a very slight turn of the market in its favour would make it worth more than a sovereign, and it would be profitable to melt the silver coin. The over-valuation of the silver coin creates an inducement to buy silver and send it to the mint to be coined, since it is received back at a higher value than properly belongs to it: this, however, has been guarded against, by limiting the quantity of the silver coinage, which is not left, like that of gold, to the discretion of individuals, but is determined by the government, and restricted to the amount supposed to be required for small payments. The only precaution necessary is not to put so high a valuation upon the silver, as to hold out a strong temptation to private coining.

# CHAPTER XI.

## OF CREDIT, AS A SUBSTITUTE FOR MONEY.

§ 1. The functions of credit, have been a subject of as much misunderstanding and as much confusion of ideas, as any single topic in Political Economy. This is not owing to any peculiar difficulty in the theory of the subject, but to the complex nature of some of the mercantile phenomena arising from the forms in which credit clothes itself; by which attention is diverted from the properties of credit in general, to the peculiarities of its particular forms.

As a specimen of the confused notions entertained respecting the nature of credit, we may advert to the exaggerated language so often used respecting its national importance. Credit has a great, but not, as many people seem to suppose a magical power; it cannot make something out of nothing. How often is an extension of credit talked of as an equivalent to a creation of capital, or as if credit actually were capital. It seems strange that there should be any need to point out, that credit being only permission to use the capital of another person, the means of production cannot be increased by it, but only transferred. If the borrower's means of production and of employing labour are increased by the credit given him, the lender's are as much diminished. The same sum cannot be used as capital both by the owner, and also by the person to whom it is lent: it cannot supply its full value in wages, tools, and materials, to two sets of labourers at once. It is true that the capital which A has borrowed from B, and makes use of in his business, still forms part of the wealth of B for other purposes; he can enter into engagements in reliance on it, and can even borrow, when needful, an equivalent sum on the security of it; so that to a superficial eye it



might seem as if both B and A had the use of it at once. But the smallest consideration will shew that when B has parted with his capital to A, the use of it as capital rests with A alone, and that B has no other service from it than in so far as his ultimate claim upon it serves him to obtain the use of another capital from a third person, C. All capital (not his own) of which any person has really the use, is, and must be, so much subtracted from the capital of some one else.

§ 2. But though credit is never anything more than a transfer of capital from hand to hand, it is generally, and naturally, a transfer to hands more competent to employ the capital efficiently in production. If there were no such thing as credit, or if, from general insecurity and want of confidence, it were scantily practised, many persons who possess more or less of capital, but who from their occupations, or for want of the necessary skill and knowledge, cannot personally superintend its employment, would derive no benefit from it: their funds would either lie idle, or would be, perhaps, wasted and annihilated in unskilful attempts to make them yield a profit. All this capital is now lent at interest, and made available for production. Capital thus circumstanced forms a large portion of the productive resources of any commercial country; and is naturally attracted to those producers or traders who, being in the greatest business, have the means of employing it to most advantage; because such are both the most desirous to obtain it, and able to give the best security. Although, therefore, the productive funds of the country are not increased by credit, they are called into a more complete state of productive activity. As the confidence on which credit is grounded extends itself, means are developed by which even the smallest portions of capital, the sums which each person keeps by him to meet contingencies, are made available for productive uses. The principal instruments for this purpose are banks of deposit. Where these

do not exist, a prudent person must keep a sufficient sum unemployed in his own possession, to meet every demand which he has even a slight reason for thinking himself liable to. When the practice however has grown up of keeping this reserve not in his own custody but with a banker, many small sums, previously lying idle, become aggregated in the banker's hands; and the banker, being taught by experience what proportion of the amount is likely to be wanted in a given time, and knowing that if one depositor happens to require more than the average, another will require less, is able to lend the remainder, that is, the far greater part, to producers and dealers: thereby adding the amount, not indeed to the capital in existence, but to that in employment, and making a corresponding addition to the aggregate production of the community.

While credit is thus indispensable for rendering the whole capital of the country productive, it is also the means by which the industrial talent of the country is turned to most account for purposes of production. Many a person who has either no capital of his own, or very little, but who has qualifications for business which are known and appreciated by some persons of capital, is enabled to obtain either advances in money or more frequently goods on credit, by which his industrial capacities are made instrumental to the increase of the public wealth: and this benefit will be reaped far more largely, whenever, through better laws and better education, the community shall have made such progress in integrity, that personal character can be accepted as a sufficient guarantee not only against dishonestly appropriating, but against dishonestly risking, what belongs to another.

Such are, in the most general point of view, the uses of credit to the productive resources of the world. But these considerations only apply to the credit given to the industrious classes—to producers and dealers. Credit given *by* dealers to unproductive consumers is never an addition, but always a detriment, to the sources of public wealth. It makes



over in temporary use, not the capital of the unproductive classes to the productive, but that of the productive to the unproductive. If A, a dealer, supplies goods to B, a landowner or annuitant, to be paid for at the end of five years, as much of the capital of A as is equal to the value of these goods, remains for five years unproductive. During such a period, if payment had been made at once, the sum might have been several times expended and replaced, and goods to the amount might have been several times produced, consumed, and reproduced: consequently B's withholding 100*l.* for five years, even if he pays at last, has cost to the labouring classes of the community during that period an absolute loss of probably several times that amount. A, individually, is compensated, by putting a higher price upon his goods, which is ultimately paid by B: but there is no compensation made to the labouring classes, the chief sufferers by every diversion of capital, whether permanently or temporarily, to unproductive uses. The country has had 100*l.* less of capital during those five years, B having taken that amount from A's capital, and spent it unproductively, in anticipation of his own means, and having only after five years set apart a sum from his income and converted it into capital for the purpose of indemnifying A.

§ 3. Thus far of the general function of Credit in production. It is not a productive power in itself, though, without it, the productive powers already existing could not be brought into complete employment. But a more intricate portion of the theory of Credit is its influence on prices; the chief cause of most of the mercantile phenomena which perplex observers. In a state of commerce in which much credit is habitually given, general prices at any moment depend much more upon the state of credit than upon the quantity of money. For credit, though it is not productive power, is purchasing power; and a person who, having credit, avails himself of it in the purchase of goods, creates just as much

demand for the goods, and tends quite as much to raise their price, as if he made an equal amount of purchases with ready money.

The credit which we are now called upon to consider, as a distinct purchasing power, independent of money, is of course not credit in its simplest form, that of money lent by one person to another and paid directly into his hands; for when the borrower expends this in purchases, he makes the purchases with money, not credit, and exerts no purchasing power over and above that conferred by the money. The forms of credit which create purchasing power, are those in which no money passes at the time, and very often does not pass at all, the transaction being included with a mass of other transactions in an account, and nothing paid but a balance. This takes place in a variety of ways, which we shall proceed to examine, beginning, as is our custom, with the simplest.

First: Suppose A and B to be two dealers, who have transactions with each other both as buyers and as sellers. A buys from B on credit. B does the like with respect to A. At the end of the year the sum of A's debts to B is set against the sum of B's debts to A, and it is ascertained to which side a balance is due. This balance, which may be less than the amount of many of the transactions singly, and is necessarily less than the sum of the transactions, is all that is paid in money; and perhaps even this is not paid, but carried over in an account current to the next year. A single payment of a hundred pounds may in this manner suffice to liquidate a long series of transactions, some of them to the value of thousands.

But secondly: the debts of A to B may be paid without the intervention of money, even though there be no reciprocal debts of B to A. A may satisfy B by making over to him a debt due to himself from a third person C. This is conveniently done by means of a written instrument called a bill of exchange, which is in fact a transferable



order by a creditor upon his debtor, and when *accepted* by the debtor, that is, authenticated by his signature, becomes an acknowledgment of debt.

§ 4. Bills of exchange were first introduced to save the expense and risk of transporting the precious metals from place to place. "Let it be supposed," says Mr. Henry Thornton*, "that there are in London ten manufacturers who sell their article to ten shopkeepers in York, by whom it is retailed; and that there are in York ten manufacturers of another commodity, who sell it to ten shopkeepers in London. There would be no occasion for the ten shopkeepers in London to send yearly to York, guineas for the payment of the York manufacturers, and for the ten York shopkeepers to send yearly as many guineas to London. It would only be necessary for the York manufacturers to receive from each of the shopkeepers at their own door, the money in question, giving in return letters which should acknowledge the receipt of it; and which should also direct the money, lying ready in the hands of their debtors in London, to be paid to the London manufacturers, so as to cancel the debt in London in the same manner as that at York. The expense and the risk of all transmission of money would thus be saved. Letters ordering the transfer of the debt are termed, in the language of the present day, bills of exchange. They are bills by which the debt of one person is exchanged for the debt of another; and the debt, perhaps, which is due in one place for the debt due in another."

Bills of exchange having been found convenient as means of paying debts at distant places without the expense of

* Enquiry into the Nature and Effects of the Paper Credit of Great Britain, p. 24. This work, published in 1802, is even now the clearest exposition that I am acquainted with, in the English language, of the modes in which credit is given and taken in a mercantile community.

transporting the precious metals, their use was afterwards greatly extended from another motive. It is usual in every trade to give a certain length of credit for goods bought: three months, six months, a year, even two years, according to the convenience or custom of the particular trade. A dealer who has sold goods, for which he is to be paid in six months, but who desires to receive the amount sooner, draws a bill on his debtor payable in six months, and gets the bill discounted by a banker or other money-lender, that is, transfers the bill to him, receiving the amount, minus interest for the time it has still to run. It has become one of the chief functions of bills of exchange to serve as a means by which a debt due from one person can thus be made available for obtaining credit from another. The convenience of the expedient has led to the frequent creation of bills of exchange not grounded on any debt previously due to the drawer of the bill by the person on whom it is drawn. These are called *accommodation* bills; and sometimes, with a tinge of disapprobation, *fictitious* bills. Their nature is so clearly stated, and with such judicious remarks, by the author whom I have just quoted, that I shall transcribe the entire passage*.

"A, being in want of 100*l.*, requests B to accept a note or bill drawn at two months, which B, therefore, on the face of it, is bound to pay; it is understood, however, that A will take care either to discharge the bill himself, or to furnish B with the means of paying it. A obtains ready money for the bill on the joint credit of the two parties. A fulfils his promise of paying it when due, and thus concludes the transaction. This service rendered by B to A is, however, not unlikely to be requited at a more or less distant period by a similar acceptance of a bill on A, drawn and discounted for B's convenience.

"Let us now compare such a bill with a real bill. Let

* Pp. 29–33.



us consider in what points they differ, or seem to differ; and in what they agree.

"They agree, inasmuch as each is a discountable article; each has also been created for the purpose of being discounted; and each is, perhaps, discounted in fact. Each, therefore, serves equally to supply means of speculation to the merchant. So far, moreover, as bills and notes constitute what is called the circulating medium, or paper currency of the country, and prevent the use of guineas, the fictitious and the real bill are upon an equality; and if the price of commodities be raised in proportion to the quantity of paper currency, the one contributes to that rise exactly in the same manner as the other.

"Before we come to the points in which they differ, let us advert to one point in which they are commonly supposed to be unlike; but in which they cannot be said always or necessarily to differ.

"Real notes (it is sometimes said) represent actual property. There are actual goods in existence, which are the counterpart to every real note. Notes which are not drawn in consequence of a sale of goods, are a species of false wealth, by which a nation is deceived. These supply only an imaginary capital; the others indicate one that is real.

"In answer to this statement it may be observed, first, that the notes given in consequence of a real sale of goods cannot be considered as on that account *certainly* representing any actual property. Suppose that A sells 100*l.* worth of goods to B at six months credit, and takes a bill at six months for it; and that B, within a month after, sells the same goods, at a like credit, to C, taking a like bill; and again, that C, after another month, sells them to D, taking a like bill, and so on. There may then, at the end of six months, be six bills of 100*l.* each, existing at the same time; and every one of these may possibly have been discounted. Of all these bills, then, only one represents any actual property.

"In order to justify the supposition that a real bill (as it is called) represents actual property, there ought to be some power in the bill-holder to prevent the property which the bill represents, from being turned to other purposes than that of paying the bill in question. No such power exists; neither the man who holds the real bill, nor the man who discounts it, has any property in the specific goods for which it was given: he as much trusts to the general ability to pay of the giver of the bill, as the holder of any fictitious bill does. The fictitious bill may, in many cases, be a bill given by a person having a large and known capital, a part of which the fictitious bill may be said in that case to represent. The supposition that real bills represent property, and that fictitious bills do not, seems, therefore, to be one by which more than justice is done to one of these species of bills, and something less than justice to the other.

"We come next to some points in which they differ.

"First, the fictitious note, or note of accommodation, is liable to the objection that it professes to be what it is not. This objection, however, lies only against those fictitious bills which are passed as real. In many cases, it is sufficiently obvious what they are. Secondly, the fictitious bill is, in general, less likely to be punctually paid than the real one. There is a general presumption, that the dealer in fictitious bills is a man who is a more adventurous speculator than he who carefully abstains from them. It follows, thirdly, that fictitious bills, besides being less safe, are less subject to limitation as to their quantity. The extent of a man's actual sales forms some limit to the amount of his real notes; and as it is highly desirable in commerce that credit should be dealt out to all persons in some sort of regular and due proportion, the measure of a man's actual sales certified by the appearance of his bills drawn in virtue of those sales, is some rule in the case, though a very imperfect one in many respects.

"A fictitious bill, or bill of accommodation, is evidently,



in substance, the same as any common promissory note; and even better in this respect, that there is but one security to the promissory note, whereas in the case of the bill of accommodation, there are two. So much jealousy subsists lest traders should push their means of raising money too far, that paper, the same in its general nature with that which is given, being the only paper which can be given, by men out of business, is deemed somewhat discreditable when coming from a merchant. And because such paper, when in the merchant's hand, necessarily imitates the paper which passes on the occasion of a sale of goods, the epithet fictitious has been cast upon it; an epithet which has seemed to countenance the confused and mistaken notion, that there is something altogether false and delusive in the nature of a certain part both of the paper and of the apparent wealth of the country."

A bill of exchange, when merely discounted, and kept in the portfolio of the discounter until it falls due, does not perform the functions or supply the place of money, but is itself bought and sold for money. It is no more currency than the public funds, or any other securities. But when a bill drawn upon one person is paid to another (or even to the same person) in discharge of a debt or a pecuniary claim, it does something for which, if the bill did not exist, money would be required: it performs the functions of currency. This is a use to which bills of exchange are often applied. "They not only," continues Mr. Thornton*, "spare the use of ready money; they also occupy its place in many cases. Let us imagine a farmer in the country to discharge a debt of 10*l.* to his neighbouring grocer, by giving him a bill for that sum, drawn on his cornfactor in London for grain sold in the metropolis; and the grocer to transmit the bill, he having previously indorsed it, to a neighbouring sugar-baker, in discharge of a like debt; and the sugar-baker to send it, when

* P. 40.

again indorsed, to a West India merchant in an outport, and the West India merchant to deliver it to his country banker, who also indorses it, and sends it into further circulation. The bill in this case will have effected five payments exactly as if it were a 10*l.* note payable to bearer on demand. A multitude of bills pass between trader and trader in the country, in the manner which has been described; and they evidently form, in the strictest sense, a part of the circulating medium of the kingdom."

Many bills, both domestic and foreign, are at last presented for payment quite covered with indorsements, each of which represents either a fresh discounting, or a pecuniary transaction in which the bill has performed the functions of money. Up to twenty years ago, the circulating medium of Lancashire for sums above five pounds, was almost entirely composed of such bills.

§ 5. A third form in which credit is employed as a substitute for currency, is that of promissory notes. A bill drawn upon any one and accepted by him, and a note of hand by him promising to pay the same sum, are, as far as he is concerned, exactly equivalent, except that the former commonly bears interest and the latter generally does not. But it is chiefly in the latter form that it has become, in commercial countries, an express occupation to issue such substitutes for money. Dealers in money (as lenders by profession are improperly called) desire, like other dealers, to stretch their operations beyond what can be carried on by their own means: they wish to lend, not their capital merely, but their credit, and not only such portion of their credit as consists of funds actually deposited with them, but their power of obtaining credit from the public generally, so far as they think they can safely employ it. This is done in a very convenient manner by lending their own promissory notes payable to bearer on demand: the borrower being willing to accept these as so much money, because the credit of the



lender makes other people willingly receive them on the same footing, in purchases or other payments. These notes, therefore, perform all the functions of currency, and render an equivalent amount of money which was previously in circulation, unnecessary. As, however, being payable on demand, they may be at any time returned on the issuer, and money demanded for them, he must, on pain of bankruptcy, keep by him as much money as will enable him to meet any claims of that sort which can be expected to occur within the time necessary for providing himself with more: and prudence also requires that he should not attempt to issue notes beyond the amount which experience shows can remain in circulation without being presented for payment.

The convenience of this mode of (as it were) coining credit, having once been discovered, governments have availed themselves of the same expedient, and have issued their own promissory notes in payment of their expenses; a resource the more useful, because it is the only mode in which they are able to borrow money without paying interest, their promises to pay on demand being, in the estimation of the holders, equivalent to money in hand. The practical differences between such government notes and the issues of private bankers, and the further diversities of which this class of substitutes for money are susceptible, will be considered presently.

§ 6. A fourth mode of making credit answer the purposes of money, by which, when carried far enough, money may be very completely superseded, consists in making payments by cheques. The custom of keeping the spare cash reserved for immediate use or against contingent demands, in the hands of a banker, and making all payments, except small ones, by orders on bankers, is in this country spreading to a continually larger portion of the public. If the person making the payment, and the person receiving it, kept their money with the same banker, the payment would take place

without any intervention of money, by the mere transfer of its amount in the banker's books from the credit of the payer to that of the receiver. If all persons in London kept their cash at the same banker's, and made all their payments by means of cheques, no money would be required or used for any transactions beginning and terminating in London. This ideal limit is almost attained in fact, so far as regards transactions between dealers. It is chiefly in the retail transactions between dealers and consumers, and in the payment of wages, that money or bank notes now pass, and then only when the amounts are small. In London, even shopkeepers of any amount of capital or extent of business have generally an account with a banker; which, besides the safety and convenience of the practice, is to their advantage in another respect, by giving them an understood claim to have their bills discounted in cases when they could not otherwise expect it. As for the merchants and larger dealers, they habitually make all payments in the course of their business by cheques. They do not, however, all deal with the same banker, and when A gives a cheque to B, B usually pays it not into the same but into some other bank. But the convenience of business has given birth to an arrangement which makes all the banking houses of the City of London, for certain purposes, virtually one establishment. A banker does not send the cheques which are paid into his banking house, to the banks on which they are drawn, and demand money for them. There is a building called the Clearing-house, to which every City banker sends, each afternoon, all the cheques on other bankers which he has received during the day, and they are there exchanged for the cheques on him which have come into the hands of other bankers, the balances only being paid in money. By this contrivance, all the business transactions of the City of London during that day, amounting often to millions of pounds, and a vast amount besides of country transactions, represented by bills which country bankers have drawn upon their London correspondents, are liquidated by payments not exceeding on the average 200,000*l.**



By means of the various instruments of credit which have now been explained, the immense business of a country like Great Britain is transacted with an amount of the precious metals surprisingly small; many times smaller, in proportion to the pecuniary value of the commodities bought and sold, than is found necessary in France, or any other country in which, the habit and the disposition to give credit not being so generally diffused, these "economizing expedients," as they have been called, are not practised to the same extent. What becomes of the money thus superseded in its functions, and by what process it is made to disappear from circulation, are questions the discussion of which must be for a short time postponed.

* According to Mr. Tooke (Inquiry into the Currency Principle, p. 27,) the adjustments at the clearing house "in the year 1839 amounted to 954,401,600*l.*, making an average amount of payments of upwards of 3,000,000*l.* of bills of exchange and cheques daily effected through the medium of little more than 200,000*l.* of bank notes."

# CHAPTER XII.

## INFLUENCE OF CREDIT ON PRICES.

§ 1. HAVING now formed a general idea of the modes in which credit is made available as a substitute for money, we have to consider in what manner the use of these substitutes affects the value of money, or, what is equivalent, the prices of commodities. It is hardly necessary to say that the permanent value of money—the natural and average prices of commodities—are not in question here. These are determined by the cost of producing or of obtaining the precious metals. An ounce of gold or silver will in the long run exchange for as much of every other commodity, as can be produced or imported at the same cost with itself. And an order, or note of hand, or bill payable at sight, for an ounce of gold, while the credit of the giver is unimpaired, is worth neither more nor less than the gold itself.

It is not, however, with ultimate or average, but with immediate and temporary prices, that we are now concerned. These, as we have seen, may deviate very widely from the standard of cost of production. Among other causes of fluctuation, one we have found to be, the quantity of money in circulation. Other things being the same, an increase of the money in circulation raises prices, a diminution lowers them. If more money is thrown into circulation than the quantity which can circulate at a value conformable to its cost of production, the value of money, so long as the excess lasts, will remain below the standard of cost of production, and general prices will be sustained above the natural rate.

But we have now found that there are other things, such as bank notes, bills of exchange, and cheques, which circulate



as money, and perform all the functions of it: and the question arises, Do these various substitutes operate on prices in the same manner as money itself? Does an increase in the quantity of transferable paper tend to raise prices, in the same manner and degree as an increase in the quantity of money? There has been no small amount of discussion on this point among writers on currency, without any result so conclusive as to have yet obtained general assent.

I apprehend that bank notes, bills, or cheques, as such, do not act on prices at all. What does act on prices is Credit, in whatever shape given, and whether it gives rise to any transferable instruments capable of passing into circulation, or not.

I proceed to explain and substantiate this opinion.

§ 2. Money acts upon prices in no other way than by being tendered in exchange for commodities. The demand which influences the prices of commodities consists of the money offered for them. But the money offered, is not the same thing with the money possessed. It is sometimes less, sometimes very much more. In the long run indeed, the money which people lay out will be neither more nor less than the money which they have to lay out: but this is far from being the case at any given time. Sometimes they keep money by them for fear of an emergency, or in expectation of a more advantageous opportunity for expending it. In that case the money is said not to be in circulation: in plainer language, it is not offered, nor about to be offered, for commodities. Money not in circulation has no effect on prices. The converse, however, is a much commoner case; people make purchases with money not in their possession. An article, for instance, which is paid for by a cheque on a banker, is bought with money which not only is not in the payer's possession, but generally not even in the banker's, having been lent by him (all but the usual reserve) to other persons. We just now made the imaginary supposition that

all persons dealt with a bank, and all with the same bank, payments being universally made by cheques. In this ideal case, there would be no money any where except in the hands of the banker; who might then safely part with all of it, by selling it as bullion, or lending it, to be sent out of the country in exchange for goods or foreign securities. But though there would then be no money in possession, or ultimately perhaps even in existence, money would be offered, and commodities bought with it, just as at present. People would continue to reckon their incomes and their capitals in money, and to make their usual purchases with orders for the receipt of a thing which would have literally ceased to exist. There would be in all this nothing to complain of, so long as the money, in disappearing, left behind it an equivalent value in other things, applicable when required to the reimbursement of those to whom the money originally belonged.

In the case however of payment by cheques, the purchases are at any rate made, though not with money in the buyer's possession, yet with money to which he has a right. But he may make purchases with money which he only expects to have, or even only pretends to expect. He may obtain goods in return for his acceptances payable at a future time; or on his note of hand; or on a simple book credit, that is, on a mere promise to pay. All these purchases have exactly the same effect on price, as if they were made with ready money. The amount of purchasing power which a person can exercise, is composed of all the money in his possession or due to him, and of all his credit. For exercising the whole of this power he finds a sufficient motive only under peculiar circumstances; but he always possesses it; and the portion of it which he at any time does exercise, is the measure of the effect which he produces on price.

Suppose that, in the expectation that some commodity will rise in price, he determines, not only to invest in it all his ready money, but to take up on credit, from the producers



or importers, as much of it as their opinion of his resources will enable him to obtain. Every one must see that by thus acting he produces a greater effect on price, than if he limited his purchases to the money he has actually in hand. He creates a demand for the article to the full amount of his money and credit taken together, and raises the price proportionally to both. And this effect is produced, although none of the written instruments called substitutes for currency may be called into existence; though the transaction may give rise to no bill of exchange, nor to the issue of a single bank note. The buyer, instead of taking a mere book credit, might have given a bill for the amount; or might have paid for the goods with bank notes borrowed for that purpose from a banker, thus making the purchase not on his own credit with the seller, but on the banker's credit with the seller, and his own with the banker. Had he done so, he would have produced as great an effect on price as by a simple purchase to the same amount on a book credit, but no greater effect. The credit itself, not the form and mode in which it is given, is the operating cause.

§ 3. The inclination of the mercantile public to increase their demand for commodities by making use of all or much of their credit as a purchasing power, depends on their expectation of profit. When there is a general impression that the price of some commodity is likely to rise, from an extra demand, a short crop, obstructions to importation, or any other cause, there is a disposition among dealers to increase their stocks, in order to profit by the expected rise. This disposition tends in itself to produce the effect which it looks forward to, a rise of price; and if the rise is considerable and progressive, other speculators are attracted, who, so long as the price has not begun to fall, are willing to believe that it will continue rising. These, by further purchases, produce a further advance: and thus a rise of price for which there were originally some rational grounds, is often

heightened by merely speculative purchases, until it greatly exceeds what the original grounds will justify. After a time this begins to be perceived; the price ceases to rise, and the holders, thinking it is time to realize their gains, are anxious to sell. Then the price begins to decline: the holders rush into the market to avoid a still greater loss; and, few being willing to buy in a falling market, the price falls much more suddenly than it rose. Those who have bought at a higher price than reasonable calculation justified, and who have been overtaken by the revulsion before they had realized, are losers in proportion to the greatness of the fall, and to the quantity of the commodity which they hold, or have bound themselves to pay for.

Now all these effects might take place in a community to which credit was unknown: the prices of some commodities might rise from speculation, to an extravagant height, and then fall rapidly back. But if there were no such thing as credit, this could hardly happen with respect to commodities generally. If all purchases were made with ready money, the payment of increased prices for some articles would draw an unusual proportion of the money of the community into the markets for those articles, and must therefore draw it away from some other class of commodities, and thus lower their prices. The vacuum might, it is true, be partly filled up by increased rapidity of circulation; and, in fact, the money of the community *is* virtually increased in a time of speculative activity, because people keep little of it by them, but hasten to lay it out in some tempting adventure as soon as possible after they receive it. This resource, however, is limited: on the whole, people cannot, while the quantity of money remains the same, lay out much more of it in some things, without laying out less in others. But what they cannot do by ready money, they can do by an extension of credit. When people go into the market and purchase with money which they hope to receive hereafter, they are drawing upon an unlimited, not a limited fund. Speculation, thus



supported, may be going on in any number of commodities, without disturbing the regular course of business in others. It might even be going on in all commodities at once. We could imagine that in an epidemic fit of the passion of gambling, all dealers, instead of giving only their accustomed orders to the manufacturers or growers of their commodity, commenced buying up all of it which they could procure, as far as their capital and credit would go. All prices would rise enormously, even if there were no increase of money, and no paper credit, but a mere extension of purchases on book credits. After a time those who had bought would wish to sell, and prices would collapse.

This is the ideal extreme case of what is called a commercial crisis. There is said to be a commercial crisis, when a great number of merchants and traders at once, either have, or apprehend that they shall have, a difficulty in meeting their engagements. The most usual cause of this general embarrassment, is the recoil of prices after they have been raised by a spirit of speculation, intense in degree, and extending to many commodities. Some accident, which excites expectations of rising prices, such as the opening of a new foreign market, or simultaneous indications of a short supply of several great articles of commerce, sets speculation at work in several leading departments at once. The prices rise, and the holders realize, or appear to have the power of realizing, great gains. In certain states of the public mind, such examples of rapid increase of fortune call forth numerous imitators, and speculation not only goes much beyond what is justified by the original grounds for expecting rise of price, but extends itself to articles in which there never was any such ground: these, however, rise like the rest as soon as speculation sets in. At periods of this kind, a great extension of credit takes place. Not only do all whom the contagion reaches, employ their credit much more freely than usual; but they really have more credit, because they seem to be making unusual gains, and because a generally reckless

and adventurous feeling prevails, which disposes people to give as well as take credit more largely than at other times, and give it to persons not entitled to it. In this manner, in the celebrated speculative year 1825, and at various other periods during the present century, the prices of many of the principal articles of commerce rose greatly, without any fall in others, so that general prices might without incorrectness be said to have risen. When, after such a rise, the reaction comes, and prices begin to fall, though at first perhaps only through the desire of the holders to realize, speculative purchases cease: but were this all, prices would only fall to the level from which they rose, or to that which is justified by the state of the consumption and of the supply. They fall, however, much lower; for as, when prices were rising, and everybody apparently making a fortune, it was easy to obtain almost any amount of credit, so now when everybody seems to be losing, and many fail entirely, it is with difficulty that firms of known solidity can obtain even the credit to which they are accustomed, and which it is the greatest inconvenience to them to be without: because all dealers having engagements to fulfil, and nobody feeling sure that the portion of his means which he has entrusted to others will be available in time, no one likes to part with ready money, or to postpone his claim to it. To these rational considerations there is superadded, in extreme cases, a panic as unreasoning as the previous over-confidence; money is borrowed for short periods at almost any rate of interest, and sales of goods for immediate payment are made at almost any sacrifice. Thus general prices, during a commercial revulsion, fall as much below the usual level, as during the previous period of speculation they had risen above it: the fall, as well as the rise, originating not in anything affecting money, but in the state of credit—an unusually extended employment of credit during the earlier period, followed by a great diminution, never amounting however to an entire cessation of it, in the later.

It is not, however, universally true that the contraction



of credit, characteristic of a commercial crisis, must have been preceded by an extraordinary and irrational extension of it. There are other causes; and the most recent crisis, that of 1847, is an instance, having been preceded by no particular extension of credit, and by no speculations; except those in railway shares, which, though in many cases extravagant enough, yet being carried on mostly with that portion of means which the speculators could afford to lose, were not calculated to produce the wide-spread ruin which arises from vicissitudes of price in the commodities in which men habitually deal, and in which the bulk of their capital is invested. The crisis of 1847 belonged to another class of mercantile phenomena. There occasionally happens a concurrence of circumstances tending to withdraw from the loan market a considerable portion of the capital which usually supplies it. These circumstances, in the present case, were great foreign payments, (occasioned by the high price of cotton and the unprecedented importation of food) together with the continual demands on the circulating capital of the country by railway calls and the loan transactions of railway companies, for the purpose of being converted into fixed capital and made unavailable for future lending. These various demands fell principally, as such demands always do, on the loan market. A great, though not the greatest part of the imported food, was actually paid for by the proceeds of a government loan. The extra payments which purchasers of corn and cotton, and railway shareholders, found themselves obliged to make, were either made with their own spare cash, or with money raised for the occasion. On the first supposition, they were made by withdrawing deposits from bankers, and thus cutting off a part of the streams which fed the loan market; on the second supposition, they were made by actual drafts on the loan market, either by the sale of securities or by taking up money at interest. This combination of a fresh demand for loans with a curtailment of the capital disposable for them, raised the rate of interest, and made it

impossible to borrow except on the very best security. Some firms, therefore, which by an improvident and unmercantile mode of conducting business had allowed their capital to become either temporarily or permanently unavailable, became unable to command that perpetual renewal of credit which had previously enabled them to struggle on. These firms stopped payment: their failure involved more or less deeply many other firms which had trusted them; and, as usual in such cases, the general distrust, commonly called a panic, began to set in, and might have produced a destruction of credit equal to that of 1825, had not circumstances which may almost be called accidental, given to a very simple measure of the government a fortunate power of allaying panic, to which, when considered in itself, it had no sort of claim.

§ 4. The general operation of credit upon prices being such as we have described, it is evident that if any particular mode or form of credit is calculated to have a greater operation on prices than others, it can only be by giving greater facility, or greater encouragement, to the multiplication of credit transactions generally. If bank notes, for instance, or bills, have a greater effect on prices than book credits, it is not by any difference in the transactions themselves, which are essentially the same whether taking place in the one way or in the other: it must be that there are likely to be more of them. If credit is likely to be more extensively used as a purchasing power when bank notes or bills are the instrument used, than when the credit is given by mere entries in an account, to that extent and no more there is ground for ascribing to the former a greater power over the markets than belongs to the latter.

Now it appears that there is some such distinction. As far as respects the particular transaction, it makes no difference in the effect on price whether A buys goods of B on simple credit, or gives a bill for them, or pays for them with bank notes lent to him by a banker C. The difference is in



a subsequent stage. If A has bought the goods on a book credit, there is no obvious or convenient mode by which B can make A's debt to him a means of extending his own credit. Whatever credit he has, will be due to the general opinion entertained of his solvency; he cannot specifically pledge A's debt to a third person, as a security for money lent or goods bought. But if A has given him a bill for the amount, he can get this discounted, which is the same thing as borrowing money on the joint credit of A and himself: or he may pay away the bill in exchange for goods, which is obtaining goods on the same joint credit. In either case, here is a second credit transaction, grounded on the first, and which would not have taken place if the first had been transacted without the intervention of a bill. Nor need the transactions end here. The bill may be again discounted, or again paid away for goods, several times before it is itself presented for payment. Nor would it be correct to say that these successive holders, if they had not had the bill, might have attained their purpose by purchasing goods on their own credit with the dealers. They may not all of them be persons of credit, or they may already have stretched their credit as far as it will go. And at all events, either money or goods are more readily obtained on the credit of two persons than of one. Nobody will pretend that it is as easy a thing for a merchant to borrow a thousand pounds on his own credit, as to get a bill discounted to the same amount, when the drawee is of known solvency; or that he can as easily obtain goods on a book credit, as by paying for them with such a bill.

If we now suppose that A, instead of giving a bill, obtains a loan of bank notes from a banker C, and with them pays B for his goods, we shall find the difference to be still greater. B is now independent even of a discounter: A's bill would have been taken in payment only by those who were acquainted with his reputation for solvency, but a banker is a person who has credit with the public generally, and whose notes are taken in payment by every one, at least in his own

neighbourhood: insomuch that, by a custom which has grown into law, payment in bank notes is a complete acquittance to the payer, whereas if he has paid by a bill he still remains liable to the debt, if the person on whom the bill is drawn fails to pay it when due. B therefore can expend the whole of the bank notes without at all involving his own credit; and whatever power he had before of obtaining goods on book credit, remains to him unimpaired, in addition to the purchasing power he derives from the possession of the notes. The same remark applies to every person in succession, into whose hands the notes may come. It is only A, the first holder, (who used his credit to obtain the notes as a loan from the issuer,) who can possibly find the credit he possesses in other quarters abated by it; and even in his case that result is not probable; for though, in reason, and if all his circumstances were known, every draft already made upon his credit ought to diminish by so much his power of obtaining more, yet in practice the reverse more frequently happens, and his having been trusted by one person is supposed to be a reason why he may safely be trusted by others also.

It appears, therefore, that bank notes are a more powerful instrument for raising prices than bills, and bills than book credits. It does not, indeed, follow that credit *will* be more used because it *can* be. When the state of trade holds out no particular temptation to make large purchases on credit, dealers will use only a small portion of the credit-power, and it will depend only on convenience whether the portion which they use will be taken in one form or in another. It is not until the circumstances of the markets, and the state of the mercantile mind, render many persons desirous of stretching their credit to an unusual extent, that the distinctive properties of the different forms of credit display themselves. Credit already stretched to the utmost in the form of book debts, would be susceptible of great additional extension by means of bills, and of still greater by means of bank notes.



The first, because each dealer, in addition to his own credit, would be enabled to create a further purchasing power out of the credit which he had himself given to others: the second, because the banker's credit with the public at large, coined into notes, as bullion is coined into pieces of money to make it portable and divisible, is so much purchasing power superadded, in the hands of every successive holder, to that which he may derive from his own credit. To state the matter otherwise; one single exertion of the credit-power, in the form of book credit, is only the foundation of a single purchase: but if a bill is drawn, that same portion of credit may serve for as many purchases as the number of times the bill changes hands: while every bank note issued, renders the credit of the banker a purchasing power to that amount in the hands of all the successive holders, without impairing any power they may possess of effecting purchases on their own credit. Credit, in short, has exactly the same purchasing power with money; and as money tells upon prices not simply in proportion to its amount, but to its amount multiplied by the number of times it changes hands, so also does credit; and credit transferable from hand to hand is in that proportion more potent, than credit which only performs one purchase.

§ 5. All this purchasing power, however, is operative upon prices, only according to the proportion of it which is used: and the effect, therefore, is only felt in a state of circumstances calculated to lead to an unusually extended use of credit. In such a state of circumstances, that is, in speculative times, it cannot, I think, be denied, that prices are likely to rise higher if the speculative purchases are made with bank notes, than when they are made with bills, and when made by bills than when made by book credits. This, however, is of far less practical importance than might at first be imagined; because, in point of fact, speculative purchases are not, in the great majority of cases, made either

with bank notes or with bills, but are made almost exclusively on book credits. "Applications to the Bank for extended discount," says the highest authority on such subjects*, (and the same thing must be true of applications to other banks) "occur rarely if ever in the origin or progress of extensive speculations in commodities. These are entered into, for the most part if not entirely, in the first instance, on credit for the length of term usual in the several trades; thus entailing on the parties no immediate necessity for borrowing so much as may be wanted for the purpose beyond their own available capital. This applies particularly to speculative purchases of commodities on the spot, with a view to resale. But these generally form the smaller proportion of engagements on credit. By far the largest of those entered into on the prospect of a rise of prices, are such as have in view importations from abroad. The same remark too is applicable to the export of commodities, when a large proportion is on the credit of the shippers or their consignees. As long as circumstances hold out the prospect of a favourable result, the credit of the parties is generally sustained. If some of them wish to realize, there are others with capital and credit, ready to replace them; and if the events fully justify the grounds on which the speculative transactions were entered into (thus admitting of sales for consumption in time to replace the capital embarked) there is no unusual demand for borrowed capital to sustain them. It is only when by the vicissitudes of political events or of the seasons, or other adventitious circumstances, the forthcoming supplies are found to exceed the computed rate of consumption, and a fall of prices ensues, that an increased demand for capital takes place; the market rate of interest then rises, and increased applications are made to the Bank of England for discount." So that the multiplication

* From the fourth volume, just published, of Mr. Tooke's *History of Prices*, pp. 125—6.



of bank notes and other transferable paper does not, for the most part, accompany and facilitate the speculation; but comes into play chiefly when the tide is turning, and difficulties begin to be felt.

Of the extraordinary height to which speculative transactions can be carried upon mere book credits, without the smallest addition to what is commonly called the currency, very few persons are at all aware. "The power of purchase," says Mr. Tooke*, "by persons having capital and credit, is much beyond anything that those who are unacquainted practically with speculative markets have any idea of. . . . A person having the reputation of capital enough for his regular business, and enjoying good credit in his trade, if he takes a sanguine view of the prospect of a rise of price of the article in which he deals, and is favoured by circumstances in the outset and progress of his speculation, may effect purchases to an extent perfectly enormous, compared with his capital." Mr. Tooke confirms this statement by some remarkable instances, exemplifying the immense purchasing power which may be exercised, and rise of price which may be produced, by credit not represented by either bank notes or bills of exchange.

"Amongst the earliest speculators for an advance in the price of tea, in consequence of our dispute with China in 1839, were several retail grocers and tea-dealers. There was a general disposition among the trade to get into stock; that is, to lay in at once a quantity which would meet the probable demand from their customers for several months to come. Some, however, among them, more sanguine and adventurous than the rest, availed themselves of their credit with the importers and wholesale dealers, for purchasing quantities much beyond the estimated demand in their own business. As the purchases were made in the first instance ostensibly, and

* Inquiry into the Currency Principle, pp. 79 and 136—8.

perhaps really, for the legitimate purposes and within the limits of their regular business, the parties were enabled to buy without the condition of any deposit; whereas speculators, known to be such, are required to pay 2*l.* per chest, to cover any probable difference of price which might arise before the expiration of the prompt, which, for this article, is three months. Without, therefore, the outlay of a single farthing of actual capital or currency in any shape, they made purchases to a considerable extent; and with the profit realized on the resale of a part of these purchases, they were enabled to pay the deposit on further quantities when required, as was the case when the extent of the purchases attracted attention. In this way, the speculation went on at advancing prices (100 per cent and upwards) till nearly the expiration of the prompt, and if at that time circumstances had been such as to justify the apprehension which at one time prevailed, that all future supplies would be cut off, the prices might have still further advanced, and at any rate not have retrograded. In this case, the speculators might have realized, if not all the profit they had anticipated, a very handsome sum, upon which they might have been enabled to extend their business greatly, or to retire from it altogether, with a reputation for great sagacity in thus making their fortune. But instead of this favourable result, it so happened that two or three cargoes of tea which had been transhipped were admitted, contrary to expectation, to entry on their arrival here, and it was found that further indirect shipments were in progress. Thus the supply was increased beyond the calculation of the speculators: and at the same time, the consumption had been diminished by the high price. There was, consequently, a violent reaction on the market; the speculators were unable to sell without such a sacrifice as disabled them from fulfilling their engagements, and several of them consequently failed. Among these, one was mentioned, who having a capital not exceeding 1,200*l.*, which was locked up in his business, had contrived to buy 4,000 chests,



value above 80,000*l.*, the loss upon which was about 16,000*l.*

"The other example which I have to give, is that of the operation on the corn market between 1838 and 1842. There was an instance of a person who, when he entered on his extensive speculations, was, as it appeared by the subsequent examination of his affairs, possessed of a capital not exceeding 5000*l.*, but being successful in the outset, and favoured by circumstances in the progress of his operations, he contrived to make purchases to such an extent, that when he stopped payment his engagements were found to amount to between 500,000*l.* and 600,000*l.* Other instances might be cited of parties without any capital at all, who, by dint of mere credit, were enabled, while the aspect of the market favoured their views, to make purchases to a very great extent.

"And be it observed, that these speculations, involving enormous purchases on little or no capital, were carried on in 1839 and 1840, when the money market was in its most contracted state; or when, according to modern phraseology, there was the greatest scarcity of money."

But although the great instrument of speculative purchases is book credits, it cannot be contested that in speculative periods an increase does take place in the quantity both of bills of exchange and of bank notes. This increase, indeed, so far as bank notes are concerned, hardly ever takes place in the earliest stage of the speculations; advances from bankers (as Mr. Tooke observes) not being applied for in order to purchase, but in order to hold on without selling when the usual term of credit has expired, and the high price which was calculated on has not arrived. But the tea speculators mentioned by Mr. Tooke could not have carried their speculations beyond the three months which are the usual term of credit in their trade, unless they had been able to obtain advances from bankers, which, if the expectation of

a rise of price had still continued, they probably could have done.

Since, then, credit in the form of bank notes is a more potent instrument for raising prices than book credits, an unrestrained power of resorting to this instrument may contribute to prolong and heighten the speculative rise of prices, and hence to aggravate the subsequent recoil. But in what degree? and what importance ought we to ascribe to this possibility? It may help us to form some judgment on this point, if we consider the proportion which the utmost increase of bank notes in a period of speculation, bears, I do not say to the whole mass of credit in the country, but to the bills of exchange alone. The average amount of bills in existence at any one time is supposed considerably to exceed a hundred millions sterling*. The bank note circulation of Great Britain and Ireland is less than thirty-five millions, and the increase in speculative periods at most two or three.

* The most approved estimate is that of Mr. Leatham, grounded on the official returns of bill stamps issued. The following are the results:—

| Year. | Bills created in Great Britain and Ireland, founded on returns of Bill Stamps issued from the Stamp Office. | Average amount in circulation at one time in each year. |
|---|---|---|
| 1832 | £356,153,409 | £89,038,352 |
| 1833 | 383,659,585 | 95,914,896 |
| 1834 | 379,155,052 | 94,788,763 |
| 1835 | 405,403,051 | 101,350,762 |
| 1836 | 485,943,473 | 121,485,868 |
| 1837 | 455,084,445 | 113,771,111 |
| 1838 | 465,504,041 | 116,376,010 |
| 1839 | 528,493,842 | 132,123,460 |

"Mr. Leatham," says Mr. Tooke, "gives the process by which, upon the data furnished by the returns of stamps, he arrives at these results; and I am disposed to think that they are as near an approximation to the truth as the nature of the materials admits of arriving at."—*Inquiry into the Currency Principle*, p. 26.



And even this, as we have seen, hardly ever comes into play until that advanced period of the speculation at which the tide shows signs of turning, and the dealers generally are rather thinking of the means of fulfilling their existing engagements, than meditating an extension of them: while the quantity of bills in existence is largely increased from the very commencement of the speculations.

§ 6. It is well known that of late years, an artificial limitation of the issue of bank notes has been regarded by many political economists, and by a great portion of the public, as an expedient of supreme efficacy for preventing, and when it cannot prevent, for moderating, the fever of speculation; and this opinion received the recognition and sanction of the legislature by the Currency Act of 1844. At the point, however, which our inquiries have reached, although we have conceded to bank notes a greater power over prices than is possessed by bills or book credits, we have not found reason to think that this superior efficacy has much share in producing the rise of prices which accompanies a period of speculation, nor consequently that any restraint applied to this one instrument, can be efficacious to the degree which is often supposed, in moderating either that rise, or the recoil which follows it. We shall be still less inclined to think so, when we consider that there is a fourth form of credit transactions, by cheques on bankers, and transfers in a banker's books, which is exactly parallel in every respect to bank notes, giving equal facilities to an extension of credit, and capable of acting on prices quite as powerfully. In the words of Mr. Fullarton*, "there is not a single object at present attained through the agency of Bank of England notes, which might not be as effectually accomplished by each individual keeping an account with the bank, and transacting all his payments of five pounds and upwards by cheque." A bank, instead of

* On the Regulation of Currencies, p. 41.

lending its notes to a merchant or dealer, might open an account with him, and credit the account with the sum it had agreed to advance: on an understanding that he should not draw out that sum in any other mode than by drawing cheques against it in favour of those to whom he had occasion to make payments. These cheques might possibly even pass from hand to hand like bank notes; more commonly however the receiver would pay them into the hands of his own banker, and when he wanted the money, would draw a fresh cheque against it: and hence an objector may suggest, that as the original cheque would very soon be presented for payment, when it must be paid either in notes or in coin, notes or coin to an equal amount must be provided as the ultimate means of liquidation. It is not so, however. The person to whom the cheque is transferred, may perhaps deal with the same banker, and the cheque may return to the very bank on which it was drawn: this is very often the case in country districts; if so, no payment will be called for, but a simple transfer in the banker's books will settle the transaction. If the cheque is paid into a different bank, it will not be presented for payment, but liquidated by set-off against other cheques; and in a state of circumstances favourable to a general extension of banking credits, a banker who has granted more credit, and has therefore more cheques drawn on him, will also have more cheques on other bankers paid to him, and will only have to provide notes or cash for the payment of balances; for which purpose the ordinary reserve of prudent bankers, one-third of their liabilities, will abundantly suffice. Now, if he had granted the extension of credit by means of an issue of his own notes, he must equally have retained in coin the usual reserve: so that he can, as Mr. Fullarton says, give every facility of credit by what may be termed a cheque circulation, which he could give by a note circulation.

This extension of credit by entries in a banker's books, has all that superior efficiency in acting on prices, which we



ascribed to an extension by means of bank notes. As a bank note of 20*l.*, paid to any one, gives him 20*l.* of purchasing-power based on credit, over and above whatever credit he had of his own, so does a cheque paid to him do the same: for, although he may make no purchase with the cheque itself, he deposits it with his banker, and can draw against it. As this act of drawing a cheque against another which has been exchanged and cancelled, can be repeated as often as a purchase with a bank note, it effects the same increase of purchasing power. The original loan, or credit given by the banker to his customer, is potentially multiplied as a means of purchase, in the hands of the successive persons to whom portions of the credit are paid away, just as the purchasing power of a bank note is multiplied by the number of persons through whose hands it passes before it is returned to the issuer.

These considerations abate very much from the importance of any effect which can be produced in allaying the vicissitudes of commerce, by so superficial a contrivance as the one so much relied on of late, the restriction of the issue of bank notes by an artificial rule. An examination of all the consequences of that restriction, and a full estimate of the reasons for and against it, must be deferred until we have treated of the foreign exchanges, and the international movements of bullion. At present we are only concerned with the general theory of prices, of which the different influence of different kinds of credit is an essential part.

§ 7. Some high authorities have claimed for bank notes, as compared with other modes of credit, a greater distinction in respect to influence on price than we have seen reason to allow; a difference, not in degree, but in kind. They ground this distinction on the fact, that bank notes have the property, in common with metallic money, of finally closing the transactions in which they are employed; while no other mode of paying one debt by transferring another, has that

privilege, but, on the contrary, all bills and cheques, as well as all book-debts, are from the first intended to be, and actually are, ultimately liquidated either in coin or in notes. The bank notes in circulation, jointly with the coin, are therefore, according to these authorities, the basis on which all the other expedients of credit rest; and in proportion to the basis will be the superstructure; insomuch that the quantity of bank notes determines that of all the other forms of credit. If bank notes are multiplied, there will, they seem to think, be more bills, more payments by cheque, and, I presume, more book credits; and, by regulating and limiting the issue of bank notes, they think that all other forms of credit are, by an indirect consequence, brought under a similar limitation. I believe I have stated the opinion of these authorities correctly, though I have nowhere seen the grounds of it set forth with such distinctness as to make me feel quite certain that I understand them. I can see no reason for the doctrine, that according as there are more or fewer bank notes, there will be more or less of other descriptions of credit. If indeed we begin by assuming, as I suspect is tacitly done, that prices are regulated by coin and bank notes, the proposition maintained will certainly follow; for, according as prices are higher or lower, the same purchases will give rise to bills, cheques, and book-credits of a larger or smaller amount. But the premiss in this reasoning is the very proposition to be proved. Setting this assumption aside, I know not how the conclusion can be substantiated. The credit given to any one by those with whom he deals, does not depend on the quantity of bank notes or coin in circulation at the time, but on their opinion of his solvency: if any consideration of a more general character enters into their calculation, it is only in a time of pressure on the loan market, when they are not certain of being themselves able to obtain the credit on which they have been accustomed to rely; and even then, what they look to is the general state of the loan market, and not (pre-



conceived theory apart) the amount of bank notes. So far, as to the willingness to *give* credit. And the willingness of any one to *use* his credit, depends on his expectations of gain, that is, on his opinion of the probable future price of his commodity; an opinion grounded either on the rise or fall already going on, or on his prospective judgment respecting the supply and the rate of consumption. When a dealer extends his purchases beyond his immediate means of payment, engaging to pay at a specified time, he does so in the expectation either that the transaction will have terminated favourably before that time arrives, or that he shall then be in possession of sufficient funds from the proceeds of his other transactions. The fulfilment of these expectations depends upon prices, but not specially upon the amount of bank notes. He may, doubtless, also ask himself, in case he should be disappointed in these expectations, to what quarter he can look for a temporary advance, to enable him, at the worst, to keep his engagements. But in the first place, this prospective reflection on the somewhat more or less of difficulty which he may have in tiding over his embarrassments, seems too slender an inducement to be much of a restraint in a period supposed to be one of rash adventure, and upon persons so confident of success as to involve themselves beyond their certain means of extrication. And further, I apprehend that their confidence of being helped out in the event of ill fortune, will mainly depend on their opinion of their own individual credit, with, perhaps, some consideration, not of the quantity of the currency, but of the general state of the loan market. They are aware that, in case of a commercial crisis, they shall have difficulty in obtaining advances. But if they thought it likely that a commercial crisis would occur before they had realized, they would not speculate. If no great contraction of general credit occurs, they will feel no doubt of obtaining any advances which they absolutely require, provided the state of their own affairs at the time affords in the estimation of lenders a sufficient prospect that those advances will be repaid.

# CHAPTER XIII.

## OF AN INCONVERTIBLE PAPER CURRENCY.

§ 1. After experience had shown that pieces of paper, of no intrinsic value, by merely bearing upon them the written profession of being equivalent to a certain number of francs, dollars, or pounds, could be made to circulate as such, and to produce all the benefit to the issuers which could have been produced by the coins which they purported to represent; governments began to think that it would be a happy device if they could appropriate to themselves this benefit, free from the condition to which individuals issuing such paper substitutes for money were subject, of giving, when required, for the sign, the thing signified. They determined to try whether they could not emancipate themselves from this unpleasant obligation, and make a piece of paper issued by them pass for a pound, by merely calling it a pound, and consenting to receive it in payment of the taxes. And such is the influence of almost all established governments, that they have generally succeeded in attaining this object: I believe I might say they have always succeeded for a time, and the power has only been lost to them after they had compromised it by the most flagrant abuse.

In the case supposed, the functions of money are performed by a thing which derives its power of performing them solely from convention; but convention is quite sufficient to confer the power; since nothing more is needful to make a person accept anything as money, and even at any arbitrary value, than the persuasion that it will be taken from him on the same terms by others. The only question is, what determines the value of such a currency? since it cannot be, as in the case of gold and silver (or paper



exchangeable for them at pleasure), the cost of production.

We have seen, however, that even in the case of a metallic currency, the immediate agency in determining its value is its quantity. If the quantity, instead of depending on the ordinary mercantile motives of profit and loss, could be arbitrarily fixed by authority, the value would depend on the fiat of that authority, not on cost of production. The quantity of a paper currency not convertible into the metals at the option of the holder, *can* be arbitrarily fixed; especially if the issuer is the sovereign power of the state. The value, therefore, of such a currency, is entirely arbitrary.

Suppose that, in a country of which the currency is wholly metallic, a paper currency is suddenly issued, to the amount of half the metallic circulation: not by a banking establishment, or in the form of loans, but by the government, in payment of salaries and purchase of commodities. The currency being suddenly increased by one-half, all prices will rise, and among the rest, the prices of all things made of gold and silver. An ounce of manufactured gold will become more valuable than an ounce of gold coin, by more than that customary difference which compensates for the value of the workmanship; and it will be profitable to melt the coin for the purpose of being manufactured, until as much has been taken from the currency by the subtraction of gold, as had been added to it by the issue of paper. Then prices will relapse to what they were at first, and there will be nothing changed except that a paper currency has been substituted for half of the metallic currency which existed before. Suppose now a second emission of paper; the same series of effects will be renewed; and so on, until the whole of the metallic money has disappeared: that is, if paper be issued of as low a denomination as the lowest coin; if not, as much will remain, as convenience requires for the smaller payments. The addition made to the quantity of gold and silver disposable for ornamental purposes, will somewhat

reduce, for a time, the value of the article; and as long as this is the case, even though paper has been issued to the original amount of the metallic circulation, as much coin will remain in circulation along with it, as will keep the value of the currency down to the reduced value of the metallic material: but the value having fallen below the cost of production, a stoppage or diminution of the supply from the mines will enable the surplus to be carried off by the ordinary agents of destruction, after which, the metals and the currency will recover their natural value. We are here supposing, as we have supposed throughout, that the country has mines of its own, and no commercial intercourse with other countries: for, in a country having foreign trade, the coin which is rendered superfluous by an issue of paper is carried off by a much prompter method.

Up to this point, the effects of a paper currency are substantially the same, whether it is convertible into specie or not. It is when the metals have been completely superseded and driven from circulation, that the difference between convertible and inconvertible paper begins to be operative. When the gold or silver has all gone from circulation, and an equal quantity of paper has taken its place, suppose that a still further issue is superadded. The same series of phenomena recommences: prices rise, among the rest the prices of gold and silver articles, and it becomes an object as before to procure coin in order to convert it into bullion. There is no longer any coin in circulation; but if the paper currency is convertible, coin may still be obtained from the issuers, in exchange for notes. All additional notes, therefore, which are attempted to be forced into circulation after the metals have been completely superseded, will return upon the issuers in exchange for coin; and they will not be able to maintain in circulation such a quantity of convertible paper, as to sink its value below the metal which it represents. It is not so, however, with an inconvertible currency. To the increase of that (if permitted by law) there is no check. The



issuers may add to it indefinitely, lowering its value and raising prices in proportion; they may, in other words, depreciate the currency without limit.

Such a power, in whomsoever vested, is an intolerable evil. All variations in the value of the circulating medium are mischievous: they disturb existing contracts and expectations, and the liability to such changes renders every pecuniary engagement of long date entirely precarious. The person who buys for himself, or grants to another, an annuity of 100*l.*, does not know whether it will be equivalent to 200*l.* or to 50*l.* a few years hence. Great as this evil would be if it depended only on accident, it is still greater when placed at the arbitrary disposal of a man or a body of men; who may have any kind or degree of interest to be served by an artificial fluctuation in fortunes; and who have at any rate a strong interest in issuing as much as possible, each issue being in itself a source of profit. Not to add, that the issuers may have, and in the case of a government paper, always have, a direct interest in lowering the value of the currency, because it is the medium in which their own debts are computed.

§ 2. In order that the value of the currency may be secure from being altered by design, and may be as little as possible liable to fluctuation from accident, the articles least liable of all known commodities to vary in their value, the precious metals, have been made in all civilized countries the standard of value for the circulating medium; and no paper currency ought to exist of which the value cannot be made to conform to theirs. Nor has this fundamental maxim ever been entirely lost sight of, even by the governments which have most abused the power of creating inconvertible paper. If they have not (as they generally have) professed an intention of paying in specie at some indefinite future time, they have at least, by giving to their paper issues the names of their coins, made a virtual, though generally a false, profes-

sion of intending to keep them at a value corresponding to that of the coins. This is not impracticable, even with an inconvertible paper. There is not indeed the self-acting check which convertibility brings with it. But there is a clear and unequivocal indication by which to judge whether the currency is depreciated, and to what extent. That indication is, the price of the precious metals. When holders of paper cannot demand coin to be converted into bullion, and when there is none left in circulation, bullion rises and falls in price like other things; and if it is above the mint price, if an ounce of gold, which would be coined into the equivalent of 3*l.* 17*s.* 10½*d.*, is sold for 4*l.* or 5*l.* in paper, the value of the currency has sunk just that much below what the value of a metallic currency would be. If, therefore, the issue of inconvertible paper were subjected to strict rules, one rule being that whenever bullion rose above the mint price, the issues should be contracted until the market price of bullion and the mint price were again in accordance, such a currency would not be subject to any of the evils usually deemed inherent in an inconvertible paper.

But also such a system of currency would have no advantages sufficient to recommend it to adoption. An inconvertible currency, regulated by the price of bullion, would conform exactly, in all its variations, to a convertible one; and the only advantage gained, would be that of exemption from the necessity of keeping any reserve of the precious metals; which is not a very important consideration, especially as a government, so long as its good faith is not suspected, needs not keep so large a reserve as private issuers, being not so liable to great and sudden demands, since there never can be any real doubt of its solvency. Against this small advantage is to be set, in the first place, the possibility of fraudulent tampering with the price of bullion for the sake of acting on the currency; in the manner of the fictitious sales of corn, to influence the averages, so much and so justly complained of while the corn laws were in force. But a still stronger consideration is the importance of adhering to a simple principle, intelligible to the most untaught capacity. Everybody can understand convertibility; every one sees that what can be at any moment exchanged for five pounds, is worth five pounds. Regulation by the price of bullion is a more complex idea, and does not recommend itself through the same familiar associations. There would be nothing like the same confidence, by the public generally, in an inconvertible currency so regulated, as in a convertible one: and the most instructed person might reasonably doubt whether such a rule would be as likely to be inflexibly adhered to. The grounds of the rule not being so well understood by the public, opinion would probably not enforce it with as much rigidity, and, in any circumstances of difficulty, would be likely to turn against it; while to the government itself a suspension of convertibility would appear a much stronger and more extreme measure, than a relaxation of what might possibly be considered a somewhat artificial rule. There is therefore a great preponderance of reasons in favour of a convertible, in preference to even the best regulated inconvertible currency. The temptation to over-issue, in certain financial emergencies, is so strong, that nothing is admissible which can tend, in however slight a degree, to weaken the barriers that restrain it.



§ 3. Although no doctrine in political economy rests upon more obvious grounds than the mischief of a paper currency not maintained at the same value with a metallic, either by convertibility, or by some principle of limitation equivalent to it; and although, accordingly, this doctrine has, though not till after the discussions of many years, been tolerably effectually drummed into the public mind; yet dissentients are still numerous, and projectors every now and then start up, with plans for curing all the economical evils of society by means of an unlimited issue of inconvertible paper. There is, in truth, a great charm in the idea. To be

able to pay off the national debt, defray the expenses of government without taxation, and in fine, to make the fortunes of the whole community, is a brilliant prospect, when once a man is capable of believing that printing a few characters on bits of paper will do it. The philosopher's stone could not be expected to do more.

As these projects, however often slain, always resuscitate, it is not superfluous to examine one or two of the fallacies by which the schemers impose upon themselves. One of the commonest is, that a paper currency cannot be issued in excess so long as every note issued *represents* property, or has a *foundation* of actual property to rest on. These phrases, of representing and resting, seldom convey any distinct or well-defined idea: when they do, their meaning is no more than this—that the issuers of the paper must *have* property, either of their own, or entrusted to them, to the value of all the notes they issue; though for what purpose, does not very clearly appear; for if the property cannot be claimed in exchange for the notes, it is difficult to divine in what manner its mere existence can serve to uphold their value. I presume, however, it is intended as a guarantee that the holders would be finally reimbursed, in case any untoward event should cause the whole concern to be wound up. On this theory there have been many schemes for "coining the whole land of the country into money" and the like.

In so far as this notion has any connexion at all with reason, it seems to originate in confounding two entirely distinct evils, to which a paper currency is liable. One is, the insolvency of the issuers; which, if the paper is grounded on their credit—if it makes any promise of payment in cash, either on demand or at any future time—of course deprives the paper of any value which it derives from that promise. To this evil paper credit is equally liable, however moderately used; and against it, a proviso that all issues should be "founded on property," as for instance that notes should only be issued on the security of some valuable thing



expressly pledged for their redemption, would really be efficacious as a precaution. But the theory takes no account of another evil, which is incident to the notes of the most solvent firm, company, or government: that of being depreciated in value from being issued in excessive quantity. The assignats, during the French Revolution, were a model of a currency grounded on these principles. The assignats "represented" an immense amount of highly valuable property, namely the lands of the crown, the church, the monasteries, and the emigrants, amounting perhaps to half the territory of France. They were, in fact, orders or assignments on this mass of land. The revolutionary government had the idea of "coining" these lands into money; but, to do them justice, they did not originally contemplate the immense multiplication of issues to which they were eventually driven by the failure of all other financial resources. They imagined that the assignats would come rapidly back to the issuers in exchange for land, and that they should be able to reissue them continually until the lands were all disposed of, without having at any time more than a very moderate quantity in circulation. Their hope was frustrated: the land did not sell so quickly as they expected; buyers were not inclined to invest their money in possessions which were likely to be resumed without compensation if the Revolution succumbed: the bits of paper which represented land, becoming prodigiously multiplied, could no more keep up their value than the land itself would have done if it had all been brought to market at once: and the result was, that it at last required an assignat of five hundred francs to pay for a cup of coffee.

The example of the assignats has been said not to be conclusive, because an assignat only represented land in general, but not a definite quantity of land. To have prevented their depreciation, the proper course, it is affirmed, would have been, to have made a valuation of all the confiscated property at its metallic value, and to have issued

assignats up to, but not beyond, that limit; giving to the holders a right to demand any piece of land, at its registered valuation, in exchange for assignats to the same amount. There can be no question about the superiority of this plan over the one actually adopted. Had this course been followed, the assignats could never have been depreciated to the inordinate degree they were; for—as they would have retained all their purchasing power in relation to land, however much they might have fallen in respect to other things—before they had lost very much of their market value, they would probably have been brought in to be exchanged for land. It must be remembered, however, that their not being depreciated would presuppose that no greater number of them continued in circulation than would have circulated if they had been convertible into cash. However convenient, therefore, in a time of revolution, this currency convertible into land on demand might have been, as a contrivance for selling rapidly a great quantity of land with the least possible sacrifice; it is difficult to see what advantage it would have, as the permanent system of a country, over a currency convertible into coin: while it is not at all difficult to see what would be its disadvantages; since land is far more variable in value than gold and silver; and besides, land, to most persons, being rather an incumbrance than a desirable possession, except to be converted into money, people would submit to a much greater depreciation before demanding land, than they will before demanding gold or silver*.

* Among the schemes of currency to which, strange to say, intelligent men have been found to give their sanction, one is as follows: that the state should receive in pledge, or mortgage, any kind or amount of property, such as land, stock, &c., and should advance to the owners inconvertible paper money to the estimated value. Such a currency would not even have the recommendations of the imaginary assignats supposed in the text; since those into whose hands the notes were paid by the persons who received them, could not return them to the Government and demand in exchange land or stock which was only pledged, not alienated. There would be no reflux of such assignats as these, and their depreciation would be indefinite.



§ 4. Another of the fallacies from which the advocates of an inconvertible currency derive support, is the notion that an increase of the currency quickens industry. This idea was set afloat by Hume, in his Essay on Money, and has had many devoted adherents since; witness the Birmingham currency school of the present day, of whom Mr. Attwood was for a time the most conspicuous representative. Mr. Attwood maintained that a rise of prices produced by an increase of paper currency, stimulates every producer to his utmost exertion, and brings all the capital and labour of the country into complete employment; and that this has invariably happened in all periods of rising prices, when the rise was on a sufficiently great scale. I presume, however, that the inducement which, according to Mr. Attwood, excited this unusual ardour in all persons engaged in production, must have been the expectation of getting more of commodities generally, more real wealth, in exchange for the produce of their labour, and not merely more pieces of paper. This expectation, however, must have been, by the very terms of the supposition, disappointed, since, all prices being supposed to rise equally, no one was really better paid for his goods than before. Those who agree with Mr. Attwood could only succeed in winning people on to these unwonted exertions, by a prolongation of what would in fact be a delusion; contriving matters so, that by a progressive rise of money prices, every producer shall always seem to be in the very act of obtaining an increased remuneration which he never, in reality, does obtain. It is unnecessary to advert to any other of the objections to this plan, than that of its total impracticability. It calculates on finding the whole world persisting for ever in the belief that more pieces of paper are more riches, and never discovering that, with all their paper, they cannot buy more of anything than they could before. No such mistake was made during any of the periods of high prices, on the experience of which this school lays so much stress. At the periods which Mr. Attwood mistook for

times of prosperity, and which were simply (as all periods of high prices, under a convertible currency, must be) times of speculation, the speculators did not think they were growing rich because the high prices would last, but because they would not last, and because whoever contrived to realize while they did last, would find himself, after the recoil, in possession of a greater number of pounds sterling, without their having become of less value. If, at the close of the speculation, an issue of paper had been made, sufficient to keep prices up to the point which they attained when at the highest, no one would have been more disappointed than the speculators: since the gain which they thought to have reaped by realizing in time (at the expense of their competitors, who bought when they sold, and had to sell after the revulsion) would have faded away in their hands, and instead of it they would have got nothing except a few more paper tickets to count by.

Hume's version of the doctrine differed in a slight degree from Mr. Attwood's. He thought that all commodities would not rise in price simultaneously, and that some persons therefore would obtain a real gain, by getting more money for what they had to sell, while the things which they wished to buy might not yet have risen. And those who would reap this gain would always be (he seems to think) the first comers. It seems obvious, however, that for every person who thus gains more than usual, there is necessarily some other person who gains less. The loser, if things took place as Hume supposes, would be the seller of the commodities which are slowest to rise; who, by the supposition, parts with his goods at the old prices to purchasers who have already benefited by the new. This seller has obtained for his commodity only the accustomed quantity of money, while there are already some things of which that money will no longer purchase as much as before. If, therefore, he knows what is going on, he will raise his price, and then the buyer will not have the gain, which is supposed to



stimulate his industry. But if, on the contrary, the seller does not know the state of the case, and only discovers it when he finds, in laying his money out, that it does not go so far, he then obtains less than the ordinary remuneration for his labour and capital: and if the other dealer's industry is encouraged, it should seem that his must, from the opposite cause, be impaired.

§ 5. There is no way in which a general and permanent rise of prices, or in other words, depreciation of money, can benefit anybody, except at the expense of somebody else. The substitution of paper for a metallic currency is a national gain: any further increase of paper beyond this is but a form of robbery.

An issue of notes is a manifest gain to the issuers, who, until the notes are returned for payment, obtain the use of them as if they were a real capital: and so long as the notes are no permanent addition to the currency, but merely supersede gold or silver to the same amount, the gain of the issuer is a loss to no one; it is obtained by saving to the community the expense of the more costly material. But if there is no gold or silver to be superseded—if the notes are added to the currency, instead of being substituted for the metallic part of it—all holders of currency lose, by the depreciation of its value, the exact equivalent of what the issuer gains. A tax is virtually levied on them for his benefit. It will be objected by some, that gains are also made by the producers and dealers who, by means of the increased issue, are accommodated with loans. Theirs, however, is not an additional gain, but a portion of that which is reaped by the issuer at the expense of all possessors of money. The profits arising from the contribution levied upon the public, he does not keep to himself, but divides with his customers.

But besides the benefit reaped by the issuers, or by others through them, at the expense of the public generally, there is another unjust gain obtained by a larger class,

namely by those who are under fixed pecuniary obligations. All such persons are freed, by a depreciation of the currency, from a portion of the burden of their debts or other engagements: in other words, part of the property of their creditors is gratuitously transferred to them. On a superficial view it may be imagined that this is an advantage to industry; since the productive classes are great borrowers, and generally owe larger debts to the unproductive (if we include among the latter all persons not actually in business) than the unproductive classes owe to them; especially if the national debt be included. It is only thus that a general rise of prices can be a source of benefit to producers and dealers; by diminishing the pressure of their fixed burdens. And this might be accounted an advantage, if integrity and good faith were of no importance to the world, and to industry and commerce in particular. Not many, however, have been found to say that the currency ought to be depreciated on the simple ground of its being desirable to rob the national creditor and private creditors of a part of what is in their bond. The schemes which have tended that way have almost always had some appearance of special and circumstantial justification, such as the necessity of compensating for a prior injustice committed in the contrary direction.

§ 6. Thus in England, from 1819 to the present time, it has been pertinaciously contended, that a large portion of the national debt, and a multitude of private debts still in existence, were contracted between 1797 and 1819, when the Bank of England was exempted from giving cash for its notes; and that it is grossly unjust to borrowers, (that is, in the case of the national debt, to all tax-payers) that they should now be paying interest on the same nominal sums in a currency of full value, which were borrowed in a depreciated one. The depreciation, according to the views and objects of the particular writer, is represented to have averaged thirty, fifty, or even more than fifty per cent: and the conclusion is, that either we ought to return to this depreciated currency, or to strike off from the national debt, and from private debts of old standing (such as mortgages), a percentage corresponding to the estimated amount of the depreciation.



To this doctrine the following is the answer usually made. Granting that, by returning to cash payments without lowering the standard, an injustice was done to debtors, in holding them liable for the same amount of a currency enhanced in value, which they had borrowed while it was depreciated; it is now too late to make reparation for this injury. The debtors and creditors of to-day are not the debtors and creditors of 1819: the lapse of years has entirely altered the pecuniary relations of the community; and it being impossible now to ascertain the particular persons who were either benefited or injured, to attempt to retrace our steps would be not redressing a wrong, but superadding a second act of wide-spread injustice to the one already committed. This argument is certainly conclusive on the practical question; but it places the honest conclusion on too narrow and too low a ground. It concedes that the measure of 1819, called Peel's Bill, by which cash payments were resumed at the original standard of 3*l.* 17*s.* 10½*d.*, was really the injustice it is said to be. This is an admission wholly opposed to the truth. Parliament had no alternative: it was absolutely bound to adhere to the acknowledged standard; as may be shown on three distinct grounds, two of fact, and one of principle.

The reasons of fact are these. In the first place, it is not true that the debts, private or public, incurred during the Bank restriction, were contracted in a currency of lower value than that in which the interest is now paid. It is indeed true that the suspension of the obligation to pay in specie, did put it in the power of the Bank to depreciate the currency. It is true also that the Bank really exercised that power, though to a far less extent than is often pretended;

since the difference between the market price of gold and the mint valuation, during the greater part of the interval, was very trifling, and when it was greatest, during the last five years of the war, did not much exceed thirty per cent. To the extent of that difference, the currency was depreciated, that is, its value was below that of the standard to which it professed to adhere. But the state of Europe at that time was such—there was so unusual an absorption of the precious metals by hoarding, and by the military chests of the vast armies which then desolated the Continent, that the value of the standard itself was very considerably raised: and the best authorities, among whom it is sufficient to name Mr. Tooke, have, after an elaborate investigation, satisfied themselves that the difference between paper and bullion was not greater than the enhancement in value of gold itself, and that the paper, though depreciated relatively to the then value of gold, did not sink below the ordinary value, at other times, either of gold or of a convertible paper. If this be true (and the evidences of the fact are conclusively stated in Mr. Tooke's *History of Prices*,) the foundation of the whole case against the fundholder and other creditors on the ground of depreciation is subverted.

But, secondly, even if the currency had really been lowered in value at each period of the Bank restriction, in the same degree in which it was depreciated in relation to its standard, we must remember that a part only of the national debt, or of other permanent engagements, were incurred during the Bank restriction. A large part had been contracted before 1797; a still larger during the early years of the restriction, when the difference between paper and gold was yet small. To the holders of the former part, an injury was done, by paying the interest for twenty-two years in a depreciated currency: those of the second, suffered an injury during the years in which the interest was paid in a currency more depreciated than that in which the loans were contracted. To have resumed cash payments at a lower



standard would have been to perpetuate the injury to these two classes of creditors, in order to avoid giving an undue benefit to a third class, who had lent their money during the few years of greatest depreciation. As it is, there was an underpayment to one set of persons, and an overpayment to another. The late Mr. Mushet took the trouble to make an arithmetical comparison between the two amounts. He ascertained by calculation, that if an account had been made out in 1819, of what the fundholders had gained and lost by the variation of the paper currency from its standard, they would have been found as a body to have been losers; so that if any compensation was due on the ground of depreciation, it would not be *from* the fundholders collectively, but *to* them.

Thus it is with the facts of the case. But these reasons of fact are not the strongest. There is a reason of principle, still more powerful. Suppose that, not a part of the debt merely, but the whole, had been contracted in a depreciated currency, depreciated not only in comparison with its standard, but with its own value before and after; and that we are now paying this debt in a currency fifty or even a hundred per cent more valuable than that in which it was contracted. What difference would this make in the obligation of paying it, if the condition that it should be so paid was part of the original compact? Now this is not only truth, but less than the truth. The compact stipulated better terms for the fundholder than he has received. During the whole continuance of the Bank restriction, there was a parliamentary pledge, by which the legislature was as much bound as any legislature is capable of binding itself, that cash payments should be resumed on the original footing, at farthest in six months after the conclusion of a general peace. This was therefore an actual condition of every loan; and the terms of the loans were more favourable in consideration of it. Without some such stipulation, the government could not have expected to borrow unless on the terms on which men lend

to the native princes of India. If it had been understood and avowed that, after borrowing the money, the standard at which it was computed might be permanently lowered, to any extent which to the "collective wisdom" of a legislature of borrowers might seem fit—who can say what rate of interest would have been a sufficient inducement to a person of common sense to risk his savings in such an adventure? However much the fundholders had gained by the resumption of cash payments, the terms of the contract insured their giving ample value for it. They gave value for more than they received; since cash payments were not resumed in six months, but in as many years, after the peace. So that, waving all our arguments except the last, and conceding all the facts asserted on the other side of the question, the fundholders, instead of being unduly benefited, are the injured party; and would have a claim to compensation, if such claims were not very properly barred by the impossibility of adjudication, and by the salutary general maxim of law and policy, "quòd interest reipublicæ ut sit finis litium."

# CHAPTER XIV.

## OF EXCESS OF SUPPLY.

§ 1. After the elementary exposition of the theory of money contained in the last few chapters, we shall return to a question in the general theory of Value, which could not be satisfactorily discussed until the nature and operations of Money were in some measure understood, because the errors against which we have to contend mainly originate in a misunderstanding of those operations.

We have seen that the value of everything gravitates towards a certain medium point (which has been called the Natural Value), namely, that at which it exchanges for every other thing in the ratio of their cost of production. We have seen, too, that the actual or market value coincides, or nearly so, with the natural value, only on an average of years; and is continually either rising above, or falling below it, from alterations in the demand, or casual fluctuations in the supply: but that these variations correct themselves, through the tendency of the supply to accommodate itself to the demand which exists for the commodity at its natural value. A general convergence thus results from the balance of opposite divergences. Dearth, or scarcity, on the one hand, and over-supply, or in mercantile language, glut, on the other, are incident to all commodities. In the first case, the commodity affords to the producers or sellers, while the deficiency lasts, an unusually high rate of profit: in the second, the supply being in excess of that for which a demand exists at such a value as will afford the ordinary profit, the sellers must be content with less, and must even, in extreme cases, submit to a loss.

Because this phenomenon of over-supply, and consequent

inconvenience or loss to the producer or dealer, may exist in the case of any one commodity whatever, many persons, including some distinguished political economists, have thought that it may exist with regard to all commodities; that there may be a general over-production of wealth; a supply of commodities, in the aggregate, surpassing the demand; and a consequent depressed condition of all classes of producers. Against this doctrine, of which Mr. Malthus and Dr. Chalmers in this country, and M. de Sismondi on the Continent, were the chief apostles, I have already contended in the First Book*; but it was not possible, in that stage of our inquiry, to enter into a complete examination of an error (as I conceive) essentially grounded on a misunderstanding of the phenomena of Value and Price.

The doctrine appears to me to involve so much inconsistency in its very conception, that I feel considerable difficulty in giving any statement of it which shall be at once clear, and satisfactory to its supporters. They agree in maintaining that there may be, and sometimes is, an excess of productions in general beyond the demand for them; that when this happens, purchasers cannot be found at prices which will repay the cost of production with a profit; that there ensues a general depression of prices or values (they are seldom accurate in discriminating between the two), so that producers, the more they produce, find themselves the poorer, instead of richer; and Dr. Chalmers accordingly inculcates on capitalists the practice of a moral restraint in reference to the pursuit of gain: while Sismondi deprecates machinery, and the various inventions which increase productive power. They both maintain that accumulation of capital may proceed too fast, not merely for the moral, but for the material interests of those who produce and accumulate; and they enjoin the rich to guard against this evil by an ample unproductive consumption.

* Supra, vol. i. pp. 82—5.



§ 2. When these writers speak of the supply of commodities as out-running the demand, it is not clear which of the two elements of demand they have in view—the desire to possess, or the means of purchase; whether their meaning is that there are, in such cases, more consumable products in existence than the public desires to consume, or merely more than it is able to pay for. In this uncertainty, it is necessary to examine both suppositions.

First, let us suppose that the quantity of commodities produced is not greater than the community would be glad to consume: is it, in that case, possible that there should be a deficiency of demand for all commodities, for want of the means of payment? Those who think so cannot have considered what it is which constitutes the means of payment for commodities. It is simply, commodities. Each person's means of paying for the productions of other people consists of those which he himself possesses. All sellers are inevitably and *ex vi termini* buyers. Could we suddenly double the productive powers of the country, we should double the supply of commodities in every market; but we should, by the same stroke, double the purchasing power. Everybody would bring a double demand as well as supply: everybody would be able to buy twice as much, because every one would have twice as much to offer in exchange. It is probable, indeed, that there would now be a superfluity of certain things. Although the community would willingly double its aggregate consumption, it may already have as much as it desires of some commodities, and it may prefer to do more than double its consumption of others, or to exercise its increased purchasing power on some new thing. If so, the supply will adapt itself accordingly, and the values of things will continue to conform to their cost of production. At any rate, it is a sheer absurdity that all things should fall in value, and that all producers should, in consequence, be insufficiently remunerated. If values remain the same, what becomes of prices is immaterial, since the remuneration of producers

does not depend on how much money, but on how much of consumable articles, they obtain for their goods. Besides, money is a commodity; and if all commodities are supposed to be doubled in quantity, we must suppose money to be doubled too, and then prices would no more fall than values would.

§ 3. A general over-supply, or excess of all commodities above the demand, so far as demand consists in means of payment, is thus shown to be an impossibility. But it may perhaps be supposed that it is not the ability to purchase, but the desire to possess, that falls short, and that the general produce of industry may be greater than the community desires to consume—the part, at least, of the community which has an equivalent to give. It is evident enough, that produce makes a market for produce, and that there is wealth in the country with which to purchase all the wealth in the country; but those who have the means, may not have the wants, and those who have the wants may be without the means. A portion, therefore, of the commodities produced, may be unable to find a market, from the absence of means in those who have the desire to consume, and the want of desire in those who have the means.

This is much the most plausible form of the doctrine, and does not, like that which we first examined, involve a contradiction. There may easily be a greater quantity of any particular commodity than is desired by those who have the ability to purchase, and it is abstractedly conceivable that this might be the case with all commodities. The error is in not perceiving that although all who have an equivalent to give, *might* be fully provided with every consumable article which they desire, the fact that they go on adding to the production proves that this is not *actually* the case. Assume the most favourable hypothesis for the purpose, that of a limited community, every member of which possesses as much of necessaries and of all known luxuries as he desires: and since it



is not conceivable that persons whose wants were completely satisfied would labour and economize to obtain what they did not desire, suppose that a foreigner arrives, and produces an additional quantity of something of which there was already enough. Here, it will be said, is over-production: true, I reply; over-production of that particular article: the community wanted no more of that, but it wanted something. The old inhabitants indeed wanted nothing; but did not the foreigner himself want something? When he produced the superfluous article, was he labouring without a motive? He has produced, but the wrong thing instead of the right. He wanted, perhaps, food, and has produced watches, with which everybody was sufficiently supplied. The newcomer brought with him into the country a demand for commodities, equal to all that he could produce by his industry, and it was his business to see that the supply he brought should be suitable to that demand. If he could not produce something capable of exciting a new want or desire in the community, for the satisfaction of which some one would grow more food and give it to him in exchange, he had the alternative of growing food for himself; either on fresh land, if there was any unoccupied, or as a tenant, or partner, or servant, of some former occupier, willing to be partially relieved from labour. He has produced a thing not wanted, instead of what was wanted; and he himself, perhaps, is not the kind of producer who is wanted; but there is no over-production; production is not excessive but merely ill assorted. We saw before that whoever brings additional commodities to the market, brings an additional power of purchase; we now see, that he brings also an additional desire to consume; since if he had not that desire, he would not have troubled himself to produce. Neither of the elements of demand, therefore, can be wanting, when there is an additional supply; though it is perfectly possible that the demand may be for one thing, and the supply may unfortunately consist of another.

Driven to his last retreat, an opponent may perhaps allege, that there are persons who produce and accumulate from mere habit; not because they have any object in growing richer, or desire to add in any respect to their consumption, but from *vis inertiæ*. They continue producing because the machine is ready mounted, and save and re-invest their savings because they have nothing on which they care to expend them. I grant that this is possible, and in some few instances probably happens; but these do not in the smallest degree affect our conclusion. For, what do these persons do with their savings? They invest them productively; that is, expend them in employing labour. In other words, having a purchasing power belonging to them, more than they know what to do with, they make over the surplus of it for the general benefit of the labouring class. Now, will that class also not know what to do with it? Are we to suppose that they too have their wants perfectly satisfied, and go on labouring from mere habit? Until this is the case; until the working classes have also reached the point of satiety—there will be no want of demand for the produce of capital, however rapidly it may accumulate: since, if there is nothing else for it to do, it can always find employment in producing the necessaries or luxuries of the labouring class. And when they too had no further desire for necessaries or luxuries, they would take the benefit of any further increase of wages by diminishing their work; so that the over-production which then for the first time would be possible in idea, could not even then take place in fact, for want of labourers. Thus, in whatever manner the question is looked at, even though we go to the extreme verge of possibility to invent a supposition favourable to it, the theory of general over-production implies an absurdity.

§ 4. What then is it by which men who have reflected much on economical phenomena, and have even contributed to throw new light upon them by original speculations, have been led to embrace so irrational a doctrine? I conceive them to have been deceived by a mistaken interpretation of certain mercantile facts. They imagined that the possibility of a general oversupply of commodities was proved by experience. They believed that they saw this phenomenon in certain conditions of the markets, the true explanation of which is totally different.



I have already described the state of the markets for commodities which accompanies what is termed a commercial crisis. At such times there is really an excess of all commodities above the money demand: in other words, there is an under-supply of money. From the sudden annihilation of a great mass of credit, every one dislikes to part with ready money, and many are anxious to procure it at any sacrifice. Almost everybody therefore is a seller, and there are scarcely any buyers: so that there may really be, though only while the crisis lasts, an extreme depression of general prices, from what may be indiscriminately called a glut of commodities or a dearth of money. But it is a great error to suppose, with Sismondi, that a commercial crisis is the effect of a general excess of production. It is simply the consequence of an excess of speculative purchases. It is not a gradual advent of low prices, but a sudden recoil from prices extravagantly high: its immediate cause is a contraction of credit, and the remedy is, not a diminution of supply, but the restoration of confidence. It is also evident that this temporary derangement of markets is an evil only because it is temporary. The fall being solely of money prices, if prices did not rise again no dealer would lose, since the smaller price would be worth as much to him as the larger price was before. In no manner does this phenomenon answer to the description which these celebrated economists have given of the evil of over-production. That permanent decline in the circumstances of producers, for want of markets, which those writers contemplate, is a conception to which the nature of a commercial crisis gives no support.

The other phenomenon from which the notion of a general excess of wealth and superfluity of accumulation seems to derive countenance, is one of a more permanent nature, namely, the fall of profits and interest which naturally takes place with the progress of population and production. The cause of this decline of profit is the increased cost of maintaining labour, which results from an increase of population and of the demand for food, outstripping the advance of agricultural improvement. This important feature in the economical progress of nations will receive full consideration and discussion in the succeeding Book*. It is obviously a totally different thing from a want of market for commodities, though often confounded with it in the complaints of the producing and trading classes. The true interpretation of the modern or present state of industrial economy, is, that there is hardly any amount of business which may not be done, if people will be content to do it on small profits: and this, all active and intelligent persons in business perfectly well know: but even those who comply with the necessities of their time, grumble at what they comply with, and wish that there were less capital, or as they express it, less competition, in order that there might be greater profits. Low profits, however, are a different thing from deficiency of demand; and the production and accumulation which merely reduce profits, cannot be called excess of supply or of production. What the phenomenon really is, and its effects and necessary limits, will be seen when we treat of that express subject.

I know not of any economical facts, except the two I have specified, which can have given occasion to the opinion that a general over-production of commodities ever presented itself in actual experience. I am convinced that there is no fact in commercial affairs, which, in order to its explanation, stands in need of that chimerical supposition.

* Infra, book iv. ch. 4.



The point is fundamental; any difference of opinion on it involves radically different conceptions of Political Economy, especially in its practical aspect. On the one view, we have only to consider how a sufficient production may be combined with the best possible distribution, but on the other there is a third thing to be considered—how a market can be created for produce, or how production can be limited to the capabilities of the market. Besides; a theory so essentially self-contradictory cannot intrude itself without carrying confusion into the very heart of the subject, and making it impossible even to conceive with any distinctness many of the more complicated economical workings of society. This error has been, I conceive, fatal to the systems, as systems, of the three distinguished economists to whom I before referred, Malthus, Chalmers, and Sismondi; all of whom have admirably conceived and explained several of the elementary theorems of political economy, but this fatal misconception has spread itself like a veil between them and the more difficult portions of the subject, not suffering one ray of light to penetrate. Still more is the same confused idea constantly crossing and bewildering the speculations of minds inferior to theirs. It is but justice to two eminent names, to call attention to the fact, that the merit of having placed this most important point in its true light, belongs principally, on the Continent, to the judicious J. B. Say, and in this country to Mr. Mill; who, (besides the conclusive exposition which he gave of the subject in his Elements of Political Economy), had set forth the correct doctrine with great force and clearness in an early pamphlet, called forth by a temporary controversy, and entitled, "Commerce Defended;" the first of his writings which attained any celebrity, and which he prized more as having been his first introduction to the friendship of David Ricardo, the most valued and most intimate friendship of his life.

# CHAPTER XV.

## OF A MEASURE OF VALUE.

§ 1. THERE has been much discussion among political economists respecting a Measure of Value. An importance has been attached to the subject, greater than it deserved, and what has been written respecting it has contributed not a little to the reproach of logomachy, which is brought, with much exaggeration, but not altogether without ground, against the speculations of political economists. It is necessary however to touch upon the subject, if only to show how little there is to be said on it.

A Measure of Value, in the ordinary sense of the word measure, would mean, something, by comparison with which we may ascertain what is the value of any other thing. When we consider farther, that value itself is relative, and that two things are necessary to constitute it, independently of the third thing which is to measure it; we may define a Measure of Value to be something, by comparing with which any two other things, we may infer their value in relation to one another.

In this sense, any commodity will serve as a measure of value at a given time and place; since we can always infer the proportion in which things exchange for one another, when we know the proportion in which each exchanges for any third thing. To serve as a convenient measure of value is one of the functions of the commodity selected as a medium of exchange. It is in that commodity that the values of all other things are habitually estimated. We say that one thing is worth 2*l.*, another 3*l.*; and it is then known without express statement, that one is worth two-thirds of the other, or that the things exchange for one another in the



proportion of 2 to 3. Money is a complete measure of their value.

But the desideratum sought by political economists is not a measure of the value of things at the same time and place, but a measure of the value of the same thing at different times and places: something by comparison with which it may be known whether any given thing is of greater or less value now than a century ago, or in this country than in America or China. And for this also, money, or any other commodity, will serve quite as well as at the same time and place, provided we can obtain the same data; provided we are able to compare with the measure not one commodity only, but the two or more which are necessary to the idea of value. If wheat is now 50*s.* the quarter, and a fat sheep the same, and if in the time of Henry the Second wheat was 20*s.*, and a sheep 10*s.*, we know that a quarter of wheat was then worth two sheep, and is now only worth one, and that the value therefore of a sheep, estimated in wheat, is twice as great as it was then; quite independently of the value of money at the two periods, either in relation to those two articles (in respect to both of which we suppose it to have fallen), or to other commodities, in respect to which we need not make any supposition.

What seems to be desired, however, by writers on the subject, is some means of ascertaining the value of a commodity by merely comparing it with the measure, without referring it specially to any other given commodity. They would wish to be able, from the mere fact that wheat is now 50*s.* the quarter, and was formerly 20*s.*, to decide whether wheat has varied in its value, and in what degree, without selecting a second commodity, such as a sheep, to compare it with; because they are not desirous of knowing how much wheat has varied in value relatively to sheep, but how much it has varied relatively to things in general.

The first obstacle arises from the necessary indefiniteness of the idea of general exchange value—value in relation not

to some one commodity, but to commodities at large. Even if we knew exactly how much a quarter of wheat would have purchased at the earlier period, of every marketable article considered separately, and that it will now purchase more of some things and less of others, we should often find it impossible to say whether it had risen or fallen in relation to things in general. How much more impossible when we only know how it has varied in relation to the measure. To enable the money price of a thing at two different periods to measure the quantity of things in general which it will exchange for, the same sum of money must correspond at both periods to the same quantity of things in general, that is, money must always have the same exchange value, the same general purchasing power. Now, not only is this not true of money, or of any other commodity, but we cannot, even in mere hypothesis, suppose any state of circumstances in which it would be true.

§ 2. A measure of exchange value, therefore, being impossible, writers have formed a notion of something, under the name of a measure of value, which would be more properly termed a measure of cost of production. They have imagined a commodity invariably produced by the same quantity of labour; to which supposition it is necessary to add, that the fixed capital employed in the production must bear always the same proportion to the wages of the immediate labour, and must be always of the same durability: in short, the same capital must be advanced for the same length of time, so that the element of value which consists of profits, as well as that which consists of wages, may be unchangeable. We should then have a commodity always produced under one and the same combination of all the circumstances which affect permanent value. Such a commodity would be by no means constant in its exchange value; for (even without reckoning the fluctuations arising from supply and demand) its exchange value would be altered by every change in the



circumstances of production of the things against which it was exchanged. But if there existed such a commodity, we should derive this advantage from it, that whenever any other thing varied in relation to it, we should know that the cause of variation was not in it, but in the other thing. It would thus be fitted to serve as a measure, not indeed of the value of other things, but of their cost of production. If a commodity acquired a greater permanent purchasing power in relation to the invariable commodity, its cost of production must have become greater; and in the contrary case, less. This measure of cost, is what political economists have generally meant by a measure of value.

But a measure of cost, though perfectly conceivable, can no more exist in fact, than a measure of exchange value. There is no commodity which is invariable in its cost of production. Gold comes nearest to the idea; but gold is liable to vary in cost of production, from the exhaustion of old mines, the discovery of new, and improvements in the mode of working. If we attempt to ascertain the changes in the cost of production of any commodity from the changes in its money price, the conclusion will require to be corrected by the best allowance we can make for the intermediate changes in the cost of production of money itself.

Adam Smith fancied that there were two commodities peculiarly fitted to serve as a measure of value: corn, and labour. Of corn, he said that although its value fluctuates much from year to year, it does not vary greatly from century to century. This we now know to be an error: corn tends to rise in cost of production with every increase of population, and to fall with every improvement in agriculture, either in the country itself or in any foreign country from which it draws a portion of its supplies. The supposed constancy of the cost of production of corn depends on the maintenance of a complete equipoise between these antagonizing forces, an equipoise which, if ever realized, can only be accidental. With respect to labour as a measure of value, the language of

Adam Smith is not uniform. He sometimes speaks of it as a good measure only for short periods, saying that the value of labour (or wages) does not vary much from year to year, though it does from generation to generation. On other occasions he speaks as if labour were intrinsically the most proper measure of value, on the ground that one day's ordinary muscular exertion of one man, may be looked upon as always, to him, the same amount of effort or sacrifice. But this proposition, whether in itself admissible or not, discards the idea of exchange value altogether, substituting a totally different idea, more analogous to value in use. If a day's labour will purchase in America twice as much of ordinary consumable articles as in England, it seems a vain subtlety to insist on saying that labour is of the same value in both countries, and that it is the value of the other things which is different. Labour, in this case, may be correctly said to be twice as valuable, both in the market and to the labourer himself, in America as in England.

If the object were to obtain an approximate measure by which to estimate value in use, perhaps nothing better could be chosen than one day's subsistence of an average man, reckoned in the ordinary food consumed by the class of unskilled labourers. If in America a pound of maize flour will support a labouring man for a day, a thing might be deemed more or less valuable in proportion to the number of pounds of maize flour it exchanged for. If one thing, either by itself or by what it would purchase, could maintain a labouring man for a day, and another could maintain him for a week, there would be some reason in saying that the one was worth, for ordinary human uses, seven times as much as the other. But this would not measure the worth of the thing to its possessor for his own purposes, which might be greater to any amount, though it could not be less, than the worth of the food which the thing would purchase.

The idea of a Measure of Value must not be confounded with the idea of the regulator, or determining principle, of



value. When it is said by Ricardo and others, that the value of a thing is regulated by quantity of labour, they do not mean the quantity of labour for which the thing will exchange, but the quantity required for producing it. This, they mean to affirm, determines its value; causes it to be of the value it is, and of no other. But when Adam Smith and Malthus say that labour is a measure of value, they do not mean the labour by which the thing was or can be made, but the quantity of labour which it will exchange for, or purchase; in other words, the value of the thing, estimated in labour. And they do not mean that this *regulates* the general exchange value of the thing, or has any effect in determining what that value shall be, but only ascertains what it is, and whether and how much it varies from time to time and from place to place. To confound these two ideas would be much the same thing as to overlook the distinction between the thermometer and the fire.

## CHAPTER XVI.

### OF SOME PECULIAR CASES OF VALUE.

§ 1. The general laws of value, in all the more important cases of the interchange of commodities in the same country, have now been investigated. We examined, first, the case of monopoly, in which the value is determined by either a natural or an artificial limitation of quantity, that is, by demand and supply: secondly, the case of free competition, when the article can be produced in indefinite quantity at the same cost; in which case the permanent value is determined by the cost of production, and only the fluctuations by supply and demand: thirdly, a mixed case, that of the articles which can be produced in indefinite quantity, but not at the same cost; in which case the permanent value is determined by the greatest cost which it is necessary to incur in order to obtain the required supply. And lastly, we have found that money itself is a commodity of the third class; that its value, in a state of freedom, is governed by the same laws as the values of other commodities of its class; and that prices, therefore, follow the same laws as values.

From this it appears that demand and supply govern the fluctuations of values and prices in all cases, and the permanent values and prices of all things of which the supply is determined by any agency other than that of free competition: but that, under the regime of competition, things are, on the average, exchanged for each other at such values, and sold at such prices, as afford equal expectation of advantage to all classes of producers; which can only be when things exchange for one another in the ratio of their cost of production.

It is now, however, necessary to take notice of certain



cases, to which, from their peculiar nature, this law of exchange value is inapplicable.

It sometimes happens that two different commodities have what may be termed a joint cost of production. They are both products of the same operation, or set of operations, and the outlay is incurred for the sake of both together, not part for one and part for the other. The same outlay would have to be incurred for either of the two, if the other were not wanted or used at all. There are not a few instances of commodities thus associated in their production. For example, coke and coal-gas are both produced from the same material, and by the same operation. In a more partial sense, mutton and wool are an example: beef, hides, and tallow: calves and dairy produce: chickens and eggs. Cost of production can have nothing to do with deciding the value of the associated commodities relatively to each other. It only decides their joint value. The gas and the coke together have to repay the expenses of their production, with the ordinary profit. To do this, a given quantity of gas, together with the coke which is the residuum of its manufacture, must exchange for other things in the ratio of their joint cost of production. But how much of the remuneration of the producer shall be derived from the coke, and how much from the gas, remains to be decided. Cost of production does not determine their prices, but the sum of their prices. A principle is wanting to apportion the expenses of production between the two.

Since cost of production here fails us, we must revert to a law of value anterior to cost of production, and more fundamental, the law of demand and supply. That law is, that the demand for a commodity varies with its value, and that the value adjusts itself so that the demand shall be equal to the supply. This supplies the principle of repartition which we are in quest of.

Suppose that a certain quantity of gas is produced and sold at a certain price, and that the residuum of coke is

offered at a price which, together with that of the gas, repays the expenses with the ordinary rate of profit. Suppose, too, that at the price put upon the gas and coke respectively, the whole of the gas finds an easy market, without either surplus or deficiency, but that purchasers cannot be found for all the coke corresponding to it. The coke will be offered at a lower price in order to force a market. But this lower price, together with the price of the gas, will not be remunerating: the manufacture, as a whole, will not pay its expenses with the ordinary profit, and will not, on these terms, continue to be carried on. The gas, therefore, must be sold at a higher price, to make up for the deficiency on the coke. The demand consequently contracting, the production will be somewhat reduced; and prices will become stationary when by the joint effect of the rise of gas and the fall of coke, so much less of the first is sold, and so much more of the second, that there is now a market for all the coke which results from the existing extent of the gas manufacture.

Or suppose the reverse case; that more coke is wanted at the present prices, than can be supplied by the operations required by the existing demand for gas. Coke, being now in deficiency, will rise in price. The whole operation will yield more than the usual rate of profit, and additional capital will be attracted to the manufacture. The unsatisfied demand for coke will be supplied; but this cannot be done without increasing the supply of gas too; and as the existing demand was fully supplied already, an increased quantity can only find a market by lowering the price. The result will be that the two together will yield the return required by their joint cost of production, but that more of this return than before will be furnished by the coke, and less by the gas. Equilibrium will be attained when the demand for each article fits so well with the demand for the other, that the quantity required of each is exactly as much as is generated in producing the quantity required of the other. If there is any surplus or deficiency on either side; if there is a demand for



coke, and not a demand for all the gas produced along with it, or *vice versâ;* the values and prices of the two things will so readjust themselves that both shall find a market.

When, therefore, two or more commodities have a joint cost of production, their natural values relatively to each other are those which will create a demand for each, in the ratio of the quantities in which they are sent forth by the productive process. This theorem is not in itself of any great importance: but the illustration it affords of the law of demand, and of the mode in which, when cost of production fails to be applicable, that other principle steps in to supply the vacancy, is worthy of particular attention, as we shall find in the next chapter but one that something very similar takes place in cases of much greater moment.

§ 2. Another case of value which merits attention, is that of the different kinds of agricultural produce. This is rather a more complex question than the last, and requires that attention should be paid to a greater number of influencing circumstances.

The case would present nothing peculiar, if different agricultural products were either grown indiscriminately and with equal advantage on the same soils, or wholly on different soils. The difficulty arises from two things: first, that most soils are fitter for one kind of produce than another, without being absolutely unfit for any; and secondly, the rotation of crops.

For simplicity, we will confine our supposition to two kinds of agricultural produce, for instance, wheat and oats. If all soils were equally adapted for wheat and for oats, both would be grown indiscriminately on all soils, and their relative cost of production, being the same everywhere, would govern their relative value. If the same labour which grows three quarters of wheat on any given soil, would always grow on that soil five quarters of oats, the three and the five quarters would be of the same value. If, again, wheat and oats could

not be grown on the same soil at all, the value of each would be determined by its peculiar cost of production on the least favourable of the soils adapted for it, which the existing demand required a recourse to. The fact, however, is that both wheat and oats can be grown on almost any soil which is capable of producing either: but some soils, such as the stiff clays, are better adapted for wheat, while others (the light sandy soils,) are more suitable for oats. There may be some soils which will yield, to the same quantity of labour, only four quarters of oats to three of wheat; others perhaps less than three of wheat, to five quarters of oats. Among these diversities, what determines the relative value of the two things?

It is evident that each grain will be cultivated in preference, on the soils which are better adapted for it than for the other; and if the demand is supplied from these alone, the values of the two grains will have no reference to one another. But when the demand for both is such as to require that each should be grown not only on the soils peculiarly fitted for it, but on the medium soils which, without being specifically adapted to either, are about equally suited for both, the cost of production on those medium soils will determine the relative value of the two grains; while the rent of the soils specifically adapted to each, will be regulated by their productive power, considered with reference to that one alone to which they are peculiarly applicable. Thus far the question presents no difficulty, to any one to whom the general principles of value are familiar.

It may happen, however, that the demand for one of the two, as for example wheat, may so outstrip the demand for the other, as not only to occupy the soils specially suited for wheat, but to engross entirely those equally suitable to both, and even encroach upon those which are better adapted to oats. To create an inducement for this unequal apportionment of the cultivation, wheat must be relatively dearer, and oats cheaper, than according to the cost of their production



on the medium land. Their relative value must be in proportion to the cost on that quality of land, whatever it may be, on which the comparative demand for the two grains requires that both of them should be grown. If, from the state of the demand, the two cultivations meet on land more favourable to one than to the other, that one will be cheaper and the other dearer, in relation to each other and to things in general, than if the proportional demand were as we at first supposed.

Here, then, we obtain a fresh illustration, in a somewhat different manner, of the operation of demand, not as an occasional disturber of value, but as a permanent regulator of it, conjoined with, or supplementary to, cost of production.

The case of rotation of crops does not require separate analysis, being a case of joint cost of production, like that of gas and coke. If it were the practice to grow white and green crops on all land, in alternate years, the one being necessary as much for the sake of the other as for its own sake; the farmer would derive his remuneration for two years' expenses from one white and one green crop, and the prices of the two would so adjust themselves as to create a demand which would carry off an equal number of white and of green crops.

There would be little difficulty in finding other anomalous cases of value, which it might be a useful exercise to resolve: but it is neither desirable nor possible, in a work like the present, to enter more into details than is necessary for the elucidation of principles. I now therefore proceed to the only part of the general theory of exchange which has not yet been touched upon, that of International Exchanges, or, to speak more generally, exchanges between distant places.