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Part One

Chapter One
On Wealth

The land is the source or matter from whence all wealth is produced. The **labour** of man is the form which produces it: and wealth in itself is nothing but the maintenance, conveniencies, and superfluities of life.

Land produces herbage, roots, corn, flax, cotton, hemp, shrubs and timber of several kinds, with divers sorts of fruits, bark, and foliage like that of the mulberry-tree for silkworms; it supplies mines and minerals. To all this the **labour** of man gives the form of wealth.

Rivers and seas supply fish for the food of man, and many other things for his enjoyment. But these seas and rivers belong to the adjacent lands or are common to all, and the **labour** of man extracts from them the fish and other advantages.

Chapter Two
Of Human Societies

Which way soever a society of men is formed the **ownership of the land** they inhabit will necessarily **belong to a small number among them**.

In wandering societies like Hordes of Tartars and Camps of Indians who go from one place to another with their animals and families, it is necessary that the captain or king who is their leader should fix the boundaries of each head of a family and the quarters of an Individual around the camp. Otherwise there would always be disputes over the quarters or conveniencies, woods, herbage, water, etc. but when the quarters and boundaries of each man are settled it is **as good as ownership** while they stay in that place.

In the more settled societies: if a prince at the head of an army has conquered a country, he will distribute the lands among his officers or favourites according to their merit or his pleasure (as was originally the case in France): he will then establish laws to vest the property in them and their descendants: or he will reserve to himself the ownership of the land and employ his officers or favourites to cultivate it: or will grant the land to them on condition that they pay for it an annual quit rent or due: or he will grant it to them while reserving his freedom to tax them every year according to his needs and their capacity. In all these cases these officers or favourites, whether absolute owners or dependents, whether stewards or bailiffs of the produce of the land, will be few in number in proportion to all the inhabitants.

Even if the prince distribute the land equally among all the inhabitants it will **ultimately be divided among a small number**. One man will have several children and cannot leave to each of them a portion of land equal to his own; another will die without children, and will leave his portion to some one who has land already rather than to one who has none; a third will be lazy, prodigal, or sickly, and be obliged to sell his portion to another who is frugal and industrious, who will continually add to his estate by new purchases and will employ upon it the labour of those who having no land of their own are

compelled to offer him their labour in order to live.

At the first settlement of Rome each citizen had two journaux of land allotted to him. Yet there was soon after as great an inequality in the estates as that which we see today in all the countries of Europe. The land was divided among a few owners.

Supposing then that the land of a new country belongs to a small number of persons, each owner will manage his land himself or let it to one or more farmers: in this case it is essential that the farmers and labourers should have a living whether they cultivate the land for the owner or for the farmer. The overplus of the land is at the disposition of the owner: he pay part of it to the prince or the government, or else the farmer does so directly at the owner's expense.

As for the **use to which the land should be put**, the first necessity is to employ part of it for the **maintenance and food of those who work upon it** and make it productive: the rest depends principally upon the humour and fashion of living of the prince, the lords, and the owner: if these are fond of drink, vines must be cultivated; if they are fond of silks, mulberry-trees must be planted and silkworms raised, and moreover part of the land must be employed to support those needed for these labours; if they delight in horses, pasture is needed, and so on.

If however we suppose that the land belongs to no one in particular, it is not easy to conceive how a society of men can be formed there: we see, for example, in the village commons a limited fixed to the number of animals that each of the commoners may put upon them; and if the land were left to the first occupier in a new conquest or discovery of a country it would always be necessary to fall back upon a law to settle ownership in order to establish a society, whether the law rested upon force or upon policy.

Chapter Three

Of Villages

To whatever cultivation land is put, whether pasture, corn, vines, etc. the **farmers or labourers who carry on the work must live near at hand**; otherwise the time taken in going to their fields and returning to their houses would take up too much of the day. **Hence the necessity for villages** established in all the country and cultivated land, where there must also be enough farriers and wheelwrights for the instruments, ploughs, and carts which are needed; especially when the village is at a distance from the towns. The size of a village is naturally proportioned in number of inhabitants to what the land dependent on it requires for daily work, and to the artisans who find enough employment there in the service of the farmers and labourers: but these artisans are not quite so necessary in the neighbourhood of towns to which the labourers can resort without much loss of time.

If one or more of the owners of the land dependent on the village reside there the number of inhabitants will be greater in proportion to the domestic servants and artisans drawn thither, and the inns which will be established there for the convenience of the domestic servants and workmen who are maintained by the landlords.

If the lands are only proper for maintaining **sheep**, as in the sandy districts and moorlands, the villages will be fewer and smaller since only a few shepherds are required on the land.

If the lands only produce **woods** in sandy soils where there is no grass for beasts, and if they are distant from towns and rivers which makes the timber useless for consumption as one sees in many cases in Germany, there will be

only so many houses and villages as are needed to gather acorns and feed pigs in season: but if the lands are altogether **barren** there will be neither villages nor inhabitants.

Chapter Four
Of Market Towns

There are some villages where markets have been established by the interest of some proprietor or gentleman at court. These markets, held once or twice a week, encourage several little undertakers and merchants to set themselves up there. They **buy in the market the products brought from the surrounding villages in order to carry them to the large towns for sale**. **In the large towns they exchange them for iron, salt, sugar and other merchandise which they sell on market days to the villagers**. Many small artisans also, like locksmiths, cabinet makers and others, settle down for the service of the villagers who have none in their villages, and at length these villages become market towns. [A market town being placed in the centre of the villages, and at length these villages become market towns.]? A market town being placed in the centre of the villages whose people come to market, it is more natural and easy that the villagers should bring their products thither for sale on market days and buy the articles they need, than that the merchants and factors should transport them to the villages in exchange for their products. (1) For the merchants to go round the villages would unnecessarily increase the cost of carriage. (2) The merchants would perhaps be obliged to go to several villages before finding the quality and quantity of produce which they wished to buy. (3) The villagers would generally be in their fields when the merchants arrived and not knowing what produce these needed would have nothing prepared and fit for sale. (4) It would be almost impossible to fix the price of the produce and the merchandise in the villages, between the merchants and the villagers. In one village the merchant would refuse the price asked for produce, hoping to find it cheaper in another village, and the villager would refuse the price offered for his merchandise in the hope that another merchant would come along and take it on better terms.

All these difficulties are avoided when the villagers come to town on market days to sell their produce and to buy the things they need. **Prices are fixed by the proportion between the produce exposed for sale and the money offered** for it; this takes place in the same spot, under the eyes of all the villagers of different villages and of the merchants or undertakers of the town. **When the price has been settled between a few the others follow without difficulty** and so the market place of the day is determined. The peasant goes back to his village and resumes his work.

The size of the market town is naturally proportioned to the number of farmers and labourers needed to cultivate the lands dependent on it, and to the number of artisans and small merchants that the villages bordering on the market town employ with their assistants and horses, and finally to the number of persons whom the landowners resident there support.

When the villages belonging to a market town (i.e. whose people ordinarily bring their produce to market there) are considerable and have a large output the market town will become considerable and large in proportion; but when the neighbouring villages have little produce the market town also is poor and insignificant.

Chapter Five
Of Cities

The landlords who have only small estates usually reside in market towns

and villages near their land and farmers. The transport of the produce they derive from them into distant cities would not enable them to live comfortably there. But the landlords who have several large estates have the means to go and live at a distance from them to enjoy agreeable society with other landowners and gentlemen of the same condition.

If a prince or nobleman who has received large grants of land on the conquest or discovery of a country fixes his residence in some pleasant spot, and several other noblemen come to live there to be within reach of seeing each other frequently and enjoying agreeable society, this place will become a city. Great houses will be built there for the noblemen in question, and an infinity of others for the merchants, artisans, and people of all sorts of professions whom the residence of these noblemen will attract thither. For the service of these noblemen, bakers, butchers, brewers, wine merchants, manufacturers of all kinds, will be needed. These will build houses in the locality or will rent houses built by others. There is no great nobleman whose expense upon his house, his retinue and servants, does not maintain merchants and artisans of all kinds, as may be seen from the detailed calculations which I have caused to be made in the supplement of this essay.

As all these artisans and undertakers serve each other as well as the nobility it is overlooked that the upkeep of them all falls ultimately on the nobles and landowners. It is not perceived that **all the little houses in a city such as we have described depend upon and subsist at the expense of the great houses**. It will, however, be shown later that **all the classes and inhabitants of a state live at the expense of the proprietors of land**. The city in question will increase still further if the king or the government establish in it law courts to which the people of the market towns and villages of the province must have recourse. An increase of undertakers and artisans of every sort will be needed for the service of the legal officials and lawyers.

If in this same city **workshops and manufactories be set up apart from home consumption for export and sale abroad**, the city will be large in proportion to the workmen and artisans who live there at the expense of the foreigner.

But if we put aside these considerations so as not to complicate our subject, we may say that the **assemblage of several rich landowners living together in the same place suffices to form what is called a city**, and that many cities in Europe, in the interior of the country, owe the number of their inhabitants to this assemblage: in which case the **size of a city is naturally proportioned to the number of landlords who live there**, or rather to the produce of the land which belongs to them after deduction of the cost of carriage to those whose land is the furthest removed, and the part which they are obliged to furnish to the king or the government, which is usually consumed in the capital.

Chapter Six
Of Capital Cities

A capital city is formed in the same way as a provincial city with this difference that the largest landowners in all the state reside in the capital, that the king or supreme government is fixed in it and spends there the government revenue, that the supreme courts of justice are fixed there, that it is the centre of the fashions which all the provinces take for a model, that the landowners who reside in the provinces do not fail to come occasionally to pass some time in the capital and to send their children thither to be polished. Thus all the lands in the state contribute more or less to maintain those who dwell in the capital.

If a sovereign quits a city to take up his abode in another the nobility will not fail to follow him and to make its residence with him in the new city which

will become great and important at the expense of the first. We have seen quite a recent example of this in the city of **Petersburg to the disadvantage of Moscow**, and one sees many old cities which were important fall into ruin and others spring from their ashes. **Great cities are usually built on the seacoast or on the banks of large rivers for the convenience of transport**; because water carriage of the produce and merchandise necessary for the subsistence and comfort of the inhabitants is much cheaper than carriages and land transport.

Chapter Seven
The Labour of the Husbandman is of less Value than that of the Handicrafts Man

A labourer's son at seven or twelve years of age begins to help his father either in keeping the flocks, digging the ground, or in other sorts of country labour which require no art or skill.

If his father puts him to a trade he loses his assistance during the time of his apprenticeship and is necessitated to clothe him and to pay the expenses of his apprenticeship for some years. The son is thus an expense to this father and his labour brings in no advantage till the end of some years**. The [working] life of man is estimated but at 10 or 12 years**, and as several are lost in learning a trade most of which in England require **seven years of apprenticeship**, a husbandman would never be willing to have a trade taught to his son if the mechanics did not earn more than the husbandmen.

Those who employ artisans or craftsmen must needs therefore pay for their labour at a higher rate than for that of a husbandman or common labourer; and their labour will necessarily be dear in proportion to the time lost in learning the trade and the cost and risk incurred in becoming proficient.

The craftsmen themselves do not make all their children learn their own mystery: there would be too many of them for the needs of a city or a state; many would not find enough work; the work, however, is naturally better paid than that of husbandmen.

Chapter Eight
Some Handicrafts Men earn more, others less, according to the different Cases and Circumstances

Supposing two tailors make all the cloths of a village, one may have more customers than the other, whether from his mode of attracting business, or because he works better or more durably than the other, or follows the fashions better in the cut of the garments.

If one dies, the other finding himself more pressed with work will be able to raise the price of his labour, giving some customers a preference in point of expedition to others, till the villagers find it to their advantage to have their cloths made in another village, town or city losing the time spent in going and returning, or till some other tailor comes to live in their village and to share in the business of it.

The crafts which require the most time in training or most ingenuity and industry must necessarily be the best paid. A skillful cabinet maker must receive a higher price for his work than an ordinary carpenter, and a good watchmaker more than a farrier.

The **arts and crafts which are accompanied by risks and dangers like those of founders, mariners, silver miners, etc. ought to be paid in proportion to the risks. When over and above the dangers skill is needed they ought to be paid still more**, e.g. pilots, divers, engineers, etc. When

capacity and trustworthiness are needed the labour is paid still more highly, as in the case of jewellers, bookkeepers, cashiers and others.

By these examples and a hundred others drawn from ordinary experience it is easily seen that the **difference of price paid for daily work is based upon natural and obvious reasons**.

Chapter Nine
The Number of Labourers, Handicraftsmen and others, who work in a State is naturally proportioned to the Demand for them

If all the labourers in a village breed up several sons to the same work there will be **too many labourers to cultivate the lands belonging to the village, and the surplus adults must go to seek a livelihood elsewhere**, which they generally do in cities: if some remain with their fathers, as they will not all find sufficient employment they will live in great poverty and will not marry for lack of means to bring up children, or if they marry, the children who come will soon die of starvation with their parents, as we see every day in France.

Therefore if the village continue in the same situation as regards employment, and derives its living from cultivating the same portion of land, it will **not increase in population in a thousand years**.

The women and girls of this village can, it is true, when they are not working in the fields, busy themselves in spinning, knitting or other work which can be sold in the cities; but this rarely suffices to bring up the extra children, who leave the village to seek their fortune elsewhere.

The **same may be said of the tradesmen of a village**. If a tailor makes all the cloths there and breeds up three sons to the same trade, as there is but work enough for one successor to him the two others must go to seek their livelihood elsewhere: if they do not find enough employment in the neighbouring town they must go further afield or change their occupations to get a living and become lackeys, soldiers, sailors, etc.

By the same process of reasoning it is easy to conceive that **the labourers, handicraftsmen and others who gain their living by work, must proportion themselves in number to the employment and demand for them in market towns and cities**.

But if four tailors are enough to make all the cloths for a town and a fifth arrives he may attract some custom at the expense of the other four; so if the work is divided between the five tailors neither of them will have enough employment, and each one will live more poorly.

It often happens that labourers and handicraftsmen have not enough employment when there are too many of them to share the business. It happens also that they are **deprived of work** by accidents and by variations in demand, or that they are **overburdened with work** according to circumstances. Be that as it may, when they have no work they quit the villages, towns or cities where they live in such numbers that those who remain are always proportioned to the employment which suffices to maintain them; when there is a continuous increase of work there is gain to be made and enough others arrive to share in it.

From this it is easy to understand that **the Charity Schools in England and the proposals in France to increase the number of handicraftsmen, are useless**. If the King of France sent 100,000 of his subjects at his expense into Holland to learn seafaring, they would be of no use on their return if no more vessels were sent to sea than before. It is true that it would be a **great advantage to a state to teach its subjects to produce the manufactures which are customarily drawn from abroad**, and all the other articles bought there, but I am considering only at present a state in relation to itself.

As the handicraftsmen earn more than the labourers they are better able to

bring up their children to crafts; and there will never be a lack of craftsmen in a state when there is enough work for their constant employment.

Chapter Ten
The Price and Instrinsic Value of a Thing in general is the measure of the Land and Labour which enter into its Production

One acre of land produces more corn or feeds more sheep than another. The work of one man is dearer than that of another, as I have already explained, according to the superior skill and occurrences of the times. If two acres of land are of equal goodness, one will feed as many sheep and produce as much wool as the other, supposing the labour to be the same, and the wool produced by one acre will be the same, and the wool produced by one acre will sell at the same price as that produced by the other.

If the wool of the one acre is made into a suit of coarse cloth and the wool of the other into a suit of fine cloth, as the latter will require more work and dearer workmanship it will be sometimes ten times dearer, though both contain the same quantity and quality of wool. **The quantity of the produce of the land and the quantity as well as the quality of the labour, will of necessity enter into the price**.

A pound of flax wrought into fine Brussels lace requires the labour of 14 persons for a year or of one person for 14 years, as may be seen from a calculation of the different processes in the supplement, where we also see that the price obtained for the lace suffices to pay for the maintenance of one person for 14 years as well as the profits of all the undertakers and merchants concerned.

The fine steel spring which regulates an English watch is generally sold at a price which makes the proportion of material to labour, or of steel to spring, one to one million so that in this case **labour makes up nearly all the value** of the spring. See the calculation in the supplement.

On the other hand the price of the hay in a field, on the spot, or a wood which it is proposed to cut down, **is fixed by the matter or produce of the land**, according to its goodness.

The price of a pitcher of Seine water is nothing, because there is an immense supply which does not dry up; but in the streets of Paris people give a sol for it -- the price or measure of the labour of the water carrier.

By these examples and inductions it will, I think, be understood that the **price or intrinsic value of a thing is the measure of the quantity of land and of labour entering into its production, having regard to the fertility or produce of the land and to the quality of the labour**.

But it often happens that many things which have actually this intrinsic value are not sold in the market according to that value: that will depend on the **humours and fancies of men and on their consumption**.

If a gentleman cuts canals and erects terraces in his garden, their intrinsic value will be proportionable to the land and labour; but the price in reality will not always follow this proportion. If he offers to sell the garden possibly no one will give him half the expense he has incurred. It is also possible that if several persons desire it he may be given double the intrinsic value, that is twice the value of the land and the expense he has incurred.

If the farmers in a state sow more corn than usual, much more than is needed for the year's consumption, the real and intrinsic value of the corn will correspond to the land and labour which enter into its production; but as there is too great an abundance of it and there are more sellers than buyers the market price of the corn will necessarily fall below the intrinsic price of value. If on the contrary the farmers sow less corn than is needed for consumption there will be more buyers than sellers and the market price of

corn will rise above its intrinsic value.

There is never a variation in intrinsic values, but the impossibility of proportioning the production of merchandise and produce in a state to their consumption causes **a daily variation, and a perpetual ebb and flow in market prices**. **However in well organized societies the market prices of articles whose consumption is tolerably constant and uniform do not vary much from the intrinsic value**; and when there are no years of too scanty or too abundant production the magistrates of the city are able to fix the market prices of many things, like bread and meat, without any on having cause to complain.

Land is the matter and labour the form of all produce and merchandise, and as those who labour must subsist on the produce of the land it seems that some relation might be found between the value of labour and that of the produce of the land: this will form the subject of the next chapter.

Chapter Eleven
Of the Par or Relation between the Value of Land and Labour

It does not appear that Providence has given the right of the possession of land to one man preferably to another: the most ancient titles are founded on violence and conquest. The lands of Mexico now belong to the Spaniards and those at Jerusalem to the Turks. But howsoever people come to the property and possession of land we have already observed that it always falls into the hands of a few in proportion to the total inhabitants.

If the proprietor of a great estate keeps it in his own hands he will employ slaves or free men to work upon it. If he has many slaves he must have overseers to keep them at work: he must likewise have slave craftsmen to supply the needs and conveniencies of life for himself and his workers, and must have trades taught to others in order to carry on the work.

In this economy he must **allow his labouring slaves their subsistence** and **wherewithal to bring up their children**. The overseers must allow advantages proportionable to the confidence and authority which he gives them. The slaves who have been taught a craft must be maintained without any return during the time of their apprenticeship and the artisan slaves and their overseers who should be competent in the crafts must have a better subsistence than the labouring slaves, etc. since the loss of an artisan would be greater than that of a labourer and more care must be taken of him having regard to the expense of training another to take his place.

On this assumption the **labour of an adult slave of the lowest class is worth at least as much as the quantity of land which the proprietor is obliged to allot for his food and necessaries** and also to double the land which serves to breed a child up till he is of age fit for labour, seeing half the children that are born die before the age of 17, according to the calculations and observations of the celebrated Dr. Halley. So that two children must be reared up to keep one of them til working age and it would seem that even this would not be enough to ensure a continuance of labour since adult men die at all ages.

It is true that the one half of the children who die before 17 die faster in the first years after birth than in the following, since a good third of those who are born die in their first year. This seems to diminish the cost of raising a child to working age, but as the mothers lose much time in nursing their children in illness and infancy and the daughters even when grown up are not the equals of the males in work and barely earn their living, it seems that to keep one of two children to manhood or working age as much land must be employed as for the subsistence of an adult salve, whether the proprietor raises them himself in his house or has the children raised there or that the father brings them up in a

house or hamlet apart. Thus I conclude that the **daily labour of the meanest slave corresponds in value to double the produce of the land required to maintain him, whether the proprietor give it him for his subsistence and that of his family or provides him and his family subsistence in his own house**. It does not admit of exact calculation, and exactitude is not very necessary; it suffices to be near enough to the truth.

If the proprietor employ the labour of vassals or free peasants he will probably maintain them upon a better foot than slaves according to the custom of the place he lives in, yet in this case also the **labour of a free labourer ought to correspond in value to double the produce of land needed for his maintenance**. But **it will always be more profitable to the proprietor to keep slaves than to keep free peasants, because when he has brought up a number too large for his requirements he can sell the surplus slaves as he does his cattle** and obtain for them a price proportionable to what he has spent in rearing them to manhood or working age, except in cases of old age or infirmity.

In the same way on may appraise the labour of slave craftsmen at twice the produce of the land which they consume. Overseers likewise, allowing for the favours and privileges given to them above those who work under them.

When the artisans or labourers have their double portion at their own disposal they **employ one part of it for their own upkeep if they are married and the other for their children**. If they are unmarried they set aside a little of their double portion to enable them to marry and to make a little store for housekeeping; but most of them will consume the double portion for their own maintenance.

For example the married labourer will content himself with bread, cheese, vegetables, etc., will rarely eat meat, will drink little win or beer, and will have only old and shabby clothes which he will wear as long as he can. The surplus of his double portion he will employ in raising and keeping his children, while the unmarried labourer will eat meat as often as he can, will treat himself to new clothes, etc. and employ his double portion on his own requirements. Thus he will consume twice as much personally of the produce of the land as the married man.

I do not here take into account the **expense of the wife**. I suppose that her labour barely suffices to pay for her own living, and when one sees a large number of little children in one of these poor families I suppose that charitable persons contribute somewhat to their maintenance, otherwise the parents must deprive themselves of some of their necessaries to provide a living for their children.

For the better understanding of this it is to be observed that a poor labourer may maintain himself, at the lowest computation, upon the produce of an acre and a half of land if he lives on bread and vegetables, wears hempen garments, wooden shoes, etc., while if he can allow himself wine, meat, woollen clothes, etc. he may without drunkenness or gluttony or excess of any kind consume the produce of four to ten acres of land of ordinary goodness, such as most of the land in Europe taking part with another. I have caused some figures to be drawn up which will be found in the supplement, to determine the amount of land of which one man can consume the produce under each head of food, clothing, and other necessaries of life in a single year, according to the mode of living in Europe where the peasants of divers countries are often nourished and maintained very differently.

For this reason I have not determined to **how much land the labour of the meanest peasant corresponds in value** when I laid down that it is worth double the produce of the land which serves to maintain him: because this **varies according to the mode of living in different countries**. In some provinces of France the peasant keeps himself on the produce of one acre and a

half of land and the value of his labour may be reckoned equal to the product of three acres. But in the county of Middlesex the peasant usually spends the produce of 5 to 8 acres of land and his labour may be valued at twice as much as this.

In the country of **the Iroquois** where the inhabitants do not plough the land and live entirely by hunting, **the meanest hunter may consume the produce of 50 acres of land since it probably requires so much to support the animals he eats in one year**, especially as **these savages** have not the industry to grow grass by cutting down the trees but leave everything to nature. The labour of this hunter may then be reckoned equal in value to the product of 100 acres of land. In the southern provinces **of China** the land yields rice up to three crops in one year and a hundred times as much as is sown, owing to the great care which they have of agriculture and the fertility of the soil which is never fallow. The peasants who work there almost naked live only on rice and drink only rice water, and it appears that **one acre will support there more than ten peasants. It is not surprising, therefore, that the population is prodigious in number**. In any case it seems from these examples that nature is altogether indifferent whether that earth produce grass, trees, or grain, or maintains a large or small number of vegetables, animals, or men.

Farmers in Europe seem to correspond to overseers of labouring slaves in other countries, and the master tradesmen who employ several journeymen to the overseers of artisan slaves. These masters know pretty well how much work a jouneyman artisan can do in a day in each craft, and **often pay them in proportion to the work they do, so that the journeymen work for their own interest as hard as they can without further inspection**.

As the farmers and masters of crafts in Europe are all undertakers working at a risk, some get rich and gain more than a double subsistence, others are ruined and become bankrupt, as will be explained more in detail in treating of undertakers; but the majority support themselves and their families from day to day, and their labour or superintendence may be valued at about thrice the produce of the land which serves for their maintenance.

Evidently these farmers and master craftsmen, if they superintend the labour of ten labourers or journeymen, would be equally capable of superintending the labour of twenty, according to the size of their farms or the number of their customers, and this renders uncertain the value of their labour or superintendence.

By these examples and others which might be added in the same sense, it is seen that the value of the day's work has a relation to the produce of the soil, and that the **intrinsic value of any thing may be measured by the quantity of land used in its production and the quantity of labour which enters into it**, in other words by the quantity of land of which the produce is allotted to those who have worked upon it; and as all the land belongs to the prince and the landowners all things which have this intrinsic value have it only at their expense.

The **money or coin** which finds the proportion of values in exchange **is the most certain measure for judging of the par between land and labour** and the relation of one to the other in different countries where this par varies according to the greater or less produce of the land allotted to those who labour.

If, for example, one man earn an ounce of silver every day by his work, and another in the same place earn only half an ounce, one can conclude that the first has as much again of the produce of the land to dispose of as the second.

Sir William Petty, in a little manuscript of the year 1685, **considers this par, or equation between land and labour, as the most important consideration in political arithmetic**, but the research which he has made into it in passing is fanciful and remote from natural laws, because he has attached

himself not to causes and principles but only to effects, as Mr Locke, Mr Davenant and all the other English authors who have written on this subject have done after him.

Chapter Twelve
All Classes and Individuals in a State subsist or are enriched at the Expense of the Proprietors of Land

There are none but the prince and the proprietors of land who live independent; all other classes and inhabitants are hired or are undertakers. The proof and detail of this will be developed in the next chapter.

If the prince and proprietors of land close their estates and will not suffer them to be cultivated it is clear that there would be neither food nor rayment for any of the inhabitants; consequently **all the individuals are supported not only by the produce of the land which is cultivated for the benefit of the owners but also at the expense of these same owners from whose property they derive all that they have**.

The **farmers have generally two thirds of the produce of the land**, one for their costs and the support of their assistants, the other for the profit of their undertaking: on these two thirds the farmer provides generally directly or indirectly subsistence for all those who live in the country, and also mechanics or undertakers in the city in respect of the merchandise of the city consumed in the country.

The **proprietor has usually one third of the produce of his land** and on this third he maintains all the mechanics and others whom he employs in the city as well, frequently, as the carriers who bring the produce of the country to the city.

It is generally calculated that one half of the inhabitants of a kingdom subsist and make their abode in cities, and the other half live in the country; on this supposition the farmer who has two thirds or four sixth of the produce of the land, pays either directly or indirectly one sixth to the citizens in exchange for the merchandise which he takes from them. This sixth with the one third or two sixths which the proprietor spends in the city makes three sixths or one half of the produce of the land. This calculation is only to convey a general idea of the proportion; but in fact, if half of the inhabitants live in the cities they consume more than half of the land's produce, as they live better than those who reside in the country and spend more of the produce of the land being all mechanics or dependents of the proprietors and consequently better maintained than the assistants and dependents of the farmers.

But let this matter be how it will, if we examine the means by which an inhabitant is supported it will always appear in returning back to the fountain head, that **these means arise from the land of the proprietor either in the two thirds reserved by the farmer, or the one third which remains to the landlord**.

If a proprietor had only the amount of land which he lets out to one farmer the farmer would get a better living out of it than himself; but the nobles and large landowners in the cities have sometimes several hundreds of farmers and are themselves very few in number in proportion to all the inhabitants of a state.

True there are often in the cities several undertakers and mechanics who **live by foreign trade, and therefore at the expense of foreign landowners**: but at present I am considering only a state in regard to its own produce and industry, not to complicate my argument by accidental circumstances.

The land belongs to the proprietors but would be useless to them if it were not cultivated. The **more labour is expended on it, other things being equal, the more it produces; and the more its products are worked up, other**

things being equal, the more value they have as merchandise. Hence the proprietors have need of the inhabitants as these have of the proprietors; but in this economy it is for the proprietors, who have the disposition and the direction of the landed capital, to give the most advantageous turn and movement to the whole. Also **everything in a state depends on the fancy, methods, and fashions of life of the proprietors of land** in especial, as I will endeavour to make clear later in this essay.

It is need and necessity which enable farmers, mechanics of every kind, merchants, officers, soldiers, sailors, domestic servants and all the other classes who work or are employed in the state, to exist. All these working people serve not only the prince and the landowners but each other, so that there are many of them who do not work directly for the landowners, and so it is not seen that they subsist on the capital of these proprietors and live at their expense. As for those who exercise professions which are not essential, like dancers, actors, painters, musicians, etc. they are only supported in the state for pleasure or for ornament, and their number is always very small in proportion to the other inhabitants.

Chapter Thirteen
The circulation and exchange of goods and merchandise as well as their production are carried on in Europe by Undertakers, and at a risk

The farmer is an undertaker who promises to pay to the landowner, for his farm or land, a fixed sum of money (generally supposed to be equal in value to the third of the produce) without assurance of the profit he will derive from this enterprise. He employs part of the land to feed flocks, produce corn, wine, hay, etc. according to his judgment without being able to foresee which of these will pay best. The price of these products will depend partly on the weather, partly on the demand; if corn is abundant relatively to consumption it will be dirt cheap, if there is scarcity it will be dear. Who can foresee the increase or reduction of expense which may come about in the families? And yet the **price of the farmer's produce depends naturally upon these unforeseen circumstances, and consequently he conducts the enterprise of his farm at an uncertainty**.

The city consumes more than half the farmer's produce. He carries it to market there or sells it in the market of the nearest town, or perhaps a few individuals set up as carriers themselves. These bind themselves to pay the farmer a fixed price for his produce, that of the market price of the day, to get in the city an uncertain price which should however defray the cost of carriage and leave them a profit. But the daily variation in the price of produce in the city, though not considerable, makes their profit uncertain.

The undertaker or merchant who carries the products of the country to the city cannot stay there to sell retail as they are consumed. No city family will burden itself with the purchase all at once of the produce it may need, each family being susceptible of increase or decrease in number and in consumption or at least varying in the choice of produce it will consume. Wine is almost the only article of consumption stocked in a family. In any case the majority of citizens who live from day to day and yet are the largest consumers cannot lay in a stock of country produce.

For this reason **many people set up in a city as merchants or undertakers, to buy the country produce from those who bring it** or to order it to be brought on their account. **They pay a certain price following that of the place where they purchase it, to resell wholesale or retail at an uncertain price.** Such undertakers are the wholesalers in wool and corn, bakers, butchers, manufacturers and merchants of all kinds who buy country

produce and materials to work them up and resell them gradually as the inhabitants require them.

These undertakers can never know how great will be the demand in their city, nor how long their customers will buy of them since their rivals will try all sorts of means to attract customers from them. All this causes **so much uncertainty among these undertakers that every day one sees some of them become bankrupt**.

The manufacturer who has bought wool from the merchant or direct from the farmer cannot foretell the profit he will make in selling his cloths and stuffs to the merchant tailor. If the latter have not a reasonable sale he will not load himself with the cloths and stuffs of the manufacturer, especially if those stuffs cease to be in the fashion.

The draper is an undertaker who buys cloths and stuffs from the manufacturer at a certain price to sell them again at an uncertain price, because he cannot foresee the extent of the demand. He can of course fix a price and stand out against selling unless he gets it, but if his customers leave him to buy cheaper from another, he will be eaten up by expenses while waiting to sell at the price he demands, and that will ruin him as soon as or sooner than if he sold without profit.

Shopkeepers and retailers of every kind are undertakers who buy at a certain price and sell in their shops or the markets at an uncertain price. What encourages and maintains these undertakers in a state is that the consumers who are their customers prefer paying a little more to get what they want ready to hand in small quantities rather than lay in a stock and that most of them have not the means to lay in such a stock by buying at first hand.

All these undertakers become consumers and customers one in regard to the other, the draper of the wine merchant and vice versa. They proportion themselves in a state to the customers or consumption. If there are too many hatters in a city or in a street for the number of people who buy hats there, some who are least patronised must become bankrupt: if they be too few it will be a profitable undertaking which will encourage new hatters to open shops there and so it is that the undertakers of all kinds adjust themselves to risks in a state.

All the other undertakers like those who take charge of mines, theatres, building, etc., the merchants by sea and land, etc., cook-shop keepers, pastry cooks, innkeepers, etc. as well as the undertakers of their own labour who need no capital to establish themselves, like journeymen artisans, coppersmiths, needlewomen, chimney sweeps, water carriers, live at uncertainty and proportion themselves to their customers. **Master craftsmen like shoemakers, tailors, carpenters, wigmakers, etc. who employ journeymen according to the work they have, live at the same uncertainty since their customers may foresake them from one day to another**: the undertakers of their own labour in art and science, like painters, physicians, lawyers, etc. live in the like uncertainty. If one attorney or barristers earn 5000 pounds sterling yearly in the service of his clients or in his practice and another earn only 500 they may be considered as having so much uncertain wages from those who employ them.

It may perhaps be urged that undertakers seek to snatch all they can in their calling and to get the better of their customers, but this is outside my subject.

By all these inductions and many others which might be made in a topic relating to all the inhabitants of a state, it may be laid down that **except the prince and the proprietors of land, all the inhabitants of a state are dependent; that they can be divided into two classes, undertakers and hired people**; and that **all the undertakers are as it were on unfixed wages and the others on wages fixed** so long as they receive them though their functions and ranks may be very unequal. The general who has his pay, the courtier his pension and the domestic servant who has wages all fall into this

last class. All the rest are undertakers, whether they set up with a capital to conduct their enterprise, or are undertakers of their own labour without capital, and they may be regarded as living at uncertainty; the beggars even and the robbers are undertakers of this class. Finally all the inhabitants of a state derive their living and their advantages from the property of the landowners and are dependent.

It is true, however, that **if some person on high wages or some large undertaker has saved capital or wealth, that is if he have stores of corn, wool, copper, gold, silver or some produce or merchandise in constant use or vent in a state, having an intrinsic or a real value, he may be justly considered independent so far as this capital goes**. He may dispose of it to acquire a mortgage, and interest from land and from public loans secured upon land: he may live still better than the small landowners and even buy the property of some of them.

But **produce and merchandise, even gold and silver**, are much more subject to accident and loss than the ownership of land; and however one may have gained or saved them they **are always derived from the land of actual proprietors either by gain or by saving of the wages** destined for one's subsistence.

The number of **proprietors of money** in a large state is often considerable enough; and though the value of all the money which circulates in the state barely exceeds the ninth or tenth part of the value of the produce drawn from the soil yet, as the **proprietors of money lend considerable amounts for which they receive interest** either by mortgage or the produce and merchandise of the state, **the sums due to them usually exceed all the money in the state, and they often become so powerful a body that they could in certain cases rival the proprietors of lands if these last were not often equally proprietors of money, and if the owners of large sums of money did not always seek to become landowners themselves**.

It is nevertheless always true that all the sums gained or saved have been drawn from the land of the actual proprietors; but as many of these ruin themselves daily in a state and the others who acquire the property of their land take their place, the independence given by the ownership of land applies only to those who keep the possession of it; and as all land has always that it is from their property that all the inhabitants of the state derive their living and all their wealth. If these proprietors confined themselves to living on their rents it would be beyond question, and in that case it would be much more difficult for the other inhabitants to enrich themselves at their expense.

I will then lay it down as a principle **that the proprietors of land alone are naturally independent in a state**: that all the other classes are dependent whether undertakers or hired, and that all the exchange and circulation of the state is conducted by the medium of these undertakers.

Chapter Fourteen
The Fancies, the Fashions, and the Modes of Living of the Prince, and especially of the Landowners, determine the use to which Land is put in a State and cause the variations in the Market price of all things

If the owner of a large estate (which I wish to consider here as if there were no other in the world) has it cultivated himself he will follow his fancy in the use of which he will put it. (1) He will necessarily use part of it for corn to feed the labourers, mechanics and overseers who work for him, another part to feed the cattle, sheep and other animals necessary for their clothing and food or other commodities according to the way in which he wishes to maintain them. (2) He will turn part of the land into parks, gardens, fruit trees or vines as he

feels inclined and into meadows for the horses he will use for his pleasure, etc.

Let us now suppose that **to avoid so much care and trouble he makes a bargain with the overseers of the labourers, gives them farms or pieces of land and leaves to them the responsibility for maintaining in the usual manner all the labourers they supervise**, so that the overseers, now become farmers or undertakers, give the labourers for working on the land or farm another third of the produce for their food, clothing and other requirements, such as they had when the owner employed them; suppose further that the owner makes a bargain with the overseers of the mechanics for the food and other things that he gave them, that he makes the overseers become master craftsmen, fixes a common measure, like silver, to settle the price at which the farmers will supply them with wood and they will supply him with cloth, and that the prices are such as to give the master craftsmen the same advantages and enjoyments as they had when overseers, and the journeymen mechanics will be settled by the day or by the piece: the merchandise which they have made, hats, stockings, shoes, clothes, etc. will be sold to the landowner, the farmers, the labourers, and the other mechanics reciprocally at a price which leaves to all of them the same advantages as before; and the farmers will sell, at a proportionate price, their produce and raw material.

It will then come to pass that the overseers become undertakers, will be the absolute masters of those who work under them, and will have more care and satisfaction in working on their own account. We suppose then that after this change all the people on this large estate live just as they did before, and so all the portions and farms of this great estate will be put to the same use as it formerly was.

For if some of the farmers sowed more corn than usual they must feed fewer sheep, and have less wool and mutton to sell. Then there will be too much corn and too little wool for the consumption of the inhabitants. Wool will therefore be dear, which will force the inhabitants to wear their clothes longer than usual, and there will be too much corn and a surplus for the next year. As we suppose that the landowner has stipulated for the payment in silver of the third of the produce of the farm to be paid to him, the farmers who have too much corn and too little wool, will not be able to pay him his rent. If he excuses them they will take care the next year to have less corn and more wool, **for farmers always take care to use their land for the production of those things which they think will fetch the best price at market**. If, however, next year they have too much wool and too little corn for the demand, they will not fail to change from year to year the use of the land till they arrive at proportioning their production pretty well to the consumption of the inhabitants. So a farmer who has arrived at about the proportion of consumption will have part of his farm in grass, for hay, another for corn, wool and so on, and he will not change his plan unless he sees some considerable change in the demand; but in this example we have supposed that all the people live in the same way as when the landowner cultivated the land for himself, and consequently the farmers will employ the land for the same purposes as before.

The owner, who has at his disposal the third of the produce of the land, is the principal agent in the changes which may occur in demand. Labourers and mechanics who live from day to day change their mode of living only from necessity. If a few farmers, master craftsmen or other undertakers in easy circumstances vary their expense and compensation they always take as their model the lords and owners of the land. They imitate them in their clothing, meals, and mode of life. If the landowners please to wear fine linen, silk, or lace, the demand for these merchandises will be greater than that of the proprietors for themselves.

If a lord or owner who has let out all his lands to farm, take the fancy to change considerably his mode of living; if for instance he decreases the

number of his domestic servants and increases the number of his horses: not only will his servants be forced to leave the estate in question but also a proportionate number of artisans and of labourers who worked to maintain them. The portion of land which was used to maintain these inhabitants will be laid down to grass for the new horses, and if all landowners in the state did the like they would soon increase the number of horses and diminish the number of men.

When a landowner has dismissed a great number of domestic servants, and increased the number of his horses, there will be too much corn for the needs of the inhabitants, and so the corn will be cheap and the hay dear. In consequence the farmers will increase their grass land and diminish their corn to proportion it to the demand. In this way the **fancies or fashions of landowners determine the use of the land and bring about the variations of demand which cause the variations of market prices**. If all the landowners of a state cultivated their own estates they would use them to produce what they want; and as the variations of demand are chiefly caused by their mode of living the prices which they offer in the market decide the farmers to all the changes which they make in the employment and use of the land.

I do not consider here the variations in market prices which may arise from the good or bad harvest of the year, or the extraordinary consumption which may occur from foreign troops or other accidents, so as not to complicate my subject, considering only a state in its natural and uniform condition.

Chapter Fifteen
The Increase and Decrease of the Number of People in a State chiefly depend on the taste, the fashions, and the modes of living of the proprietors of land

Experience shows that trees, plants and other vegetables can be increased to any quantity which the extent of ground laid out for them can support.

The same experience shows that all kinds of the animal creation are to be multiplied to any quantity which the land allotted to them can support. Horses, cattle, sheep can easily be multiplied up to the number that the land will support. The fields which serve for this support may be improved by irrigation as in Milan. Hay may be saved and cattle fed in sheds and raised in larger numbers than if they were left in the fields. Sheep may be fed on turnips, as in England, by which means an acre of land will go further for their nourishment than if it were pasture. In a word, we can multiply all sorts of animals in such numbers as we wish to maintain even to infinity if we could find lands to infinity to to nourish them; and the multiplication of animals has no other bounds than the greater or less means allotted for their subsistence. **It is not to be doubted that if all land were devoted to the simple sustenance of man the race would increase up to the number that the land would support in the manner to be explained**.

There is no country where population is carried to a greater height than in **China**. The common people are supported by rice and rice water; they work almost naked and in the southern provinces they have three plentiful harvests of rice yearly, thanks to their great attention to agriculture. The land is never fallow and yields a hundredfold every year. Those who are clothed have generally clothing of cotton, which needs so little land for its production that an acre of land, it seems, is capable of producing a quantity full sufficient for the clothing of five hundred grown up persons. The Chinese by the principles of their religion are obliged to marry, and bring up as many children as their means of subsistence will afford. They look upon it as a crime to lay land out in pleasure gardens or parks, defrauding the public of maintenance. They carry

travellers in sedan chairs, and save the work of horses upon all tasks which can be performed by men. Their number is incredible if the relation of voyages is to be depended upon, yet they are forced to destroy many of their children in the cradle when they apprehend themselves not to be able to bring them up, keeping only the number they are able to support. By hard and indefatigable labour they draw from the rivers an extraordinary quantity of fish and from the land all that is possible.

Nevertheless **when bad years come they starve in thousands** in spite of the care of the emperor who stores rice for such contingencies. Numerous then as the people of China are, they are necessarily proportioned to their means of living and do not exceed the number the country can support according to their standard of life; and on this footing a single acre of land will support many of them.

On the other hand there is **no country where the increase of population is more limited than among the savages in the interior parts of America**. They neglect agriculture, live in woods, and on the wild beasts they find there. **As their forests destroy the sweetness and substance of the earth** there is little pasture for animals, and since an Indian eats several animals in a year, 50 or 100 acres supply only enough food for a single Indian. !

A small tribe of these Indians will have 40 square leagues for its hunting ground. The wage regular and bitter wars over these boundaries, and always proportion their numbers to their means of support from the chase.

The European cultivate the land and draw corn from it for their subsistence. The wool and draw corn from it for their subsistence. The wool of their sheep provides them with clothing. Wheat is the grain on which most of them are fed, but some peasants make their bread of rye, and in the north of barley and oats. The food of the peasants and the people is not the same in all countries of Europe, and land is often different in quality and fertility.

Most of the land in Flanders and part of that in Lombardy yields 18 to 20 fold without lying idle; the Campagna of Naples yields still more. There are a few properties in France, Spain, England and Germany which yield the same amount. Cicero tells us that the land of Sicily in his time yielded tenfold, and the elder Pliny says that the Leontine lands in Sicily yielded a hundred fold, those of Babylon a hundred and fifty, and some African lands a good deal more.

Today land in Europe yields on the average six times what is sown, so that five times the seed remains for the consumption of the people. Land usually rests one year in three, producing wheat the first year and barley the second.

In the supplement will be found estimates of the amount of land required for the support of a man according to the different assumptions of his manner of living.

It will be seen that a man who lives on bread, garlic and roots, wears only hempen garments, coarse linen, wooden shoes, and drinks only water, like many peasants in the south of France, can live on the produce of an acre and a half of land of medium goodness, yielding a sixfold harvest and resting once in 3 years. On the other hand a grown-up man who wears leather shoes, stockings, woollen cloth, who lives in a house and has a change of linen, a bed, chairs, table, and other necessaries, drinks moderately of beer or wine, eats every day meat, butter, cheese, bread, vegetables, etc. sufficiently and yet moderately needs for all that the produce of 4 to 5 acres of land of medium quality. It is true that in these estimates nothing is allowed for the food of horses except for the plough and carriage of produce for ten miles.

History records that the first Romans each maintained his family on two journaux of land, equal to one Paris acre and 330 square feet or thereabouts. They were almost naked, had no wine or oil, lay in the straw, and had hardly any comforts, but as they cultivated intensely the land, which is fairly good

around Rome, they drew from it plenty of corn and of vegetables.

If the proprietors of land had at heart the increase of population, if they encouraged the peasants to marry young and bring up children by promising to provide them with subsistence, devoting their land entirely to that purpose, they would doubtless increase the population up to the point which the land could support, according to the produce they allotted for each person whether an acre and a half or four to five acres a head.

But **if instead of that the prince, or the proprietors of land, cause the land to be used for other purposes than the upkeep of the people: if by the prices they offer in the market for produce and merchandise they determine the farmers to employ the land for other purposes than the maintenance of man (for we have seen that the prices they offer in the market and their consumption determine the use made of the land just as if they cultivated it themselves) the people will necessarily diminish in number**. Some will be forced to leave the country for lack of employment, others not seeing the necessary means of raising children, will not marry or will only marry late, after having put aside somewhat for the support of the household.

If the proprietors of land who live in the country go to reside in the cities far away from their land, horses must be fed for the transport into the city both of their food and that of all the domestic servants, mechanics and others whom their residence in the city attracts thither.

The carriage of wine from Burgundy to Paris often costs more than the wine itself costs in Burgundy; and consequently the land employed for the upkeep of the cart horses and those who look after them is more considerable than the land which produces the wine and supports those who have taken part in its production. The more horses there are in a state the less food will remain for the people. The upkeep of carriage horses, hunters, or chargers, often takes three or four acres of land.

But when the nobility and proprietors of land draw from foreign manufactures their cloths, silks, laces, etc. and pay for them by sending to the foreigner their native produce they diminish extraordinary the food of the people and increase that of foreigners who often become enemies of the state.

If a proprietor or nobleman in Poland, to whom his farmers pay yearly a rent equal to about one third of the produce of his land, pleases to use the cloths, linens, etc. of Holland, he will pay for these mechandises one half of the rent he receives and perhaps use the other half for the subsistence of his family on other products and rough manufactures of Poland: but half his rent, on our supposition, corresponds to the sixth part of the produce of his land, and this sixth part will be carried away by the Dutch to whom the farmers of Poland will deliver it in corn, wool, hemp and other produce. Here is then a sixth part of the land of Poland withdrawn from its people, to say nothing of the feeding of the cart horses, carriage horses and chargers in Poland, maintained by the manner of living of the nobility there. Further if out of the two thirds of the produce of the land allotted to the farmers there last imitating their masters consume foreign manufactures which they will also pay foreigners for in raw produce of Poland, there will be **a good third of the produce of the land in Poland abstracted from the food of the people, and, what is worse, mostly sent to the foreigner and often serving to support the enemies of the state. If the proprietors of land and the nobility in Poland would consume only the manufactures of their own state, bad as they might be at the outset, they would soon become better, and would keep a great number of their own people to work there, instead of giving this advantage to foreigners**: and if all states had the like care not to be the dupes of other states in matters of commerce, each state would be considerable only in proportion to its produce and the industry of its people.

If the ladies of Paris are pleased to wear Brussels lace, and if France pays for this lace with Champagne wine, the product of a single acre of flax must be paid for with the product of 16,000 acres of land under vines, if my calculations are correct. This will be more fully explained elsewhere and the figures are shown in the supplement. Suffice to say here that in this transaction a great amount of produce of the land is withdrawn from the subsistence of the French, and that all the produce sent abroad, unless an equally considerable amount of produce be brought back in exchange, tends to diminish the number of people in the state.

When I said that the proprietors of land might multiply the population as far as the land would support them, I assumed that most men desire nothing better than to marry if they are set in a position to keep their families in the same style as they are content to live themselves. That is, if a man is satisfied with the produce of an acre and a half of land he will marry if he is sure of having enough to keep his family in the same way. But if he is only satisfied with the produce of five to ten acres he will be in on hurry to marry unless he thinks he can bring up his family in the same manner.

In Europe the children of the nobility are brought up in affluence; and as the largest share of the property is usually given to the eldest sons, the younger sons are in no hurry to marry. They usually live as bachelors, either in the army or in the cloisters, but will seldom be fond unwilling to marry if they are offered heiresses and fortunes, or the means of supporting a family on the footing which they have in view and without which they would consider themselves to make their children wretched.

In the **lower classes** of the state also there are men who from pride and from reasons similar to those of the nobility, prefer to live in celibacy and to spend on themselves the little that they have rather than settle down in family life. **But most of them would gladly set up a family if they could count upon keeping it up as they would wish**: they would consider themselves to do an injustice to their children if they brought them up to fall into a lower class than themselves. **Only a few men in a state avoid marriage from sheer flightiness**. All the lower orders wish to live and bring up children who can live like themselves. When labourers and mechanics do not marry it is because they wait till they save something to enable them to set up a household or to find some young woman who brings a little capital for that purpose, since they see every day others like them who for lack of such precaution start housekeeping and fall into the most frightful poverty, being obliged to deprive themselves of their own food to nourish their children.

From the observations of Mr Halley, at Breslaw in Silesia, it is found that of all the females capable of child bearing, from 16 to 45 years of age, not one in six actually bears a child every year, while, says Mr Halley, there ought to be at least 4 or 6 who should have children every year, without including those who are barren or have still births. **The reason why four women out of six do not bear children every year is that they cannot marry because of the discouragements and difficulties in their way**. A young woman takes care not to become a mother if she is not married; she cannot marry unless she finds a man who is ready to run the risk of it. Most of the people in a state are hired or are undertakers; most are dependent and live in uncertainty whether they will find by their labour or their undertakings the means of supporting their household on the footing they have in view. Therefore they do not all marry, or marry so late that of six women, or at least four, who should produce a child every year there is actually only one in six who becomes a mother.

If the proprietors of land help to support the families, a single generation suffices to push the increase of population as far as the produce of the land will supply means of subsistence. Children do not require so much of this produce as grown-up persons. Both can live on more or less

according to their consumption. The northern people, where the land produces little, have been known to live on so little produce that they have sent out colonists and swarms of men to invade the lands of the south and destroy its inhabitants to appropriate their land. According to the different manner of living, 400,000 people might subsist on the same produce of the land which ordinarily supports but 100,000. A man who lives upon the produce of an acre and a half of land, may be stronger and stouter than he who spends the produce of five or ten acres; it therefore **seems pretty clear that the number of inhabitants of a state depends on the means allotted them of obtaining their support; and as this means of subsistence arises from the method of cultivating the soil, and this method depends chiefly on the taste, humours and manner of living of the proprietors of land, the increase and decrease of population also stand on the same foundation**.

The increase of population can be carried furthest in the countries where the people are content to live the most poorly and to consume the least produce of the soil. In countries where all the peasants and labourers are accustomed to eat meat and drink wine, beer, etc. so many inhabitants cannot be supported.

Sir William Petty, and after him Mr Davenant, Inspector of the Customs in England, seem to depart from nature when they try to estimate the propagation of the race by progressive generations from Adam, the first father. Their calculations seem to be purely imaginary and drawn up at hazard. On the basis of what they have seen of the actual birth rate in certain districts, how could they explain the decrease of those innumerable people formerly found in Asia, Egypt, etc. and even in Europe? If seventeen centuries ago there were 26 millions of people in Italy, now reduced to 6 million at most, how can it be determined by the progressions of Mr King that England which today contains 5 or 6 millions of inhabitants will probably have 13 millions in a certain number of years? **We see daily that Englishmen, in general, consume more of the produce of the land than their fathers did, and this is the real reason why there are fewer inhabitants than in the past**.

Men multiply like mice

Men multiply like mice in a barn if they have unlimited means of subsistence; and the English in the colonies will become more numerous in proportion in three generations than they would be in thirty in England, because **in the colonies they find for cultivation new tracts of land from which they drive the savages**.

In all countries at all times men have waged wars for the land and the means of subsistence. When wars have destroyed or diminished the population of a country, the savages and civilised nations soon repopulate in in times of peace; especially when the prince and the proprietors of land lend their encouragement.

A state which has conquered several provinces may, by tribute imposed on the vanquished, acquire an increase of subsistence for its own people. The Romans drew a great part of their subsistence from Egypt, Sicily and Africa and that is why Italy then contained so many inhabitants.

A state where mines are found, having manufactures which do not require much of the produce of the land to send them into foreign countries, and drawing from them in exchange plentiful merchandise and produce of the land, acquires an increased fund for the subsistence of its subjects.

The Dutch exchange their labour in navigation, fishing or manufactures principally with foreigners, for the products of their land. Otherwise Holland could not support of itself its population. England buys from abroad considerable amounts of timber, hemp and other materials or products of the soil and consumes much wine for which she pays in minerals, manufactures, etc. That saves the English a great quantity of the products of their soil. Without these advantages the people of England, on the footing of the expense

of living there, could not be so numerous as they are. The coal mines save them several millions of acres of land which would otherwise be needed to grow timber.

But all these advantages are refinements and exceptional cases which I mention only incidentally. **The natural and constant way of increasing population in a state is to find employment for the people there, and to make the land serve for the production of their means of support**.

It is also a question outside of my subject whether it is better to have a great multitude of inhabitants, poor and badly provided, than a smaller number, much more at their ease: a million who consume the produce of 6 acres per head or 4 million who live on the product of an acre and a half.

Chapter Sixteen
The more Labour there is in a State the more naturally rich the State is esteemed

In a long calculation worked out in the supplement it is shown that the labour of 25 grown persons suffices to provide 100 others, also grown up, with all the necessaries of life according to the European standard. In these estimates it is true the food, clothing, housing, etc. are coarse and rather elementary, but there is ease and plenty. It may be assumed that a good third of the people of state are too young or too old for daily work and that another sixth are proprietors of land, sick, or undertakers of different sorts who do not by the labour of their hands, contribute to the different needs of men. That makes half the people without work, or at least without the work in question. So if 25 persons do all the work needed for the maintenance of a hundred others, there remain 25 persons out of the hundred who are capable of working but would have nothing to do.

The soldiers, and the domestic servants in well-to-do families, will form part of these 25; and if all the others are busied in working up by additional labour the things necessary for life, like making fine linen, fine cloth, etc. the state will be deemed rich in proportion to this increase in work, though it add nothing to the quantity of things needed for the subsistence and maintenance of man.

Labour gives an additional relish to food and drink. A fork, a knife, etc. nicely wrought, are more esteemed than those roughly and hastily made. The same may be said of a house, a bed, a table and everything needed for the comfort of life.

It is true that it is of little difference in a state whether people are accustomed to wear coarse or fine clothes if both are equally lasting, and whether people eat nicely or coarsely if they have enough and are in good health, since drink, food, clothing, etc. are equally consumed whether fine or coarse, and that nothing is left in the state of this sort of wealth.

But it is always true to say that the states where fine cloths, fine linen, etc. are worn, and where the feeding is dainty and delicate, are richer and more esteemed than those where these things are ruder, and even that the states where one sees more people living in the manner of the first named are more highly esteemed than those where one sees fewer in proportion.

But if the 25 persons in a hundred of whom we have spoken were employed to produce permanent commodities, to draw from the mines iron, lead, tin, copper, etc. and work them up into tools and instruments for the use of man, bowls, plates and other useful objects much more durable than earthenware, the **state will not only appear to be richer for it but will be so in reality**.

It will be so especially if these people are employed in drawing from the earth gold and silver which metals are not only durable but so to speak permanent, which fire itself cannot destroy, **which are generally accepted as**

the measure of value, and which can always be exchanged for any of the necessaries of life: and if these inhabitants work to draw gold and silver into a state in exchange for the manufactures and work which they produce and send abroad, their labour will be equally useful and will in reality improve the state. **The point which seems to determine the comparative greatness of states is their reserve stock above the yearly consumption**, like magazines of cloth, linen, corn, etc. to answer in bad years, or war. And as gold and silver can always buy these things, even from the enemies of the state, gold and silver are the true reserve stock of a state, and the larger or smaller actual quantity of this stock necessarily determines the comparative greatness of kingdoms and states. **If it the custom to draw gold and silver from abroad by exporting merchandises and produce of the state, such as corn, wine, wool, etc. this will not fail to enrich the state at the cost of a decrease of the population; but if gold and silver be attracted from abroad in exchange for the labour of the people, such as manufactures and articles which contain little of the produce of the soil, this will enrich the state in a useful and essential manner**. In a great state, indeed, the 25 persons in a hundred of whom we have spoken, cannot be employed to make articles for foreign consumption. A million men will make more cloth, for example, then will be consumed annually in all the mercantile world, because the greater number of people in every country, and there will seldom be found in any state 100,000 persons employed upon clothing for foreigners. This is shown in the supplement with regard to England, which of all the nations of Europe supplies most cloth to foreigners. **In order that the consumption of the manufactures of a state should become considerable in foreign parts, these manufactures must be made good and valuable by a large consumption in the interior of the state. It is needful to discourage all foreign manufactures and to give plenty of employment to the inhabitants.** If enough employment cannot be found to occupy the 25 persons in a hundred upon work useful and profitable to the state, **I see no objection to encouraging employment which serves only for ornament or amusement**. The state is not considered less rich for a thousand toys which serve to trick out the ladies or even men, or are used in games and diversions, than it is for useful and serviceable objects. Diogenes, at the siege of Corinth, is said to have fell a rolling his tub that he might not seem idle while all others were at work; and we have today societies of men and women occupied in work and exercise as useless to the state as that of Diogenes. How little soever the labour of a man supplies ornament or even amusement in a state it is worth while to encourage it unless the man can find a way to employ himself usefully. It is always the inspiration of the proprietors of land which encourages or discourages the different occupations of the people and the different kinds of labour which they invent. The **example of the prince, followed by his court, is generally capable of determining the inspiration and tastes of the other proprietors of land, and the example of these last naturally influences all the lower ranks**. A prince, then, without doubt is able by his own example and without any constraint to give such a turn as he likes to the labour of his subjects. If each proprietor in a state had only a little piece of land, like that which is usually leased to a single farmer, there would be hardly any cities. The people would be more numerous and the state very rich if every proprietor employed on some useful work the inhabitants supported on his land. But when the nobles have great landed possessions, they of necessity bring about luxury and idleness. Whether an Abbot at the head of a hundred monks live on the produce of several fine estates, or a nobleman with 50 domestic	?

servants, and horses kept only for his service, live on these estates, would be indifferent to the state if it could remain in constant peace. But **a nobleman with his retinue and his horses is useful to the state in time of war; he can always be useful in the magistracy and the keeping of order in the state in peace time**; and in every case he is a great ornament to the country, while the **monks are, as people say, neither useful nor ornamental in peace or war on this side of heaven**. The convents of Mendicant Friars are much more pernicious to a state than those of the closed orders. These last usually do no more harm than to occupy estates which might serve to supply the state with officers and magistrates, while the **Mendicants who are themselves without useful employment, often interrupt and hinder the labour of other people. They take from poor people in charities the subsistence which ought to fortify them for their labour**. **They cause them to lose much time in useless conversation**, not to speak of those who intrigue themselves into families and those who are vicious. **Experience shows that the countries which have embraced Protestantism and have neither monks nor mendicants have become visibly more powerful**. They have also **the advantage of having suppressed a great number of holy days when no work is done in Roman Catholic countries, and which diminish the labour of the people by about an eighth part of the year.** If it were desired to make use of everything in a state it might be possible, it seems, to diminish the number of mendicants by incorporating them into the monasteries as vacancies or deaths occur there, without forbidding these retreats to those who can give no evidence of their skill in speculative sciences, who are capable of advancing the practical arts, i.e. in some section of mathematics. The celibacy of **churchmen** is not so disadvantageous as is popularly supposed, as is shown in the preceding chapter, but **their idleness is very injurious.**	Suppress holy days = more work
Chapter Seventeen **Of Metals and Money, and especially of gold and silver** As land produces more or less corn according to its fertility and the labour spent upon it, so the **mines of iron, lead, tin, gold, silver, etc. produce more or less of these metals according to the richness of the mines and the quantity and quality of the labour spent upon them**, in digging, draining, smelting, refining, etc. Work in silver mines is dear on account of the mortality in causes, since rarely more than five or six years are spent in that labour. **The real or intrinsic value of metals is like everything else proportionable to the land and labour that enters into their production**. The outlay on the land for this production is considerable only so far as the owner of the mine can obtain a profit from the work of the miners when the veins are unusually rich. The land needed for the subsistence of the miners and workers, that is the mining labour, is often the principal expense and the ruin of the proprietor. The **market value of metals, as of other merchandise or produce, is sometimes above, sometimes below, the intrinsic value, and varies with their plenty or scarcity according to the demand.** If the proprietors of land and the lower orders in a state who imitate them, rejected the use of time and copper, wrongly supposing that they are injurious to health, and if they all made use of dishes and utensils of earthenware, these metals would be at a very low price in the markets and the work that was carried on to extract them from the mine would be discontinued. But as these metals are found useful, and are employed in the service of life, they will always have a **market value corresponding to their plenty or rarity and the**	

demand for them; and they will always be mined to replace what is lost by daily use.

Iron is not merely serviceable for the daily use of common life but may be said to be in a certain sense necessarily; and if the Americans, who did not make use of it before the discovery of their continent, had found mines of it and known how to use it, they would doubtless have laboured to produce it at any cost.

Gold and silver are capable of serving not only the same purpose as tin and copper but most of the purposes of lead and iron. They have this further advantage over other metals that they are not consumed by fire and are so durable that they may be esteemed permanent bodies. It is not surprising, therefore, that men who found the other metals useful should have esteemed gold and silver even before they are used in exchange. The Romans prized them from the foundation of Rome and yet only used them as money 500 years later. Perhaps all other nations did the like and only adopted these metals as money long after using them for other purposes. However we find from the **oldest historians that from time immemorial gold and silver were used as money in Egypt and Asia, and we learn in the Book of Genesis that silver monies were made in the time of Abraham**.

Let us suppose that silver was first found in a mine of Mount Niphates in Mesopotamia. It is natural to think that one or more proprietors of land, finding this metal beautiful and useful, were the first to use it, and willingly encouraged the miner or undertaker to extract more of it from the mine, giving him in return for his work and that of his assistants so much of the produce of the land as they needed for their maintenance. This metal becoming more and more esteemed in Mesopotamia, if the large landowners bought ewers of silver, the lower classes, according to their means or savings, might buy silver cups; and the undertaker of the mine, seeing a constant demand for his merchandise, gave it without doubt a value proportionable to it quality or weight against the other products or merchandise which he took in exchange. While everybody looked on this metal as a precious and durable object and strove to own a few pieces of it, the undertaker, who alone could supply it, was in a manner master to demand in exchange an arbitrary quantity of other produce and merchandise.

Suppose now that on the further side of the River Tigris, and therefore outside Mesopotamia**, a new silver mine is discovered, of which the veins are incomparably richer and larger** than those of Mount Niphates, and that the working of this new Mine which was easily drained was less laborious than that of the first.

The undertaker of this new mine was naturally in a position **to supply silver much cheaper** than the undertaker of Mount Niphates, and the **people of Mesopotamia who wished to have pieces and objects of silver would find it more advantageous to export their merchandise and give it to the undertaker of the new mine in exchange for silver than to take it from the original undertaker**. This last, finding a smaller demand, would of necessity reduce his price; but the new undertaker lowering his price in proportion the first adventurer would be obliged to stop his output, and then the price of silver in exchange for other merchandise and produce would be necessarily fixed by that which was put upon it at the new mine. Silver then cost less to the people beyond Tigris than to those of Mesopotamia who had to bear the cost of a long carriage of their merchandise and produce to obtain silver.

It is easy to perceive that when several silver mines were found and the proprietors of land had taken a fancy to this metal, they were imitated by the other classes, and that the pieces and fragments of silver, even when not worked up, were sought after eagerly, because nothing was easier than to make such articles from them as were desired, according to their quantity and weight. As this metal was esteemed as its **cost value**, at least, a few people who

possessed some of it, finding themselves in need, could pawn it to borrow the things they wanted, and even to sell it later outright. Thence arose the **custom of fixing its value in proportion to its quantity or weight as against all products and merchandise**. But as silver can be combined with iron, lead, tin, copper, etc. which are not such scarce metals and are minded at less expense, the **exchange of silver was subject to much fraud**, and **this caused several kingdoms to establish mints in order to certify by a public coinage the true quantity of silver that each coin contains and to return to individuals who bring bars or ingots of silver to it the same quantity in coins bearing a stamp or certificate of the true quantity of silver they contain.**

The costs of these certificates or coinage are sometimes paid by the public, or by the prince, -- the method followed in ancient times at Rome and today in England; sometimes those who take silver to be coined pay for minting as in the custom in France.

Pure silver is hardly ever found in the mines. The ancients did not know the art of refining to perfection. They always made their silver coins of fince silver, and yet those which remain to us of the Greeks, Romans, Jews and Asiatics are never perfectly pure. Today there is more skill, the secret of making silver pur has been discovered. The different methods of refining it are not part of my subject. Many authors have treated of it, Mr Boizard among others. I will only observe that there is **a good deal of expense in refining silver and for this reason an ounce of fine silver is generally preferred to two ounces which contain one half of copper or other alloy**. It is expensive to separate the alloy and extract the one ounce of pure silver which is in these two ounces, while by simple melting any other metal can be combined with silver in any proportion desired. If copper is sometimes used as an alloy to fine silver it is only to render it more malleable and more suitable for the objects made of it. But **in the valuation of all silver the copper or alloy is reckoned at nothing and only the amount of fine pure silver is considered. For this reason an assay is always made to ascertain the amount of pure silver**.

Assaying is merely refining a little piece of a bar of silver, for example, to find how much pure silver it contains and to judge the whole bar by this small sample. A small portion of the bar, 12 grains for example, is cut off and nicely weighed in balances which are so accurate that a thousandth part of a grain will sometimes turn the scale. Then **the sample is refined by aquafortis or by fire and the copper or alloy separated**. When the silver is pur it is weighed again in the same balance and if it then weighs 11 grains instead of 12 the assayer says that the bar is 11 parts fine, i.e. it contains 11 parts of pure silver and 1 of copper or alloy. This will be more easily understood by those who have the curiosity to see assays carried out. There is nothing mysterious about it. **Gold is assayed in the same way**, with this difference only that the degrees of fineness of gold are divided into 24 parts called carats, since gold is more precious; and these carats are divided into 32 parts, while the degrees of fineness of silver are only divided into twelfths, called deniers, and these are divided into 24 grains apiece.

Usage has conferred upon gold and silver the title intrinsic value, to designate and signify the quantity of true gold or silver contained in a bar; but in this essay I have always used the term intrinsic value to signify the amount of land and labour which enter into production, not having found any term more suitable to express my meaning. I mention this only to avoid misunderstanding. When gold and silver are not in question the term will always hold good without any confusion.

We have seen that the metals such as gold, silver, iron, etc. serve several purposes and have a value proportionable to the land and labour which enter into their production. We shall see in part II of this essay that men have been forced of necessity to employ a common measure to find in their dealings the

proportion and the value of the products and merchandise they wished to exchange. The only question is what product or merchandise would be most suitable for this common measure, and whether it has not been necessity rather that fancy which has given this preference to gold, silver and copper which are generally in use today for this purpose.

Ordinary products like corn, wine, meat, etc. have a real value and serve the needs of life, but they are all perishable and difficult to be transported, and therefore hardly suitable to serve as a common measure.

Merchandise such as cloth, linen, leather, etc. is persishable also and cannot be subdivided without in some sort changing their value for the service of man. Like raw produce they cost a good deal for carriage; they even cause expense for storage, and consequently are unsuitable for a common measure.

Diamonds and other precious stones, even if they had no instrinsic value and were esteemed only from fancy, would be suitable for a common measure if they were not susceptible of imitation and if they could be divided without loss. With these defects and that of being unserviceable in use they cannot serve as a common measure.

Iron, which is always useful and fairly durable would not serve badly in default of a better. It is consumed by fire, and is too bulky owing to its quantity. It was used from the time of Lycurgus till the Peloponnesian War; but as its value was necessarily based instrinsically, or in proportion to the land and labour which entered into its production, a great quantity of it was needed for small value. It is curious that its quality was spoiled by vinegar to make it useless for service and to keep it for exchange only. Thus it could serve the austere Spartans alone, and could not continue to do so even with them as soon as they extended their communication with other countries. To ruin the spartans it needed only to find rich iron mines, to make money like theirs, and to draw in exchange their products and merchandise whilst they could get nothing from abroad for their spoiled iron. At that time they did not concern themselves with any foreign trade, but only with war.

Lead and tin have the same disadvantage of bulk as iron and are consumable by fire, but in case of need they would not do badly for exchange if copper were not more suitable and durable.

Copper alone served as money to the Romans until 484 years after the founding of Rome, and in Sweden it is still used even in large payments: but it is too bulky for very considerable payments, and the Swedes themselves prefer payment in gold or silver rather than in copper.

In the American Colonies tobacco, sugar, and cocoa have been used as money: but these commodities are too bulky, perishable, and of unequal quality: they are therefore hardly suitable to serve as money or a common measure of value.

Gold and silver alone are of small volume, equal goodness, easily transported, divisible without loss, convenient to keep, beautiful and brilliant in the articles made of them and durable almost to eternity. All who have used other articles as money return to these as soon as they can get enough of them for exchange**. It is only in the smallest purchases that gold and silver are unsuitable**. Gold or even silver coins of the value of a liard or a denier would be too small to be handled easily. It is said that the Chinese, in small transactions, cut off little pieces with scissors from their plates of silver, and weighed the pieces. But since their trade with Europe they have begun to use copper for such occasions.

It is then not surprising that **all countries have arrived at using gold and silver as money or a common measure of value and copper for small payments**. **Utility and need have decided them, and not fancy or consent**. Silver requires much labour and dear labour for its production. Silver miners are highly paid because they rarely live more than five or six years at this

work, which causes a high mortality: and so a little silver coin corresponds to as much land and labour as a large copper coin.

Money or the common measure of value must correspond in fact and reality in terms of land and labour to the articles exchanged for it. Otherwise it would have only an imaginary value. If for example a prince or a republic gave currency in the state to something which had not such a real and instrinsic value, not only would the other states refuse to accept it on that footing but the inhabitants themselves would reject it when they perceived its lack of **real value**. When towards the end of the first Punic War the Romans wished to give the copper as, weighing two ounces, the same value as the as of 1 pound or 12 ounces had before, it could not long be maintained in exchange. The history of all times shews that **when princes have debased their money, keeping it at the same nominal value, all raw produce and manufacturers have gone up in price in proportion to the debasement of the coinage**.

Mr Locke says that the consent of mankind has given its value to gold and silver. This cannot be doubted since absolute necessity had no share in it. It is the same consent which has given and does give every day a value to lace, line, fine cloths, copper, and other metals. Man could subsist without any of these things, but it must not be concluded that they have but an imaginary value. **They have a value proportionable to the land and labour which enter into their production**. Gold and silver, like other merchandise and raw produce, can only be produced at costs roughly proportionable to the value set upon them, and whatever man produces by labour, this labour must furnish his maintenance. It is the great principle that one hears every day from the mouths of the humble classes who have no part in our speculations, and who live by their labour or their undertakings. "Everybody must live."

Part Two

Chapter One
Of Barter

In Part I an attempt was made to prove that the real value of everything used by man is proportionate to the quantity of Land used for its production and for the upkeep of those who have fashioned it. **In this second part**, after summing up the different degrees of fertility of the land in several countires and the different kinds of produce it can bring forth with greater abundance according to its intrinsic quality, and assuming the establishment of towns and their markets to facilitate the sale of these products,**it will be shewn** by comparing exchanges which may be made, wine for cloth, corn for shoes, hats, etc. and by the difficulty which the transport of these different products or merchandises would involve, **that it was impossible to fix their respective intrinsic value**, and there was **absolute necessity for man to find a substance easily transportable, not perishable, and having by weight a proportion or value equal to the different products and merchandises**, necessary or convenient. **Thence arose the choice of gold and silver** for large business and of copper for small traffic.

These metals are not only durable and easily transported but correspond to the employment of a large area of land for their production, which gives them the real value desirable in exchange.

Mr Locke who, like all the English writers on this subject, has looked only to market prices, lays down that the value of all things in proportionable to their abundance or scarcity, and the abundance or scarcity of the silver for which they are exchanged. It is generally known that the prices of produce and merchandise have been raised in Europe since so great a quantity of silver has been brought thither from the West Indies.

But I consider that we must not suppose as a general rule that the market prices of things should be proportionable to their quantity and to that of the silver actually circulating in one place, because the products and merchandise sent away to be sold elsewhere do not influence the price of those which remain. If, for example, in a market town where there is twice as much corn as is consumed there, we compared the whole quantity of corn to that of silver, the corn would be more abundant of corn to that of silver, the corn would be more abundant in proportion than the silver destined for its purchase; the market price, however, will be maintained just as if there were only half the quantity of corn, since the other half can be and even must be, sent into the city, and the cost of transport will be included in the city price which is always higher than that of the town. But apart from the case of hoping to sell in another market, I consider that **Mr Locke's idea is correct** in the sense of the following chapter, and not otherwise.

Chapter Two
Of Market Prices

Suppose the butchers on one side and the buyers on the other. The **price of meat** will be settled after some altercations, and a pound of beef will be in value to a piece of silver pretty nearly as the whole beef offered for sale in the market is to all the silver brought there to buy beef.

This proportion is come at by bargaining. The butcher keeps up his price according to the number of buyers he sees; the buyers, on their side, offer less according as they think the butcher will have less sale: the price set by some is usually followed by others. Some are more clever in puffing up their wares, other in running them down. Though this method of fixing market prices has no exact or geometrical foundation, since it often depends upon the eagerness or easy temperament of a few buyers or sellers, it does not seem that it could be done in any more convenient way. **It is clear that the quantity of produce or of merchandise offered for sale, in proportion to the demand or number of buyers, is the basis on which is fixed or always supposed to be fixed the actual market prices; and that in general these prices do not vary much from the intrinsic value**.

Let us take another case. Several maître d'hôtels have been told to buy green peas when they first come in. One master has ordered the purchase of 10 litrons for 60 livres, another 10 litrons for 50 livres, a third 10 for 40 livres and a fourth 10 livres for 30 livres. If these orders are to be carried out there must be 40 litrons of green peas in the market. Suppose there are only 20. The vendors, seeing many buyers, will keep up their prices, and the buyers will come up to the prices prescribed to them: so that those who offer 60 livres for 10 litrons will be the first served. The sellers, seeing later that no one will go above 50, will let the other 10 litrons go at that price. Those who had orders not to exceed 40 and 30 livres will go away empty.

If instead of 40 litrons there were 400, not only would the maître d'hôtels get the new peas much below the sums laid down for them, but the sellers in order to be preferred one to the other by the few buyers will lower their new peas almost to their intrinsic value, and in that case many maîtres d'hôtels who had no orders will buy some.

It often happens that sellers who are too obstinate in keeping up their price in the market, miss the opportunity of selling their produce or merchandise to advantage and are losers thereby. It also happens that by sticking to their prices they may be able to sell more profitably another day.

Distant markets may always effect the prices of the market where one is: if corn is extremely dear in France it will go up in England and in other neighbouring countries.

Chapter Three
Of the Circulation of Money

It is the general opinion in England that **a farmer must make three rents**. (1) The principal and **true rent which he pays to the proprietor**, supposed equal in value to the produce of one third of his farm, **a second rent for his maintenance and that of the men and horses he employs** to cultivate the farm, and **a third which ought to remain with him to make his undertaking profitable.**

The same idea obtains generally in the other countries of Europe, though in some, like the Milanese state, the farmer gives the landlord half the produce instead of a third, and many landlords in all countries try to let their farms at the highest rent they can; but when this is above a third of the produce the farmers are generally very poor. I doubt not that the Chinese landowner extracts from his farmer more than three fourths of the produce.

However when a farmer has some capital to carry on the management of this farm the proprietor who lets him the farm for a third of the produce will be sure of payment and will be better off by such a bargain than if he let his land at a higher rate to a beggarly farmer at the risk of losing all his rent. The larger the farm the better off the farmer will be. This is seen in England where the farmers are generally more prosperous than in other countries where the farms are small.

The assumption I shall make in this enquiry as to the circulation of money is that farmers earn three rents and spend the third rent on living more comfortably instead of saving it. It is in fact the case with the greatest number of farmers in all countries.

All the produce of the country comes directly or indirectly from the hands of the farmers as well as all the materials from which commodities are made. It is the land which produces everything but fish, and even then the fishermen who catch the fish must be maintained on the produce of the land.

The three rents of the farmer must therefore be considered as the principal sources or so to speak the mainspring of circulation in the state. The **first rent must be paid to the landowner in ready money: for the second and third rents ready money is needed** for the iron, tin, copper, salt, sugar, cloth and generally all the merchandise of the city consumed in the country; but all that **hardly exceeds the sixth part of the total or three rents**. As for the food and drink of the country folk ready money is not necessarily to obtain it.

The farmer may brew his beer or make his wine without spending cash, he can make his bread, kill the oxen, sheep, pigs, etc. that are eaten in the country: he can **pay in corn, meat and drink most of his assistants** -- not only labourers but country artisans, valuing the produce at the prices of the nearest markets and labour at the ordinary price of the locality.

The things necessary to life are food, cloths, and lodging. There is no need of cash to obtain food in the country, as I have just explained. If coarse linen and cloths are made there, if houses are built there, as is often done, the labour for all this may be paid in barter by valuation without cash being needed.

The **only cash needed in the country is that for the principal rent of the landlord and for the manufactures which the country necessarily draws from the city**, such as knives, scissors, pins, needles, cloths for some farmers or other well-to-do people, the kitchen utensils, plates, and generally all that is got from the city. I have already observed that it is reckoned that half the inhabitants of a state live in the cities, and consequently the citizens spend more than half the produce of the land. Cash is therefore necessary, not only for the rent of the landlord, corresponding to one third of the produce, but also

for the city merchandise consumed in the country, which may amount to something more than one sixth of the produce of the soil. But one third and one sixth amount to half the produce. The cash circulating in the country must therefore be equal to at least one half the produce of the land, by which means the other half or somewhat less may be consumed in the country without need of cash.

The **circulation of this money takes place when the landlords spend in detail in the city the rents which the farmers have paid them in lump sums**, and when the undertakers of the cities, butchers, bakers, brewers, etc. collect little by little this same money to buy from the farmers in lump sums cattle, wheat, barley, etc. In this way all the large sums of money are distributed in small amounts, and all the small amounts are then collected to make payments in large amounts, directly or indirectly, to the farmers, and this money large or small always passes in return for services.

When I stated that for the country circulation there is needed a quantity of money often equal in value to half the produce of the land, this is the minimum; and in order that the country circulation should be easily conducted I will suppose that the ready cash which conducts the circulation of the three rents, is equal in value to two of these rents, or two thirds of the produce of the land. It will be seen later that this supposition is not far from the truth.

Let us now **imagine that the money which conducts the whole circulation of a little state is equal to 10,000 ounces of silver**, and that **all the payments made with this money, country to city, and city to country, are made once a year**; and that these 10,000 ounces of silver are equal in value to two of the rents of the farmers or two thirds of the produce of the land. The rents of the landlords will correspond to 5000 ounces, and the whole circulation of the remaining silver between the country people and the citizens, made by annual payments, will correspond also to 5000 ounces.

M = 10,000
V = 1

But if the landlords stipulate with their farmers for half yearly instead of yearly payments, and if the debtors of the two other rents also make their payments every six months, this will **alter the rapidity of circulation**: and whereas 10,000 ounces were needed to make the annual payments**, only 5000 will now be required, since 5000 ounces paid twice over** will have the same effect as 10,000 ounces paid once.

If V = 2

The M = 5,000

Further if the landlords stipulate with their farmers for **quarterly payments**, or if they are satisfied to receive their rents from the farmers according as the four seasons of the year enable them to sell their produce, and if all other payments are made quarterly, **only 2500 ounces will be needed** for the same circulation which would have been conducted by 10,000 ounces paid once a year. Therefore, supposing all payments made quarterly in the little state in question, the proportion of the value of the money needed for the circulation is to the annual produce of the soil (or the three rents), as 2500 livres is to 15,000 livres, or as 1 to 6, so that the money would correspond to the sixth part of the annual produce.

If V = 4

M = 2,500

But seeing that each branch of the circulation in the cities is carried out by undertakers, that the consumption of food is met by daily, weekly or monthly payments, and that payment for the clothing purchased once or twice a year by families is made at different times by different people; and whereas the expenditure on drink is usually made daily, that on small beer, coal, and a thousand other articles of consumption is very prompt, it would seem that the proportion we have established for quarterly payments would be too high and that the circulation of a land produce of 15,000 ounces of silver in value could be conducted with much less than 2500 ounces of silver in ready money.

As however the farmers have to make large payments to the landlords at least every quarter and the taxes which the prince or the state collects upon consumption are accumulated by the collectors to make large payments to the

Receivers-General, **there must be enough ready cash in circulation to make these large payments without difficulty, without hindering the circulation of currency for the food and clothing of the people**. It will be seen from this that **the proportion of the amount of money needed for circulation in a state is not incomprehensible, and that this amount may be greater or less in a state according to the mode of living and the rapidity of payments**. But it is very difficult to lay down anything definite as regards this quantity in general, as the proportion may differ in different countries, and it is only conjectural when I say that "the real cash or money necessary to carry on the circulation and exchange in a state is about equal in value to one third of all the annual rents of the proprietors of the said state." Supposing the money in circulation equal to the third of all the rents of the landowners and these rents equal to the third of the annual produce of the land, it follows that "the money circulating in a state is equal in value to the ninth part of all the annual produce of the soil." **Sir William Petty**, in a manuscript of 1685, **supposes frequently that the money in circulation is equal to one tenth of the produce of the soil**. He gives no reason. I suppose it is an opinion which he formed from experience and from his practical knowledge both of the money circulating in **Ireland** (a great part of the land of which country he had measured as a surveyor) and of the produce which he estimated roughly from observation. I am not far removed from his conclusion to the landlords' rents which are ordinarily paid in money and easily ascertainable by a uniform land tax, rather than to the products of the soil, the prices of which vary daily in the markets, and a large part of which is consumed without entering into the market. In the next chapter I shall give several reasons, supported by examples, to confirm my conclusion. I think it useful, even if not mathematically exact in each country. It is enough if it is near the truth and if it prevents the governors of states from forming extravagant ideas of the amount of money in circulation**. There is no branch of knowledge in which one is more subject to error than statistics when they are left to imagination, and none more demonstrable when they are based upon detailed facts**. Some cities and states which have no land belonging to them subsist by exchanging their labour or manufactures for the produce of the land of others. Such are Hamburg, Dantzig, several other cities of the Empire, and even part of Holland. In these states it seems more difficult to estimate the circulation. But if we could estimate the amount of foreign land which furnishes their subsistence, the calculation would probably not differ from that I have made for the other states which live chiefly on their own produce and are the subject of this essay. As to the **cash needed to carry on foreign trade** it seems that **no more is required than what is in circulation in the state when the balance of foreign trade is equal**, that is when the products and merchandise sent abroad are equal in value to those imported. If France sends cloth to Holland and receives from her spices, of equal value, the landowner who consumes these spices pays the value of them to the grocer, who pays the same amount to the clothmaker, to whom it is due in Holland for the cloth he has sent there. This is done by **bills of exchange** which will be explained later. These two money payments take place in France apart from the rent of the landowner, and no money leaves France on that account. All other classes of society who consume Dutch spices, similarly pay the grocer, viz. those who live on the first rent, that is the landowners, pay from this rent, and those who live on the other two rents in country or in city pay the grocer directly or indirectly out of the money which conducts the circulation of these rents. The grocer again pays this money to the manufacturer for his bill	Statistics

upon Holland, and no increase of money is needed for circulation in the state because of foreign trade when the balance is equal. **But if it is not equal, if more merchandise is sold to Holland than is bought back, or vice versa, money is needed for the surplus** which Holland must send to France or France to Holland. **This will increase or diminish the amount of money circulating in France.**

If X > M then money comes in
If X < M then money goes out

It may even occur that when the balance with the foreigner is equal to the trade with him may retard the circulation of ready money and therefore require a greater quantity of money by reason of this commerce.

For example, if the French ladies who wear French stuffs wish to wear Dutch velvets, which are paid for by the cloth sent to Holland, they will pay for these velvets to the merchants who imported them from Holland, and these merchants will pay the manufacturers of cloth. The money thus passes through more hands than if these ladies took their money to the manufacturers of cloth and contented themselves with the fabrics of France**. When the same money passes through the hands of several undertakers the rapidity of circulation is slowed down**. But it is difficult to make an exact estimate of this sort of delay which depends upon various circumstances. Thus, in our present example, if the ladies pay the merchant for the velvet today, and the merchant pay the manufacturer tomorrow for his bill on Holland, if the manufacturer pay the wool merchant the next day and this last pay the farmer the day after, it is possible that the farmer will keep the money in hand more than two months to make up the quarter's rent which he must pay his landlord. This money might in two months have circulated through the hands of a hundred undertakers without locking up the circulating medium needed by the state.

After all, the principle rent of the landowner must be considered to be the most necessary and considerable branch of the money in regard to circulation. If he lives in the city and the farmer sells in the same city all his produce and buys there all the merchandise necessary for country use, the ready money may always remain in the city. The farmer will sell there produce exceeding half the output of his farm; he will pay his landlord in the same city the money value of one third of his produce and the rest to merchants or undertakers for merchandise to be consumed in the country. Even here, however, as the farmer sells his produce for lump sums, which are subsequently distributed in retail purchases, and are again collected to serve for lump payments to the farmers, the circulation has always the same effect (subject to its rapidity) as if the farmer took to the country the money received for his produce and sent it back again to the city.

The circulation consists always of this, that the large sums which the farmer receives on the sale of his produce are split up in detail and then brought together again to make large payments. Whether this money go partly out of the city or remain there entirely it may be regarded as the circulating medium between city and country. All the circulation takes place between the inhabitants of the state, and they are all fed and maintained in every way from the produce of the soil and raw materials of the country.

It is true that the wool, for example, which is brought from the country, when made up into cloth in the city is worth four times its former value. But this increase of value, which is the price of the labour of the workmen and manufactures in the city, is exchanged for the country produce which serves for their maintenance.

Chapter Four
Further Reflection on the Rapidity or Slowness of the Circulation of Money in Exchange

Let us suppose that the farmer pays 1300 ounces of silver a quarter to his

landlord, who pays out of it every week 100 ounces to the baker, butcher, etc. and that these every week pay the farmer these hundred ounces, so that the farmer collects every week as much money as the landlord spends. In this case there will be only 100 ounces in constant circulation, the other 1200 ounces will remain in hand partly with the landlord and partly with the farmer.

But it rarely happens that the landlords spend their rents in a fixed and regular proportion. In London as soon as a landlord receives his rent he puts most of it into the hands of a goldsmith or banker, who lends it at interest, so that this part is in circulation. Or else the landlord spends a good part of it upon various things needful for his household, and before he gets his next quarter's rent he will perhaps borrow money. Thus the **money of the first quarter's rent will circulate in a thousand ways before it can be brought together again and replaced in the hands of the farmer to serve to pay his second quarter**.

When the time for paying this second quarter has come the farmer will sell his produce in large amounts, and those who buy his cattle, corn, hay, etc. will already have collected in detail the price of them. **The money of the first quarter will thus have circulated in the rivulets of small traffic for nearly three months, before being collected by the retail dealers, and these will give it to the farmer** who will pay his second quarter therewith. It would seem from this that less ready money than we have supposed would suffice for the circulation of a state.

Barters made by evaluation do not all call for much ready cash. If a brewer supplies a clothier with the beer for his family, and if the clothier in turn supplies the brewer with the clothes **he needs, both at the market price current on the day of delivery, the only ready money needed between these two traders is the amount of the difference between the two transactions**.

If a merchant in a market town sends to a correspondent in the city country produce for sale, and if the latter sends back to the former the city merchandise consumed in the country, the business lasting the whole year between these two dealers, and **mutual confidence leading them to place to their accounts their produce and merchandise at their respective market prices, the only real money needed for this commerce will be the balance which one owes to the other at the end of the year**. Even then this balance may be carried forward to the next year, without the actual payment of any money. All the undertakers of a city, who have continually business with each other, may practise this method. And **these exchanges by valuation seem to economise much cash in circulation, or at least to accelerate its movement by making it unnecessary in several hands through which it would need to pass without this confidence and this method of exchange by valuation. It is not without reason that it is commonly said <u>commercial credit makes money less scarce</u>.**

The **goldsmiths and public bankers, whose notes pass current in payment like ready money, contribute also to the speed of circulation**, which would be retarded if money were needed in all the payments for which these notes suffice: and although these goldsmiths and bankers always keep in hand a good part of the actual money they have received for their notes, they also put into circulation a considerable amount of this actual money as I shall explain later in dealing with public banks.

All these reflections seem to prove that the circulation of a state could be conducted with much less actual money than I have supposed necessary; but the following inductions appear to counterbalance them and to contribute to the slowing down of the circulation.

I will first observe that all country produce is furnished by labour which may possibly, as already often suggested, be carried on with little or no actual money. But all merchandise is made in cities or market towns by the **labour of**

men who must be paid in actual money. If a house has cost 100,000 ounces of silver to build, all this sum or the greatest part of it, must have been paid every week in small amounts to the brickmaker, masons, carpenters, etc. directly or indirectly. The expense of the humble families, who are always the most in number in a city, is necessarily made with actual money. In these small exchanges credit, book debts, and bills cannot have a place. The merchants or retailers demand cash for the things they supply: or if they give credit to a family for a few days or months they require a substantial money payment. A carriage builder who sells a carriage for 400 ounces of silver in notes, will have to change them into actual money to pay for all the materials and the men who have worked on his carriage if they have worked on credit, or, if he has paid them already, to start a new one. The sale of the carriage will leave his profit and he will spend this to maintain his family. He could not be satisfied with notes unless he can put something aside or lay it out at interest. The consumption of the inhabitants of a state is, in a sense, entirely for food. Lodging, clothing, furniture, etc. correspond to the food of the men who have worked upon them; and in the cities all drink and food are of necessity paid for in hard cash. In the families of landowners in the city food is paid for every day or every week: wine in their families is paid for every week or every month; hats, stockings, shoes, etc. are ordinarily paid for in actual money, at least the payments correspond to cash for the men who have worked upon them. All the sums which serve to pay large amounts are divided, distributed, and spread in small payments corresponding to the maintenance of the workmen, manservants, etc. and all these sums are necessarily collected and reunited by the undertakers and retailers who are employed on the subsistence of the inhabitants to make large payments when they buy the products of the farmers. An alehouse keeper collects by sols and livres the sums he pays to the brewer, who uses them to pay for all the grain and materials he buys from the country. One cannot imagine anything is bought for ready money in a state, like furniture, merchandise, etc. the value of which does not correspond to the maintenance of those who have worked upon it. Circulation in the cities is carried out by undertakers and always corresponds directly or indirectly to the subsistence of the menservants, workmen, etc. It is not conceivable that it can be effected in small detail without cash. **Notes may serve as counters in large payments for a certain time; but when the large sums come to be distributed and spread into small transactions, as is always the case sooner or later in the course of circulation in a city, notes cannot serve the purpose and cash is needed**. All this being presupposed, all the classes in a state who practice some economy, save and keep out of circulation small amounts of cash till they have enough to invest at interest or profit. Many miserly and timid people bury and hoard cash for considerable periods. Many landowners, undertakers and others, always **keep some cash in their pockets or safes against unforeseen emergencies and not to be run out of money**. If a gentleman makes it his remark that he never had less than 20 louis in his pocket throughout the whole year, it may be said that this pocket has kept 20 louis out of circulation for a year. One does not like to spend up to the last sou, one is glad not be completely denuded, and to receive a new instalment before paying even a debt with the money one has. The capital of minors and of suitors is often deposited in cash and kept out of circulation. Beside the large payments which pass through the hands of the farmers in the quarterly terms of the year there are many others from one undertaker to another in the same terms, and others at different times from borrowers to lenders of money. All these sums are collected in retail trade, are spread abroad anew and come back sooner or later to the farmer: but they seem to require a	Hoard

more considerable amount of cash for circulation than if these large payments were made in different times from those when the farmers are paid for their produce.

In fine there is so great a variety in the different orders of the inhabitants of the state and in the corresponding circulation of actual money, that **it seems impossible to lay down anything precise or exact as to the proportion of money sufficient for the circulation**. I have adduced so many examples and inductions only to make it clear that I am not far out of the truth in my conclusion "that the actual money necessary for the circulation of the state corresponds nearly to the value of the third of all the annual rents of the landlords." When the landlords have a rent which amounts to half the produce or more than a third, a greater quantity of actual money is needed for circulation, other things being equal. **When there is great confidence in the banks and in book credits less money will suffice, as also when the rapidity of circulation is accelerated in any other way.** But I shall show later that public banks do not afford so many advantages as is usually supposed.

Chapter Five
Of the Inequality of the circulation of hard money in a state

The city always supplies various merchandises to the country, and the landowners who reside in the city should always receive there about a third of the produce of their land. The country thus owes to the city more than half the produce of the land. This debt would always exceed one half if all landowners lived in the city, but as several of the least important live in the country I suppose that the balance or **debt which continually returns from the country to the city is equal to half the produce of the land and is paid in the city by half the products of the country transported to it and sold to pay this debt**.

But all the countryside of a state or kingdom owes a constant balance to the capital, as well for the rents of the more considerable landowners who reside there as for the taxes of the state or crown, most of which are spent in the capital. All the provincial cities owe a constant balance to the capital, either for the state, upon houses or consumption, or for the different commodities which they draw from the capital. It happens also that several individuals and landowners who live in the provincial cities go to spend some time in the capital, for pleasure, or for the judgment of their lawsuits in final appeal, or because they send their children thither for a fashionable education. Consequently all these expenses incurred in the capital are drawn from the provincial cities.

It may therefore be said that all the countryside and all the cities of a state owe regularly and annually a balance or debt to the capital. But as it is all paid in money it is evident that the provinces always owe considerable sums to the capital; for the products and commodities which the provinces send to the capital are sold there for money, and with this money the debt or balance in question is paid.

Suppose now that the circulation of money in the provinces and in the capital is equal both in **quantity of money and speed of circulation**. The balance will be first sent to the capital in cash and this will **diminish the quantity of money in the provinces and increase it in the capital, and consequently the raw material and commodities will be dearer in the capital than in the provinces, on account of the greater abundance of money in the capital**. The difference of prices in the capital and in the provinces must pay for the costs and risks of transport, otherwise cash will be sent to the capital to pay the balance and this will go on till the prices in the capital and the provinces come to the level of these costs and risks. Then the merchants or undertakers of the market towns will buy at a low price the

products of the villages and will have them carried to the capital to be sold there at a higher price: and this difference of price will necessarily pay for the upkeep of the horses and menservants and the profit of the undertaker, or else he would cease his enterprise.

It will follow from this that the price of raw produce of equal quality will always be higher in the country places which are nearest the capital than in those more distant in proportion to the costs and risks of transport; and that the countries adjacent to seas and rivers flowing into the capital will get a better price for their produce in proportion than those which are distant (other things being equal) because water transport is less expensive than land transport. On the other hand the products and small wares which cannot be consumed in the capital, because they are not suitable or cannot be sent thither on account of their bulk, or because they would be spoiled on the way, will be infinitely cheaper in the country and distant provinces than in the capital, owing to the amount of money circulating for them which is much smaller in the distant provinces.

So it is that new laid eggs, game, fresh butter, wood fuel, etc. will generally be much cheaper in the district of Poitou, whilst corn, cattle and horses will be dearer at Paris only by the difference of the cost and risk of carriage and the dues for entering the city.

It would be easy to make an infinite number of inductions of the same kind to justify by experience the **necessity of an inequality in the circulation of money in the different provinces of a great state or kingdom**, and to show that this inequality is always relative to the balance or debt which belongs to the capital.

If we suppose that the balance due to the capital amounts to one fourth of the produce of the land of all the provinces of the state the best use that can be made of the land would be to employ the country bordering on the capital to produce the kinds of produce which could not be drawn from distant provinces without much expense or deterioration. This is in fact what always takes place. The market prices of the capital serving as a standard for the farmers to employ the land for such or such a purpose they use the nearest, when suitable, for market gardens, pasture, etc.

So far as possible manufactures of cloth, linen, lace, etc. ought to be set up in the remote provinces; and, in the neighbourhood of coal mines or forest, which are useless by their distance, manufactures of tools of iron, tin, copper, etc. In this way finished manufactures could be sent to the capital with much less cost of carriage than the raw materials to be worked up in the capital and the subsistence of the artisans who would work upon them there. This would save a quantity of horses and waggoners who would be better employed for the benefit of the state. The land would serve to maintain on the spot workmen and useful mechanics; and a multitude of horses would be saved who serve only upon unnecessary transport. In this way the distant lands would yield higher rents to the proprietors and the inequality of the circulation of the provinces and the capital would be better proportioned and less considerable.

Nevertheless to set up manufactures in this way would need not only much encouragement and capital but also some way to ensure a regular and constant demand, either in the capital itself or in foreign countries, whose exports in return may be of service to the capital, to pay for the merchandise which it draws from these foreign countries or for the return of silver in kind.

When these manufactures are set up perfection is not at once attained. If some other province have them better or cheaper or owing to the vicinity of the capital or the convenience of a sea or river communication have their transport considerably facilitated, the manufactures in question will have no success. All these circumstances have to be considered in setting up a manufactory. I have not proposed to treat of them in this essay, but only to suggest that so far as

practicable manufactures should be set up in provinces distant from the capital, to render them more considerable and to bring about there a circulation of money less disproportionate to that of the capital.

For when a distant province has no manufactory and produces only ordinary raw materials without water communication with the capital or the ocean, it is astonishing how scarce money is there compared with that which circulates in the capital and how little the best lands produce to the prince and to the proprietors who reside in the capital.

The wines of Provence and of Languedoc sent to the north round the Straits of Gibraltar by long and difficult navigation, after having passed through the hands of several dealers yield very little to the Paris owners of the land.

It is however necessary that these distant provinces should send their produce, in spite of all the drawbacks of transport and distance to the capital or elsewhere either in the state or in foreign countries in order that the returns should provide for payment of the balance due to the capital. But these products would be mostly consumed on the spot if there were works or factories to pay this balance, in which case the number of inhabitants would be much larger.

When the province pays the balance only with its produce which yields so little in the capital having regard to the expenses of distance, it is evident that the proprietor living in the capital pays the produce of much land in the country to receive little in the capital. This arises from the inequality of money, and this inequality is owing to the constant balance due from the province to the capital.

At present if a state or kingdom which supplies all foreign countries with work of its own manufacture does so much of this commerce that it draws every year a constant balance of money from abroad, the circulation will become more considerable there than in foreign countries, money will be more plentiful there, and consequently land and labour will gradually become dearer there. It will follow that in all the branches of commerce the state in question will exchange a smaller amount of land and labour with the foreigner for a larger amount, so long as these circumstances continue.

But if some foreigner reside in the state in question he will be in about the same situation and circumstances as the proprietor at Paris who has his land in distant provinces.

France, since the erection in 1646 of manufactories of cloth and other works since set up, appeared to trade, at least in part, in the way described. Since the decay of France, England has taken possession of this trade; and all states appear flourishing only by the larger or smaller part they have in it. The **inequality of the circulation of money in the different states constitutes the inequality of their respective power, other things being equal; and this inequality of circulation is always respective to the balance of foreign trade**.

It is easy to judge from what has been said in this chapter that the assessment by taxes of the royal tithe, made by Mr de Vauban, would be neither advantageous nor practicable. If the taxes on land were levied in money proportionable to the rents of the proprietors, it would be fairer. But I must not wander from my subject to show the inconvenience and impossibility of Mr de Vauban's proposal.

Chapter Six
Of the increase and decrease in the quantity of hard money in a State

If **mines of gold or silver** be found in a state and considerable quantities

of minerals drawn from them, the proprietors of these mines, the undertaker, and all those who work there, will not fail to increase their expenses in proportion to the wealth and profit they make: they will also lend at interest the sums of money which they have over and above what they need to spend.	
All this money, whether lent or spent, will enter into circulation and will not fail to raise the price of products and merchandise in all the channels of circulation which it enters. Increased money will bring about increased expenditure and this will cause an increase of market prices in the highest years of exchange and gradually in the lowest.	More money = higher prices
Everybody agrees that the abundance of money or its increase in exchange, raises the price of everything. The quantity of money brought from American to Europe for the last two centuries justifies this truth by experience.	
Mr Locke lays it down as a fundamental maxim that the quantity of produce and merchandise in proportion to the quantity of money serves as the regulator of market price. I have tried to elucidate his idea in the preceding chapters: he has clearly seen that the abundance of money makes everything dear, but he has not considered how it does so. The great difficulty of this question consists in knowing in what way and in what proportion the increase of money raises prices.	Locke doesn't show "how"
I have already remarked that an acceleration or greater rapidity in circulation of money in exchange, is equivalent to an increase of actual money up to a point. I have also observed that the increase or decrease of prices in a distant market, home or foreign, influences the actual market prices. On the other hand money flows in detail through so many channels that it seems impossible not to lose sight of it seeing that having been amassed to make large sums it is distributed in little rills of exchange, and then gradually accumulated again to make large payments. For these operations it is constantly necessary to change coins of gold, silver and copper according to the activity of exchange. It is also usually the case that the increase or decrease of actual money in a state is not perceived because it flow abroad, or is brought into the state, by such imperceptible means and proportions that it is impossible to know exactly the quantity which enters or leaves the state.	
However all these operations pass under our eyes and everybody takes part in them. I may therefore venture to offer a few observations on the subject, even though I may not be able to give an account which is exact and precise.	
I consider in general that an increase of actual money causes in a state a corresponding increase of consumption which gradually brings about increased prices.	Increase in money means increase in consumption means Increase in prices
If the increase of actual money **comes from mines of gold** or silver in the state the **owner of these mines, the adventurers, the smelters, refiners, and all the other workers will increase their expenses** in proportion to their gains. They will consume in their households more meat, wine, or beer than before, will accustom themselves to wear better cloths, finer linen, to have better furnished houses and other choicer commodities. They will consequently **give employment to several mechanics** who had not so much to do before and who for the same reason will increase their expenses: all this increase of expense in meat, wine, wool, etc. diminishes of necessity the share of the other inhabitants of the state who do not participate at first in the wealth of the mines in question. The altercations of the market, or the demand for meat, wine, wool, etc. being more intense than usual, will not fail to raise their prices. These **high prices will determine the farmers to employ more land to produce them in another year: these same farmers will profit by this rise of prices and will increase the expenditure of their families like the others**. Those then who will suffer from this dearness and increased consumption will be first of all the landowners, during the term of their leases, then their domestic servants and all the workmen or fixed wage-earners who support their	Multiplier effects

families on their wages. All these must diminish their expenditure in proportion to the new consumption, which will compel a large number of them to emigrate to seek a living elsewhere. The landowners will dismiss many of them, and the rest will demand an increase of wages to enable them to live as before. It is thus, approximately, that a considerable increase of money from the mines increases consumption, and by diminishing the number of inhabitants entails a greater expense among those who remain.	
If more money continues to be drawn from the mines all prices will owing to this abundance rise to such a point that not only will the landowners raise their rents considerably when the leases expire and resume their old style of living, increasing proportionably the wages their servants, but the mechanics and workmen will **raise the prices of their articles so high that there will be a considerable profit in buying them from the foreigner** who makes them much more cheaply. This will naturally **induce several people to import many articles** made in foreign countries, where found very cheap: this will gradually ruin the mechanics and manufacturers of the state who will not be maintain themselves there by working at such low owing to the dearness of living.	If prices rise too high, Then imports will increase
When the excessive has diminished the inhabitants of a state, those who remain to a too large expenditure, raised produce of the land and the labour of workmen to excessive prices, ruined the manufactures of the state by use of foreign productions on the part of landlords and mine workers, **the money produced by the mines will necessarily go abroad to pay for the imports**: this will gradually impoverish the state and render it in some sort dependent on the Foreigner to whom it is obliged to send money every year as it is drawn from the mines. The great circulation of money, which was general at the beginning, ceases: poverty and misery follow and the labour of the mines appears to be only to the advantage of those employed upon them and the Foreigners who profit thereby.	If imports exceed exports money Will flow abroad Money supply is reduced
This is approximately what has happened to Spain since the discovery of the Indies. As to the Portuguese, since the discovery of the gold mines of Brazil, they have nearly always made use of foreign articles and manufactures; and it seems that they work at the mines only for the account and advantage of foreigners. All the gold and silver which these two states extract from the mines does not supply them in circulation with more precious metal than others. England and France have even more as a rule.	
Now if the increase of money in the state proceeds from a balance of foreign trade (i.e. from sending abroad articles and manufactures in greater value and quantity than is imported and consequently receiving the surplus in money) this **annual increase of money** will enrich a great number of merchants and Undertakers in the state, and will **give employment** to numerous mechanics and workmen who furnish the commodities sent to the foreigner from whom the money is drawn. This will **increase gradually the consumption of these industrial inhabitants and will raise the price of land and labour**. But the industrious who are eager to acquire property will not at first increase their expense: they will wait till they have accumulated a good sum from which they can draw an assured interest, independently of their trade. When a large number of the inhabitants have acquired considerable fortunes from this money, which enters the state regularly and annually, they will, without fail, **increase their consumption and raise the price of everything.** Though this dearness involves them in a greater expense than they at first contemplated they will for the most part continue so long as their capital lasts; for nothing is easier or more agreeable than to increase the family expenses, nothing more difficult or disagreeable than to retrench them.	If X>M, more money Inflow of money means more Expenditure which will Raise prices
If an annual and continuous balance has brought about in a state a considerable increase of money it will not fail to increase consumption, to raise	

the price of evening and even to diminish the number of inhabitants unless additional produce is drawn from abroad proportionable to the increased consumption. Moreover it is usual in states which have acquired a considerable abundance of money to draw many things from neighbouring countries where money is rare and consequently everything is cheap: but **as money must be sent for this the balance of trade will become smaller**. The cheapness of land and labour in the foreign countries where money is rare will naturally cause the erection of manufactories and works similar to those of the state, but which will not at first be so perfect nor so highly valued.

In this situation the state may subsist in abundance of money, consume all its own produce and also much foreign produce and over and above all this **maintain a small balance of trade against the foreigner or at least keep the balance level for many years**, that is import in exchange for its work and manufactures as much money from these foreign countries as it has to send them for the commodities or products of the land it takes from them. If the state is a maritime state the facility and cheapness of its shipping for the transport of its work and manufactures into foreign countries may compensate in some sort the high price of labour caused by the too great abundance of money; so that the work and manufactures of this state, dear though they be, will sell in foreign countries cheaper sometimes than the manufactures of another state where labour is less highly paid.

The cost of transport increases a good deal the prices of things sent to distant countries; but these costs are very moderate in maritime states, where there is regular shipping to all foreign ports so that Ships are nearly always found there ready to sail which take on board all cargoes confided to them at a very reasonable freight.

It is not so in states where navigation does not Nourish. There it is necessary to build ships expressly for the carrying trade and this sometimes absorbs all the profit; and navigation there is always very expensive, which entirely discourages trade.

England today consumes not only the greatest part of its own small produce but also much foreign produce, such as Silks, Wines, Fruit, Linen in great quantity, etc. while she sends abroad only the produce of her mines, her work and manufactures for the most part, and dear though labour be owing to the abundance of money, she does not fail to sell her articles in distant countries, owing to the advantage of her shipping, at prices as reasonable as in France where these same articles are much cheaper.

The increased quantity of money in circulation in a state may also be caused, without balance of trade, by subsidies paid to this state by foreign powers, by the expenses of several ambassadors, or of travellers whom political reasons or curiosity or pleasure may induce to reside there for some time, by the transfer of the property and fortune of some Families who from motives of religious liberty or other causes quit their own country to settle down in this state. **In all these cases the sums which come into the state always cause an increased expense and consumption there and consequently raise the prices** of all things in the channels of exchange into which money enters.

Suppose a quarter of the inhabitants of the state consume daily meat, wine, beer, etc. and supply themselves frequency with cloths, linen, etc. before the increase in money, but that after the increase a third or half of the inhabitants consume these same things, the prices of them will not fail to rise, and the dearness of meat will induce several of those who formed a quarter of the state to consume less of it than usual. A man who eats three pounds of meat a day will manage with two pounds, but he feels the reduction, while the other half of the inhabitants who ate hardly any meat will not feel the reduction. Bread will in truth go up gradually because of this increased consumption, as I have often

suggested, but it will be less dear in proportion than meat. The increased price of meat causes diminished consumption on the part of a small section of the people, and so is felt; but the of a small section of the people, and so is felt; but the increased price of bread diminishes the share of all the inhabitants, and so is less felt. If 100,000 extra people come to live in a state of 10 millions of inhabitants, their extra consumption of bread will amount to only pound in 100 which must be subtracted from the old inhabitants; but when a man instead of 100 pounds of bread consumes 99 for his subsistence he hardly feels this reduction.

When the consumption of meat increases the farmers add to their pastures to get more meat, and this diminishes the arable land and consequently the amount of corn. But what generally causes meat to become dearer in proportion than Bread is that ordinarily the free import of foreign corn is permitted while the import of Cattle is absolutely forbidden, as in England, or heavy import duties are imposed as in other states. This is the reason why the rents of meadows and pastures go up in England, in the abundance of money, to three times more than the rents of arable land.

There is no doubt that Ambassadors, Travellers, and Families who come to settle in the state, increase consumption there and that prices rise in all the channels of exchange where money is introduced.

As to subsidies which the state has received from foreign powers, either they are hoarded for state necessities or are put into circulation. If we suppose them hoarded they do not concern my argument for I am considering only money in circulation. Hoarded money, plate, Church treasures, etc. are wealth which the state turns to service in extremity, but are of no present utility. If the state puts into circulation the subsidies in question it can only be by spending them and this ill very certainly increase consumption and send up all prices. Whoever receives this money will set it in motion in the principal affair of life, which is the food, either of himself or of some other, since to this everything corresponds directly or indirectly.

Chapter Seven
Continuation of the same subject

As gold, silver, and copper have an intrinsic value proportionable to the land and labour which enter into their production at the mines added to the cost of their importation or introduction into states which have no mines, the quantity of money, as of all other commodities, determines its value in the bargaining of the market against other things.

If England begins for the first time to make use of gold, silver, and copper in exchanges money will be valued according to the quantity of it in circulation proportionably to its power of exchange against all other merchandise and produce, and their value will be arrived at roughly by the altercations of the markets. On the footing of this estimation the landowners and Undertakers will fix the wages of their Domestic Servants and Workmen at so much a day or a year, so that they and their families may be able to live on the wages they receive.

Suppose now that the residence of Ambassadors and foreign travellers in England have introduced as much money into the circulation there as there was before; this money will at first pass into the hands of various mechanics, Domestic Servants, Undertakers and others who have had a share in providing the equipages, amusements, etc. of these Foreigners; the manufacturers, farmers, and other Undertakers will feel the effect of this increase of money which will habituate a great number of people to a larger expense than before, and this will in consequence send up market prices. Even the children of these Undertakers and mechanics will embark upon new expense: in this abundance

of money their Fathers will give them a little money for their petty pleasures, and with this they will buy cakes and patties, and this new quantity of money will spread itself in such a way that many who lived without handling money will now have some. Many purchases which used to be made on credit will now be made for cash, and there will therefore be greater rapidity in the circulation of money in England than there was before.

From all this I conclude that by doubling the quantity of money in a state the prices of products and merchandise are not always doubled. A River which runs and winds about in its bed will not flow with double the speed when the amount of its water is doubled.

2X money not always result in 2X prices

The proportion of the dearness which the increased quantity of money brings about in the state will depend on the turn which this money will impart to consumption and circulation. Through whatever hands the money which is introduced may pass it will naturally increase the consumption; but this consumption will be more or less great according to circumstances. It will be directed more or less to certain kinds of products or merchandise according to the idea of those who acquire the money. Market prices will rise more for certain things than for others however abundant the money may be. In England the price of meat might be tripled while the price of corn went up only one fourth.

depends on pattern of circulation

In England it is always permitted to bring in corn from foreign countries, but not cattle. For this reason however great the increase of hard money may be in England the price of corn can only be raised above the price in other countries where money is scarce by the cost and risks of importing corn from these foreign countries.

It is not the same with the price of Cattle, which will necessarily be proportioned to the quantity of money offered for meat in proportion to the quantity of meat and the number of Cattle bred there.

An ox weighing 800 pounds sells in Poland and Hungary for two or three ounces of silver, but commonly sells in the London market for more than 40. Yet the bushel of flour does not sell in London for double the price in Poland and Hungary.

Increase of money only increases the price of products and merchandise by the difference of the cost of transport, when this transport is allowed. But in many cases the carriage would cost more than the thing is worth, and so timber is useless in many places. This cost of carriage is the reason why milk, fresh butter, salads, game, etc. are almost given away in the provinces distant from the capital.

I conclude that an increase of money circulating in a state always causes there an increase of consumption and a higher standard of expense. But the dearness caused by this money does not affect equally all the kinds of products and merchandise, proportionably to the quantity of money, unless what is added continues in the same circulation as the money before, that is to say unless those who offer in the market one ounce of silver be the same and only ones who now offer two ounces when the amount of money in circulation is doubled in quantity, and that is hardly ever the case. **I conceive that when a large surplus of money is brought into a state the new money gives a new turn to consumption and even a new speed to circulation. But it is not possible to say exactly to what extent.**

Chapter Eight
Further Reflections on the same subject

We have seen that the quantity of money circulating in a state may be increased by working the mines which are found in it, by subsidies from foreign powers, by the immigration of Families of foreigners, by the residence

of Ambassadors and Travellers, but above all by a **regular and annual balance of trade from supplying merchandise to Foreigners and drawing from them at least part of the price in gold and silver**. It is by this last means that a state grows most substantially, especially when its trade is accompanied and supported by ample navigation and by a considerable raw produce at home supplying the material necessary for the goods and manufactures sent abroad.

As however the continuation of this Commerce gradually introduces a great abundance of money and little by little increases consumption, and as to meet this much Foreign produce must be brought in, part of the annual balance goes out to pay for it. On the other hand the habit of spending increasing the employment of labourers the prices of manufactured goods always go up. Without fail **some foreign countries endeavour to set up for themselves the same kinds of manufactures**, and so cease to buy those of the state in question; and though these new establishments of crafts and manufactures be not at first perfect they slacken and even prevent the exportation of those of the neighbouring state into their own country where they can be got cheaper.

Thus it is that the **state begins to lose some branches of its profitable trade**: and many of its workmen and mechanics who see labour Fallen off leave the state to find more work in the countries with the new manufacture. In spite of this diminution in the balance of trade the custom of importing various products will continue. The articles and manufactures of the state having a great reputation, and the facility of navigation affording the means of sending them at little cost into distant countries, the state will for many years keep the upper hand over the new manufactures of which we have spoken and will still maintain a small Balance of trade, or at least will keep it even. If however some other maritime state tries to perfect the same articles and its navigation at the same time it will owing to the cheapness of its manufactures take away several branches of trade from the state in question. **In consequence this state will begin to lose its balance of trade** and will be forced to send every year a part of its money abroad to pay for its importations.

Moreover, even if the state in question could keep a balance of trade in its greater abundance of money it is reasonable to suppose that this abundance will not arrive without many wealthy individuals springing up who will plunge into luxury. They will buy pictures and gems from the foreigner, will procure their silks and rare objects, and set such an example of luxury in the state that in spite of the advantage of its ordinary trade its money will flow abroad annually to pay for this luxury. This will gradually impoverish the state and cause it to pass from great power into great weakness.

When a state has arrived at the highest point of wealth (I assume always that the comparative wealth of states consists principally in the respective quantities of money which they possess) it will inevitably fall into poverty by the ordinary course of things. **The too great abundance of money, which so long as it lasts forms the power of states, throws them back imperceptibly but naturally into poverty. Thus it would seem that when a state expands by trade and the abundance of money raises the price of land and labour, the Prince or the Legislator ought to withdraw money from circulation, keep it for emergencies, and try to retard its circulation by every means** except compulsion and bad faith, so as to forestall the too great dearness of its articles and prevent the drawbacks of luxury.

But as it is not easy to discover the time opportune for this, nor to know when money has become more abundant than it ought to be for the good and preservation of the advantages of the state, the Princes and Heads of Republics, who do not concern themselves much with this sort of knowledge, attach themselves only to make use of the facility which they find through the

abundance of their state revenues, to extend their power and to insult other countries on the most frivolous pretexts. And all things considered they do not perhaps so badly in working to perpetuate the glory of their reigns and administrations, and to leave monuments of their power and wealth; for since, according to the natural course of humanity, the state must collapse of itself they do but accelerate its fall a little. Nevertheless it seems that they ought to endeavour to make their power last all the time of their own administration.

It does not need a great many years to raise abundance to the highest point in a state, still fewer are needed to bring it to poverty for lack of commerce and manufactures. Not to speak of the power and fall of the Republic of Venice, the Hanseatic Towns, Flanders and Brabant, the Dutch Republic, etc. who have succeeded each other in the profitable branches of trade, one may say that the power of France has been on the increase only from 1646 (when manufactures of cloths were set up there, which were until then imported) to 1684 when a number of Protestant Undertakers and artisans were driven out of it, and that kingdom has done nothing but recede since this last date.

To judge of the abundance and scarcity of money in circulation. I know no better measure than the leases and rents of landowners. **When land is let at high rents it is a sign that there is plenty of money in the state**; but when land has to be let much lower it shows, other things being equal, that money is scarce. I have read in an *Etat de la France* that the acre of vineyard which was let in 1660 near Mantes, and therefore not far from the capital of France, for 200 livres tournois in money of full weight, only let in 1700 for 100 livres tournois in lighter money, though the silver brought from the West Indies in the interval should naturally have sent up the price of land in Europe.

The author [of the *Etat*] attributes this fall in rent to defective consumption. And it seems that he had in fact observed that the consumption of Wine had diminished. But I think he has mistaken the effect for the cause. The cause was a greater rarity of money in France, and the effect of this was naturally a falling off in consumption. In this Essay I have always suggested, on the contrary, that abundant money naturally increases consumption and contributes above everything to the cultivation of land. When abundant money raises produce to respectable prices the inhabitants make haste to work to acquire it; but they are not in the same hurry to acquire produce or merchandise beyond what is needed for their maintenance.

It is **clear that every state which has more money in circulation than its neighbours has an advantage over them so long as it maintains this abundance of** money.

In the first place in all branches of trade it gives less land and labour than it receives: the price of land and labour being everywhere reckoned in money is higher in the state where money is most abundant. Thus the state in question receives sometimes the produce of two acres of land in exchange for that of one acre, and the work of two men for that of only one. It is because of this abundance of money in circulation in London that the work of one English embroiderer costs more than that of 10 Chinese embroiderers, though the Chinese embroider much better and turn out more work in a day. In Europe one is astonished how these Indians can live, working so cheap, and how the admirable stuffs which they send us cost so little.

In the second place, the revenues of the state where money abounds, are raised more easily and in comparatively much larger amount. This gives the state, in case of war or dispute, the means to gain all sorts of advantages over its adversaries with whom money is scarce.

If of two Princes who war upon each other for the sovereignty or conquest of a state one have much money and the other little money but many estates which may be worth twice as much as all the money of his enemy, the first will

be better able to attach to himself Generals and Officers by gifts of money than the second will be by giving twice the value in lands and estates. Grants of land are subject to challenge and revocation and cannot be relied upon so well as the money which is received. With money munitions of war and food are bought even from the enemies of the state. Money can be given without witnesses for secret service. Lands, Produce, merchandise would not serve for these purposes, not even jewels or diamonds, because they are easily recognised. After all it seems to me that the comparative power and wealth of states consist, other things being equal, in the greater or less abundance of money circulating in them hic et nunc.

It remains to mention **two other methods of increasing the amount of money in active circulation in a state** The first is when Undertakers and private individual **borrow money from their foreign correspondents** a interest, or individuals abroad send their money into the state to buy shares or government stocks there. This often amounts to very considerable sums upon which the state must annually **pay interest to these foreigners** These methods of increasing the money in the state make it more abundant there and diminish the rate of interest. By means of this money the Undertakers in the state find it possible to **borrow more cheaply to set people on work and to establish manufactories** in the hope of profit. The Artisans and all those through whose hands this money passes, consume more than they would have done if they had not been employed by means of this money, which consequently **increases prices** just as if it belonged to the state, and through the increased consumption or expense thus caused the public revenues derived from taxes on consumption are augmented. **Sums lent to the state in this way bring with them many present advantages, but the end of them is always burdensome and harmful.** The state must pay the interest to the foreigners every year, and besides this is at the mercy of the foreigners who can always put it into difficulty when they take it into their heads to withdraw their capital. It will certainly arrive that they will want to withdraw it at the moment when the state has most need of it, as when preparations for war are in hand and a hitch is feared. The **interest paid to the foreigner is always much more considerable than the increase of pubic revenue which his money occasions**. These loans of money are often seen to pass from one country to another according to the confidence of investors in the states to which they are sent. But to tell the truth it most commonly happens that states loaded with these loans, who have paid heavy interest on them for many years, fall at length by bankruptcy into inability to pay the capital. As soon as distrust is awakened the shares or public stocks fall, the foreign shareholders do not like to realise them at a loss and prefer to content themselves with the interest, hoping that confidence will revive. But sometimes it never revives. In states which decline into decay the principal object of ministers is usually to restore confidence and so attract foreign money by loans of this kind. For unless the ministry fails to keep faith and to observe its engagements the money of the subjects will circulate without interruption. It is the money of the foreigners which has the power of increasing the circulating currency in the state.

But the resource of these borrowings which gives a present ease comes to a bad end and is a fire of straw. To revive a state it is needful to have a care to bring about the influx of an annual, a constant and a real balance of trade, to make flourishing by Navigation the articles and manufactures which can always be sent abroad cheaper when the state is in a low condition and has a shortage of money. Merchants are first to begin to make their fortunes, then the lawyers may get part of it, the Prince and the farmers of the revenue get a share at the expense of these, and distribute their graces as they please. When money becomes too plentiful in the state, luxury will instal itself and the state will fall into decay.

Such is approximately the circle which may be run by a considerable state which has both capital and industrious inhabitants. An able minister is always able to make it recommence this round. Not many years are needed to see it tried and succeed, at least at the beginning which is its most interesting position. The increased quantity of money in circulation will be perceived in several ways which my argument does not allow me to examine now.

As for states which have not much capital and can only increase by accidents and conjuncture it is difficult to find means to make them flourish by trade. No ministers can restore the Republics of Venice and Holland to the brilliant situation from which they have fallen. But as to Italy, Spain, France, and England, however low they may be fallen, they are always capable of being raised by good administration to a high degree of power by trade alone, provided it be undertaken separately, for if all these states were equally well administered they would be great only in proportion to their respective capital and to the greater or less industry of their people.

The last method I can think of to increase the quantity of money actually circulating in a state is by violence and arms and this is often blended with the others, since in all Treaties of Peace it is generally provided to retain the trading rights and privileges which it has been possible to derive from them. When a state exacts contributions or makes several other states tributary to it, this is a very sure method of obtaining their money. I will not undertake to examine the methods of putting this device into practice, but will content myself with saying that **all the nations who have flourished in this way have not failed to decline, like states who have nourished through their trade. The ancient Romans were more powerful in this wise than all the other peoples we know of. Yet these same Romans before losing an inch of the land of their vast states fell into decline by luxury and brought themselves low by the diminution of the money which had circulated among them, but which luxury caused to pass from their great Empire into oriental countries**.

So long as the luxury of the Romans (which did not begin till after the defeat of Antiochus, King of Asia about A.U.C. 564) was confined to the produce of the land and labour of all the vast estates of their dominion, the circulation of money increased instead of diminishing. The public was in possession of all the mines of gold, silver, and copper in the Empire. They had the gold mines of Asia, Macedonia, Aquilaea and the rich mines both of gold and silver of Spain and other countries. They had several mints where gold, silver and copper coins were struck. The consumption at Rome of all the articles and merchandise which they drew from their vast Provinces did not diminish the circulation of the currency, any more than pictures, statues and jewels which they drew from them. Though the patricians laid out excessive amounts for their feasts and paid 15,000 ounces of silver for a single fish, all that did not diminish the quantity of money circulating in Rome, seeing that the tribute of the Provinces regularly brought it back, to say nothing of what Praetors and Governors brought thither by their extortions. The amounts annually extracted from the mines merely increased the circulation at Rome during the whole reign of Augustus. Luxury was however already on a very great scale, and there was much eagerness not only for curiosities produced in the Empire but also for jewels from India, pepper and spices, and all the rarities of Arabia, and the silks which were not made with raw materials of the Empire began to be in demand there. The money drawn from the mines still exceeded however the sums sent out of the Empire to buy all these things. Nevertheless under Tiberius a scarcity of money was felt. That Emperor had shut up in his Treasury 2 milliards and 700 millions of sesterces. To restore abundance of circulation he had only to borrow 300 millions on the mortgage of his estates. Caligula in less than one year spent all this treasure of Tibetius after his death,

and it was then that the abundance of money in circulation was at its highest in Rome. **The fury of luxury kept on increasing. In the time of Pliny, the historian, there was exported from the Empire, as he estimated, at least 100 millions of sesterces annually. This was more than was drawn from the mines. Under Trajan the price of land had fallen by one-third or more, according to the younger Pliny, and money continued to decrease until the time of the Emperor Septimus Severus. It was then so scarce at Rome that the Emperor made enormous granaries, being unable to collect large treasure for his enterprises. Thus the Roman Empire fell into decline through the loss of its money before losing any of its estates. Behold what luxury brought about** and what it always will bring about in similar circumstances.

Chapter 9
Of the Interest of Money and its Causes

Just as the prices of things are fixed in the altercations of the market by the quantity of things offered for sale in proportion to the quantity of money offered for them, or, what comes to the same thing, by the proportionate number of sellers and buyers, so in the same way the interest of money in a state is settled by the proportionate number of lenders and borrowers.

Though money passes for a pledge in exchange it does not multiply itself or beget an interest in simple circulation. The needs of man seem to have introduced the usage of interest. A man who lends his money on good security or on mortgage runs at least the risk of the ill will of the borrower, or of expenses, lawsuits and losses. But when he lends without security he runs the risk of losing everything. For this reason needy men must in the beginning have tempted lenders by the bait of a profit. And this profit must have been proportionate to the needs of the borrowers and the fear and avarice of the lenders. This seems to me the origin of interest. But its constant usage in states seems based upon the profits which the Undertakers can make out of it.

The land naturally produces, aided by human labour, 4, 10, 20, 50, 100, 150 times the amount of corn sown upon it, according to the fertility of the soil and the industry of the inhabitants. It multiplies fruits and cattle. The farmer who conducts the working of it has generally two thirds of the produce, one third pays his expenses and upkeep, the other remains for the profit of his enterprise.

If the farmer have enough capital to carry on his enterprise, if he have the needful tools horses for ploughing, cattle to make the land he will take for himself after paying all expense of the produce of his farm. But if a competent labourer who lives from day to day on his wages and has no capital, can find some one willing to lend him land or money buy some, he will be able to give the lender all the third rent, or third part of the produce of a farm of which he will become the farmer or Undertaker. However he will think his position improved since he will find in the second rent and will become master instead man. If by great economy and pinching himself somewhat of his necessities he can gradually accumulate some little capital, he will have every year less to borrow, and will at last arrive at keeping the whole of his third rent.

If this new Undertaker finds means to buy corn or cattle on credit, to be paid off at a long date when he can make money by the sale of his farm produce, he will gladly pay more than the market price for ready money. The result will be the same as if he borrowed cash to buy corn for ready money, paying as interest the difference between the cash price and the price payable at a future date. But whether he borrow cash or goods there must be enough left to him for upkeep or he will become bankrupt. The risk of this is the reason why he will be required to pay 20 or 30 per cent profit or interest on the

amount of money or value of the produce or merchandise lent to him.

Again, a master hatter who has capital to carry on his manufacture of hats, either to rent a house, buy beaver, wool, dye, etc. or to pay for the subsistence of his workmen every week, ought not only to find his upkeep in this enterprise, but also a profit like that of the farmer who has his third part for himself. This upkeep and the profit should come from the sale of the hats whose price ought to cover not only the materials but also the upkeep of the hatter and his workmen and also the profit in question.

But a capable journeyman hatter with no capital may undertake the same manufacture by borrowing money and materials and abandoning the profit to anybody who is willing to lend him the money or entrust him with the beaver, wool, etc. for which he will pay only some time later when he has sold his hats. If when his bills are due the lender requires his capital back, or if the wool merchant and other lenders will not grant him further credit he must give up his business, in which case he may prefer to go bankrupt. But if he is prudent and industrious he may be able to prove to his creditors that he has in cash or in hats about the value of what he has borrowed and they will probably choose to continue to give him credit and he satisfied for the present with their interest or profit. In this way he will carry on and will perhaps gradually save some capital by retrenching a little upon his necessities. With the aid of this he will have every year less to borrow, and when he has collected a capital sufficient to conduct his manufacture, which will always be proportionable to his sales, the profit will remain to him entirely and he will grow rich if he does not increase his expenditure.

It is well to observe that the upkeep of such a manufacturer is small compared with the sums he borrows in his trade or with the materials entrusted to him, and therefore the lenders run no great risk of losing their capital if he is respectable and hard working: but as it is quite possible that he is not so the lenders always require from him a profit or interest of 20 to 30 per cent of the value of their loan. Even then only those who have a good opinion of him will trust him. The same inductions may be made with regard to all the masters, artisans, manufacturers and other Undertakers in the state who carry on enterprises in which the capital considerably carry on enterprises in which the capital considerably exceeds the value of their annual upkeep.

But if a water-carrier in Paris sets up as the Undertaker of his own work, all the capital he needs will be the price of two buckets which he can buy for an ounce of silver and then all his gains are profit. If by his labour he gains 50 ounces of silver a year, the amount of his capital or borrowing will be to that of his profit as 1 to 50. That is he will gain 5000 per cent while the hatter will gain only 50 per cent and will also have to pay 20 or 30 per cent to the lender.

Nevertheless a money lender will prefer to lend 1000 ounces of silver to a hatmaker at 20 per cent interest rather than to lend 1000 ounces to 1000 water carriers at 500 per cent interest. The water carriers will quickly spend on their maintenance not only the money they gain by their daily labour but all that which is lent to them. These capitals lent to them are small compared with what they need for their maintenance: whether they be much or little employed they can easily spend all they earn. Therefore it is hardly possible to arrive at the profits of these little undertakers. It might well be that a water carrier gains 5000 per cent of the value of the buckets which serve as his capital, even 10,000 per cent if by hard work he gains 100 ounces of silver a year. But as he may spend on his living 100 ounces just as well as 50, it is only by knowing what he devotes to his upkeep that we can find how much he has of clear profit.

The subsistence and upkeep of Undertakers must always be deducted before arriving at their profit. We have done this in the example of the farmer and of the hatmaker, but it can hardly be determined in the case of the petty

Undertakers, who are for the most part insolvent when they are in debt.

It is customary for the London brewers to lend a few barrels of beer to the keepers of ale-houses, and when these pay for the first barrels to continue to lend them more. If these ale-houses do a brisk business the brewers sometimes make a profit of 500 per cent per annum; and I have heard that the big brewers grow rich when no more than half the ale-houses go bankrupt upon them in the course of the year.

All the merchants in a state are in the habit of lending merchandise or produce for a time to retailers, and proportion the rate of their profit or interest to that of their risk. This risk is always great because of the high proportion of the borrower's upkeep to the loan. For if the borrower or retailer have not a quick turnover in small business he will quickly go to ruin and will spend all he has borrowed on his own subsistence and will therefore be forced into bankruptcy.

The fishwives, who buy fish at Billingsgate in London to sell again in the other quarters of the City, generally pay under a contract made by an expert scrivener, one shilling per guinea, or twenty-one shillings, interest per week, which amounts to 260 per cent per annum. The market-women at Paris, whose business is smaller, pay 5 sols for the week's interest on an ecu of 3 livres, which exceeds 430 per cent per annum. And yet there are few lenders who make a fortune from such high interest.

These high rates of interest are not only permitted but are in a way useful and necessary in a state. Those who buy fish in the streets pay these high interest charges in the increased price. It suits them and they do not feel it. In like manner an artisan who drinks a pot of beer and pays for it a price which enables the brewer to get his 500 per cent profit, is satisfied with this convenience and does not feel the loss in so small a detail.

The Casuists, who seem hardly suitable people to judge the nature of interest and of matters of trade, have invented a term, damnum emergens, by whose aid they consent to tolerate these high rates of interest; and rather than upset the custom and convenience of society, they have agreed and allowed to those who lend at great risk to exact in proportion a high rate of interest: and this without limit, for they would be hard put to it to find any certain limit since the business depends in reality on the fears of the lenders and the needs of the borrowers.

Maritime merchants are praised when they can make a profit on their Adventures, even though it be 10,000 per cent; and whatever profit wholesale merchants may make or stipulate for in Selling on long credit produce or merchandise to smaller retail merchants, I have not heard that the Casuists make it a crime. They are or seem to be a little more scrupulous about loans in hard cash though it is essentially the same thing. Yet they tolerate even these loans by a distinction, lucrum cessans, which they have invented. I understand this to mean that a man who has been in the habit of making his money bring in 500 per cent in his trade may demand this profit when he lends it to another. Nothing is more amusing than the multitude of laws and canons made in every age on the subject of the interest of money, always by wiseacres who were hardly acquainted with trade and always without effect.

From these examples and inductions it seems that there are in a state many classes and channels of interest or profit, that **in the lowest classes interest is always highest in proportion to the greater risk**, and that it diminishes from class to class up to the highest which is that of merchants who are rich and reputed solvent. The interest demanded in this class is called the current rate of interest in the state and differs little from interest on the mortgage of land. The bill of a solvent and solid merchant is as much esteemed, at least for a short date, as a lien upon land, because the possibility of a lawsuit or a dispute on this last makes up for the possibility of the bankruptcy of the merchant.

If there were in a state no Undertakers who could make a profit on the money or goods which they borrow, the use of interest would probably be less frequent than it is. Only extravagant and prodigal people would contract loans. But accustomed as every one is to make use of Undertakers there is a constant source for Loans and therefore for interest. They are the Undertakers who cultivate the land and supply bread, meat, clothes, etc. to all the inhabitants of a city. Those who work on wages for these Undertakers seek also to set themselves up as Undertakers, in emulation of each other. The multitude of Undertakers is much greater among the Chinese, and as they all have lively intelligence, a genius for enterprise, and great perseverance in carrying it out, there are among them many Undertakers who are among us people on fixed wages. They supply labourers with meals, even in the fields. It is perhaps this multitude of small Undertakers and others, from class to class, who finding the means to gain a good deal by ministering to consumption without its being felt by the consumers, keep up the rate of interest in the highest class at 30 per cent while it hardly exceeds 5 per cent in our Europe. At Athens in the time of Solon interest was at 18 per cent. In the Roman Republic it was most commonly 12 per cent, but has been known to be 48, 20, 8, 6, and at the lowest 4 per cent. It was never so low in the free market as towards the end of the Republic and under Augustus after the conquest of Egypt. The Emperor Antoninus and Alexander Severus only reduced interest to 4 per cent by lending public money on the mortgage of land.

Chapter 10 and last
Of the Causes of the Increase and Decrease of the Interest of Money in a State

It is a common idea, received of all those who have written on trade, that the increased quantity of currency in a state brings down the price of interest there, because when money is plentiful it is more easy to find some to borrow. **This idea is not always true or accurate**. For proof it needs only to be recalled that in 1720, nearly all the money in England was brought to London and over and above this the number of notes put out accelerated the movement of money extraordinarily. Yet this abundance of money and currency instead of lowering the current rate of interest which was before at 5 per cent and under, served only to increase the rate which was carried up to 50 and 60 per cent. **It is easy to account for this increased rate of interest** by the principles and the causes of interest laid down in the previous chapter. **The reason is that everybody had become an undertaker in the South Sea scheme and wanted to borrow money** to buy shares, expecting to make an immense profit out which it would be easy to pay this high rate of interest.

If the abundance of money in the state comes from the hands of moneylenders it will doubtless bring down the current rate of interest by increasing the number of money lenders: but if it comes from the intervention of spenders it will have just the opposite effect and will raise the rate of interest by increasing the number of Undertakers who will have employment from this increased expense, and will need to borrow to equip their business in all classes of interest.

Plenty or scarcity of money in a state always raises or lowers the price of everything in bargaining without any necessary connection with the rate of interest, which may very well be high in states where there is plenty of money and low in those where money is scarcer: high where everything is dear, and low where everything is cheap: high in London, low in Genoa.

The rate of interest rises and falls every day upon mere rumours which tend to diminish or increase the security of lenders, without the prices of things in

exchange being affected thereby.

The **most regular cause of a high rate of interest in a state is the great expense of nobles and landowners or other rich people**. Undertakers and master craftsmen are in the custom of supplying the great houses in all their branches of expenditure. These Undertakers have nearly always need to borrow money in order to supply them: and when the nobility consume their revenues in advance and borrow money they contribute doubly to raise the rate of interest.

On the contrary when the nobility of the state live economically and buy at first hand so far as they can, they get through their servants many things without their passing through the hands of Dealers, they diminish the profits and numbers of the Undertakers in the state and therefore of borrowers as well as the rate of interest, because this class of Undertakers working on their own capital borrow the least they can, and contenting themselves with small profits prevent those who have no capital from embarking in these enterprises on borrowed money. Such is today the position of the Republics of Genoa and Holland, where interest is sometimes at 2 per cent or under in the highest class, whilst in Germany, Poland, France, Spain, England and other countries the easiness and expense of noblemen and landowners always keep the Undertakers and master craftsmen of the country accustomed to large profits enabling them to pay a high rate of interest, which is higher still when they import everything from abroad with attendant risk.

When the Prince or the state incurs heavy expense, such as **making war**, the rate of interest is raised for two such as making war, the rate of interest is raised for two reasons: the first is that this multiplies the number of Undertakers by several new large enterprises for war supplies, and so increases borrowing. The second is because of the greater risk which war always involves.

On the contrary **when the war is over** risk diminishes, the number of Undertakers is lessened and war-contractors ceasing to be so retrench their expenses and become lenders of the money they have gained. If now the Prince or state offer to repay part of the debt it will interest, and this will have considerably reduce the rate of interest, and this will have a more assured result if part of the debt can be really paid off without borrowing elsewhere, because the repayments increase the number of lenders in the highest class of interest which will affect all the other classes.

When the plentifulness of money in the state is due to a continuous Balance of trade, this money first passes through the hands of Undertakers, and although it increases consumption **it does not fail to bring down the rate of interest**, because most of the Undertakers then acquire enough capital to carry on their business without money, and even become lenders of the sums they have gained beyond what they need to carry on their trade. If there are not in the state a great number of noblemen and rich people who spend heavily then the abundance of money will certainly bring down the rate of interest, while increasing the price of goods and merchandise in exchange. This is what usually happens in Republics which have neither much capital nor considerable landed property and grow rich merely by foreign trade. But in states which have a large capital and great landowners the money brought in by foreign trade increases their rents, and enables them to incur heavy expenditure which maintains several Undertakers and mechanics besides those who trade with the foreigner. This always keeps interest at a high rate in spite of the abundance of money.

When the nobility and landowners ruin themselves by extravagances, the money lenders who have mortgages on their lands often acquire the absolute ownership of them, and it may well arrive in the state that the lenders are creditors for much more money than there is circulating there, in which case

one may consider them as subaltern owners of the land and goods mortgaged for their security. If not their capital will be lost by bankruptcies.

In the same way one may consider the owners of shares and public funds as subaltern owners of the revenues of the state devoted to payment of their interest. But if the Legislature were compelled by the necessities of the state to employ these revenues for other purposes, the shareholders or owners of public funds would lose everything without the money circulating in the state being diminished on that account by a single liard.

If the Prince or administrators of the state wish to regulate the current rate of interest by law, the regulation must be fixed on the basis of the current market rate in the highest class, or thereabout. Otherwise the law will be futile, because the contracting parties, obedient to the force of competition or the current price settled by the proportion of lenders to borrowers, will make secret bargains, and this legal constraint will only embarrass trade and raise the rate of interest instead of settling it. The Romans of old after several laws to restrict interest passed one to forbid altogether the lending of money. This law had no more success than its predecessors. The law of Justinian to restrain patricians from taking more than 4 per cent, those of a lower order 6 per cent, and traders 8 per cent was equally amusing and unjust, whilst it was not forbidden to make 50 and 100 per cent profit in all sorts of business.

If it is allowable and respectable for a landlord to let a farm to a poor farmer at a high rental, risking the loss of the rent of a whole year, it seems that it should be permissible to a lender to advance his money to a needy borrower, at the risk of losing not only his interest or profit but also his capital, and to stipulate for so much interest as the borrower will freely consent to pay him. It is true that Loans of this character make more people wretched. Making away with both capital and interest they are more impotent to recover themselves than the farmer who does not carry off the land. But the bankruptcy laws being favourable enough to debtors to allow them to start again it seems that usury laws should always be adjusted to market rates, as in Holland.

The current rate of interest in a state seems to serve as a basis and measure for the purchase price of land. If the current interest is 5 per cent or one-twentieth part the price of land should be the same. But as the ownership of land gives a standing and a certain jurisdiction in the state it happens that when interest is one-twentieth part, the price of land is at 1/24 or 1/25, though mortgages on the same land hardly pass the current rate of interest.

After all, the price of land, like all other prices, naturally settles itself by the proportion of sellers to buyers, etc.; and as there will be many more buyers in London, for example, than in the Provinces, and as these buyers who live in the capital will prefer to buy land in their locality rather than in distant Provinces, they will rather buy land in the vicinity at 1/30 or 1/35 than land at a distance 1/25 or 1/22. There are often other reasons of expediency affecting the price of land, unnecessary to mention here, since they do not invalidate our explanations of the nature of interest.

Part Three

Chapter One
On Foreign Trade

When a state exchanges a small product of land for a larger in foreign trade, it seems to have the advantage; and if current money is more abundant there than abroad it will always exchange a smaller product of land for a greater.

When the state exchanges its labour for the produce of foreign land it seems to have the advantage, since its inhabitants are fed at the foreigner's expense.

When a state exchanges its produce conjointly with its labour, for a larger

produce of the foreigner conjointly with equal or greater labour, it seems again to have the advantage.

If the ladies of quality of Paris consume yearly Brussels lace to the value of 100,000 ounces of silver, a quarter of an acre of land in Brabant, which will grow 150 pounds weight of flax, to be made into fine lace in Brussels, will answer this value. This will require the yearly labour of about 2000 people in Brabant for the several parts of the work from the sowing of the flax to the final perfection of the lace. The lace merchant or undertaker at Brussels will advance the capital. He will directly or indirectly pay all the spinners and lace-women and the proportion of the labour of those who make their tools. All those who have taken part in the work will buy, directly or indirectly, their maintenance from the farmer in Brabant who pays in part the rent of his landlord. If in this economy the produce of the land attributed to these 2000 persons be put at 3 arpents per head as well for the maintenance of themselves as for that of their families who subsist in part upon it, there will be 6000 arpents of land in Brabant employed for the support of those who have worked on the lace, at the expense of the ladies of Paris who will pay for and wear the lace.

The ladies of Paris will pay the 100,000 ounces of silver, each according to the amount she has bought. All this silver must be sent to Brussels in specie, less only the cost of remittance, and the entrepreneur at Brussels must find in it not only payment of all his advances and the interest of the money which he has perhaps borrowed, but also a profit on his undertaking for the maintenance of his family. If the price which the ladies pay for the lace does not cover all the costs and profits there will be no encouragement for this manufacture, and the entrepreneurs will cease to carry it on or become bankrupt; but as we have supposed this manufacture is continued, it is necessary that all costs be covered by the prices paid by the ladies of Paris, and the 100,000 ounces of silver sent to Brussels if the people of Brabant take no commodity from France to compensate this debt.

The ladies of Paris will pay 100,000 ounces to him who sells and delivers to them the lace; he will pay them to the banker who will give him one or more bills of exchange on his Brussels corespondent. The banker will remit the money to the wine merchants in Champagne who have 100,000 ounces of silver at Brussels and who will give him their bills of exchange of the same value drawn upon him by his Brussels correspondent. Thus the 100,000 ounces paid for the Champagne wine at Brussels will balance the 100,000 ounces paid for the lace at Paris, and in this way the trouble of sending to Brussels the money received at Brussels will be avoided. This balance is effected by bills of exchange, the nature of which I will try to explain in the next chapter.

Meanwhile this example shows that the 100,000 ounces which the ladies of Paris pay for the lace, come into the hands of the merchants who send Champagne wine to Brussels; and that the 100,000 ounces which the consumers of the Champagne pay for this wine at Brussels fall into the hands of the entrepreneurs or lace merchants. The entrepreneurs on each side distribute this money to those whose labour they employ, either on the wines or on the lace.

It is clear from this that the ladies of Paris support and maintain all those who work on the lace in Brabant and cause money to circulate there, and equally that the consumers of Champagne wine at Brussels support and maintain in Champagne not only the vineyard keepers and others who take part in the production of the wine, the cartwrights, farriers, carters, etc. who take part in the transport, and the horses engaged in it, but that they also pay the value of the produce of the land for the wine, and cause a circulation of money in Champagne.

Nevertheless this circulation or trade in Champagne, which makes so great a

stir, which maintains the keeper of the vineyard, the farmer, the cartwright, the farrier, the carter, etc. and which pays precisely as well the rent of the owner of the vineyard as that of the owner of the pastures which serve to feed the carthorses, is in the present case a burdensome and unprofitable trade to France when considered by the effects that it produces.

If the muid of wine sells at Brussels for 60 ounces of silver and if we suppose one arpent of vine land produces 4 muids there must be sent to Brussels the produce of 4166½ arpents of land to correspond to 100,000 ounces of silver, and about 2000 arpents of pasture and arable for the hay and oats consumed by the cart horses if they are solely employed on this work all the year round. And so there will be about 6000 arpents of land abstracted from the maintenance of Frenchmen, and that of the people of Brabant increased by over 4000 arpents of produce, since the Champagne wine which they drink saves more than 4000 arpents which they would probably use to produce beer for their drink if they did not drink wine. However the lace with which all that is paid for costs the people of Brabant only one quarter of an arpent of flax. Thus with one arpent of produce allied to their labour, the people of Brabant pay for more than 16,000 arpents to the French, their conjoined labour being less. They obtain an increase of subsistence and give only an article of luxury which brings no real advantage to France, since the lace is worn and consumed there and cannot then be exchanged for anything useful. Following the rule of intrinsic values, the land used in Champagne for the production of the wine, the maintenance of the vineyard keepers, the coopers, the cartwrights, farriers, carters, carthorses, etc., ought to be equal to the land used in Brabant for the production of the flax, the support of the spinners and lace makers, and all those who have taken part in the manufacture of this lace.

But if money is more abundant in circulation in Brabant than in Champagne land and labour will be dearer there and consequently, valuing in silver both sides, the French will lose still more considerably.

This is an example of a branch of trade which strengthens the foreigner, lessen the number of inhabitants of the state, and without causing any circulating money to leave it weakens the same state. I have chosen it to show more strikingly how one state may be the dupe of another in trade, and the method of judging the advantages and disadvantages of foreign trade.

It is by examining the results of each branch of commerce singly that foreign trade can be usefully regulated. It cannot be distinctly apprehended by abstract reasons. It will always be found by examining particular cases that the exportation of all manufactured articles is advantageous to the state, because in this case the foreigner always pays and supports workmen useful to the state: that the best returns or payments imported are specie, and in default of specie the produce of foreign land into which there enters the least labour. By these methods of trading states which have very little raw produce are often seen to support inhabitants in great numbers at the expense of foreigners, and large states maintain their inhabitants in greater ease and abundance.

But as great states have no need to increase the number of their inhabitants it is enough to make those who are in it live there on the raw produce of the state with more comfort and ease and to increase the strength of the state for its defence and security. To do so by foreign trade it is needful to encourage as much as possible the export of goods and manufactures of the state in exchange so far as may be for gold and silver in kind. If by abundant harvest it happened that there was in the state much produce over and above the ordinary annual consumption it would be profitable to encourage the exportation of it in return for its value in gold and silver. These metals do not corrupt and disappear like the produce of the land, and with gold and silver one can always import into the state what is lacking there.

It would not however be profitable to put the state into the annual custom of

sending abroad large quantities of its raw produce in return for foreign manufactures. It would be to weaken and diminish the inhabitants and the strength of the state at both ends.

But I have no intention of entering into detail as to the branches of trade which should be encouraged for the good of the state. Enough to say that it should always be endeavoured to import as much silver as possible.

The increase in the quantity of silver circulating in a state gives it great advantages in foreign trade so long as this abundance of money lasts. The state then exchanges a small quantity of produce and labour for greater. It raises its taxes more easily and finds no difficulty in obtaining money in case of public need.

It is true that the continued increase of money will at length by it abundance cause a dearness of land and labour in the state. The goods and manufactures will in the long run cost so much that the foreigner will gradually cease to buy them, and will accustom himself to get them cheaper elsewhere, and this will by imperceptible degrees ruin the work and manufactures of the state. The same cause which will raise the rents of landlords (which is the abundance of money) will draw them into the habit of importing many articles from foreign countries where they can be had cheap. Such are the natural consequences. The wealth acquired by a state through trade, labour and economy will plunge it gradually into luxury. States who rise by trade do not fail to sink afterwards. There are steps which might be, but are not, taken to arrest this decline. But it is always true that when the state is in actual possession of a balance of trade and abundant money it seems powerful, and it is so in reality so long as this abundance continues.

Infinite inductions might be added to justify these ideas of foreign trade and the advantages of abundant money. It is astonishing to observe the disproportion in the circulation of money in England and in China. The manufactures of the Indies, like silks and printed calicoes, muslins, etc. in spite of a sea voyage of 18 months, are at a very low price in England, which would pay for them with the thirtieth part of her articles and manufactures if the Indians would buy them. But they are not so foolish as to pay extravagant prices for our work while work is done better and infinitely cheaper in their own country. So they sell us their manufactures only for ready cash, which we carry to them annually to increase their wealth and diminish our own. The Indian manufactures consumed in Europe only diminish our money and the work of our own manufactures.

An American who sells beaver skins to a European is rightly astonished to learn that woollen hats are as serviceable as those made of beaver, and that all the difference, which causes so long a sea journey, is in the fancy of those who think beaver hats lighter and more agreeable to the eye and the touch. However as these beaver skins are ordinarily paid for to the American in articles of iron, steel, etc. and not in silver, it is a trade which is not injurious to Europe, especially since it supports workmen and particularly sailors, who in the needs of the state are very useful, whilst the trade with the manufactures of the East Indies carries off the money and diminishes the workmen of Europe.

It must be admitted that the East India trade is profitable to the Dutch Republic and that she makes the loss of it fall on the rest of Europe by selling the spices and manufactures in Germany, Italy, Spain and the New World, which return to her all the money which she sends to the Indies and much more. It is even useful to Holland to clothe her women and other folk with the manufactures of India rather than with English or French fabrics. It suits the Dutch better to enrich the Indians than their neighbours who might profit by it to oppress them. Moreover they sell to the other peoples of Europe the cloths and small manufactures of their own raw produce much dearer than they sell the Indian manufactures at home where they are consumed.

England and France would be mistaken to imitate the Dutch in this respect. These kingdoms have at home the means of clothing their women with their own raw material, and though their fabrics are dearer than those of Indian manufacture they should prevent their people from wearing the foreign material. They ought not to permit the falling off of their own articles and manufactures nor become dependent on the foreigner, still less allow their money to be taken away for that purpose.

But as the Dutch find means to sell Indian merchandise in the other states of Europe, the English and French should do the same, whether to diminish the naval power of Holland or to increase their own, and above all to do without the aid of Holland in the branches of consumption which a bad habit has rendered necessary in these kingdoms. It is an evident disadvantage to allow the wearing of Indian fabrics in the kingdoms of Europe which have wherewith to clothe their people with their own products.

Just as it is disadvantageous to a state to encourage foreign manufactures so it is to encourage foreign navigation. When a state sends abroad its articles and manufactures it derives the full advantage if it sends them in its own ships. It then maintains a good number of sailors who are as useful to the state as workmen. But if it leaves the carriage of them to foreign vessels it strengthens the foreign shipping and weakens its own.

Navigation is an essential point in foreign trade. In the whole of Europe the Dutch are those who build ships the cheapest. Timber is floated down to them by river, and the proximity of the north supplies them at less expense with masts, wood, pitch, rope, etc. Their windmills for sawing wood facilitate the working of it. Also they navigate with smaller crews and their sailors live very cheaply. One of their windmills for sawing wood saves the labour of 80 men a day.

Owing to these advantages they would be the only sea carriers in Europe if cheapness only were followed. And if they had enough of their own raw material to form an extensive commerce they would doubtless have the most flourishing maritime service in Europe. But the greater number of their seamen does not suffice without the interior strength of the state, for the superiority of their naval power. They would never arm warships nor sailors if the state had large revenues to build the ships and pay the men: they would profit in everything from extended markets.

England, in order to prevent the Dutch from increasing at her expense their advantage on the sea by this cheapness, has forbidden any nation from bringing into England other merchandise than that of their own growth. In this way, the Dutch being unable to serve as carriers for England, the English have strengthened their own shipping. And though they sail at greater costs than the Dutch the wealth of their overseas cargoes renders these costs less considerable.

France and Spain are maritime states which have rich produce sent to the north, whence goods and merchandise are brought to them. It is not surprising that their shipping is inconsiderable in proportion to their produce and the extent of their seaboard, since they leave it to foreign vessels to bring them all they receive from the north and to take away from them the goods which the states of the north receive from them.

These states, France and Spain, do not take into account in their policy the consideration of trade in the way in which it would be advantageous. Most merchants in France and Spain who have to do with the foreigner are rather agents or clerks of foreign merchants than adventurers carrying on the trade on their own account.

It is true that the states of the north are, by their situation and the vicinity of countries which produce all that is needed for building ships, in a position to carry everything cheaper than France and Spain could do. But if these two

kingdoms took steps to strengthen their shipping, this obstacle would not prevent them. England has long since partly shown them the example. They have at home and in their colonies all that is needed for the construction of ships, or at least it would not be difficult to get them produced there, and there is an infinity of methods that might be used to make such a policy successful if the legislature or the ministry would concur in it. My subject does not allow me in this essay to examine these methods in detail. I will limit myself to saying that in countries where trade does not regularly support a considerable number of ships and sailors it is almost impossible for the prince to maintain a flourishing navy without such expense as would be capable by itself of ruining the treasure of his state.

I will conclude than by observing that the trade most essential to a state for the increase or decrease of its power is foreign trade, that the home trade is not of equally great importance politically, that foreign trade is only half supported when no care is taken to increase and maintain large merchants who are natives of the country, ships, sailors, workmen and manufacturers, and above all that care must always be taken to maintain the balance against the foreigner.

Chapter II
Of the Exchanges and their Nature

Inside the city of Paris the carriage of money from one house to another usually costs 5 sols per bag of 1000 livres. If it were necessary to carry it from the Fauxbourg St. Antoine to the Invalides it would cost more than twice as much, and if there were not generally trustworthy porters of money it would cost still more. If there were often robbers on the road the money would be sent in large amounts, with an escort, at greater cost, and if some one charged himself with the transport at his own cost and risks he would require payment for it in proportion to these costs and risks. So it is that the expense of transport from Rouen to Paris and from Paris to Rouen amounts generally to 50 sols per bag of 1000 livres which in the language of the bankers is 1/4 percent. The bankers generally send the money in strong kegs which robbers can hardly carry off because of the iron and the weight, and as there are always mail coaches on this route the costs are not considerable on the large sums sent between these two places.

If the city of Chalons sur Marne every year pays the receiver of the King's taxes, 10,000 ounces of silver on the one hand, and on the other the wine merchants of Chalons and its neighbourhood sell to Paris, through their agents, Champagne wine of the value of 10,000 ounces of silver, if the ounce of silver in France passes in trade for 5 livres, the total of the 10,000 ounces in question will be 50,000 livres both in Paris and in Chalons.

The Receiver of Taxes in this example has 50,000 livres to send to Paris, and the agents of the Chalons wine merchants have 50,000 livres to send to Chalons. This double transaction or transport may be avoided by a set off or as they are called bills of exchange, if the parties get together and arrange it.

Let the agents of the Chalons wine-merchants take (each his own part) the 50,000 livres to the cashier of the Tax Office at Paris. Let him give them one or more cheques or bills of exchange on the Receiver of Taxes at Chalons, payable to their order. Let them endorse or transfer their order to the Chalons wine merchants and these will obtain from the Receiver at Chalons the 50,000 livres. In this way the 50,000 livres at Paris will be paid to the Cashier of the Tax department at Paris and the 50,000 livres at Chalons will be paid to the wine merchants of that City, and by exchange or set off there will be saved the trouble of sending this money from one city to the other. Or else let the wine merchants at Cahlons,who have 50,000 livres at Paris, go and offer their bills of exchange to the Receiver of Taxes, who will endorse them to the cashier of

the tax office at Paris who will collect the amount there, and let the Receiver at Chalons pay the merchants for their bills of exchange the 50,000 livres which he has at Chalons. Whichever way this set off is effected, whether the bills of exchange be drawn from Paris, as in this example ounce for ounce is paid, and 50,000 livres for 50,000 livres, the exchange is said to be at par.

The same method might be adopted between these wine merchants at Chalons and the agents of the nobility in Paris who have land in the Chalons district, and the wine merchants or other merchants at Chalons who have sent goods or merchandise to Paris and have money there and other merchants who have drawn merchandise from Paris and sold it at Chalons. If there is a large trade between these two cities bankers will set up at Paris and Chalons who will enter into relations with the interested parties on both sides and will be the agents or intermediaries for the payments which would have to be sent from one of these cities to the other. Now if all the wine and other goods and merchandise which have been sent from Chalons to Paris and have actually been sold there for ready money exceed in value the total receipts of the taxes at Chalons, and the rents which the nobility of Paris have in the Chalons district as well as the value of the goods and merchandise sent from Paris to Chalons and sold there for ready money, by 5000 ounces of silver or 25,000 livres it will be necessary for the banker in Paris to send there for ready money, by 5000 ounces of silver or 25,000 livres it will be necessary for the banker in Paris to send this amount to Chalons in money. This will be the excess or balance of trade between these two cities. It will, I say, be of necessity sent to Chalons in specie, and this operation will be carried out in the following way or in some similar fashion.

The agents or correspondents of the wine merchants of Chalons and of others who have sent goods or merchandise from Chalons to Paris have the money for these sales in hand at Paris. They are ordered to remit it to Chalons. They are not accustomed to risk it by carriage, they will apply to the cashier to the Tax Office who will give them cheques or bills of exchange on the Receiver of Taxes at Chalons up to the amount which he has at Chalons, and generally at par. But as they need to send further sums to Chalons they will apply to the banker who will have at his disposal the rents of the Paris nobility who have lands in that district. This banker will furnish them, like the Cashier of the Tax Office, with bills of exchange on his correspondent at Chalons up to the amount of the funds which he has at his disposal at Chalons and had been ordered to bring to Paris. This set off will also be made at par, unless the banker tries to make some little profit out of it for his trouble, as well from the agents who apply to him to send their money to Chalons as from the nobility who have charged him with the transmission of their money from Chalons to Paris. If the banker has also at his disposal at Chalons the value of the merchandise sent thither from Paris and sold there for ready money he will also furnish letters of exchange for this value.

But in our case supposed the agents of the Chalons merchants have still in hand at Paris 25,000 livres which they are ordered to remit to Chalons above all the sums mentioned above. If they offer this money to the Cashier of the Tax Office he will reply that he has no more funds at Chalons, and cannot supply them with bills of exchange or cheques on that city. If they offer the money to the banker he will tell them that he has no more funds at Chalons and has no need to draw, but if they will pay him 3 per cent for exchange he will provide cheques. They will offer one or two per cent and at last 2½, not being able to do better. At this price the Banker will decide to give them bills of exchange, that is if they pay to him at Paris 2 livres 10 sols he will supply a bill of exchange for 100 livres on his Chalons correspondent, payable at 10 or 15 days, so as to put his correspondent in a position to make the payment of the 25,000 livres for which he draws upon him. At this rate of exchange he will

send him the money by mail or carriage in specie, gold or, in default of gold, silver. He will pay 10 livres for each bag of 1000 livres, or in bank parlance 1 per cent. He will pay his Chalons correspondent as commission 5 livres per bag of 1000 livres or ½ per cent, and will keep one per cent for his own profit. On this footing the exchange at Paris for Chalons is at 2½ per cent above par, because one pays 2 livres 10 sols for each 100 livres as the commission on exchange.

It is somewhat in this way that the balance of trade is transported from one city to the other through bankers, and generally on a large scale. All those who bear the name of bankers are not accustomed to these transactions and many of them deal only in commissions and bank speculations. I will include among bankers only those who remit money. It is they who always fix the exchange, the charge for which follows the cost and risks of the carriage of specie in the different cases.

The charge of exchange between Paris and Chalons is rarely fixed at more than 2½ or 3 per cent over or under par. But from Paris to Amsterdam the charge will amount to 5 or 6 per cent when specie has to be sent. The journey is longer, the risk is greater, more correspondents and commission agents are involved. From India to England the charge for carriage will be 10 to 12 per cent. From London to Amsterdam it will hardly exceed 2 per cent in peace time.

In our present example it will be said that the exchange at Paris for Chalons will be 2½ per cent above par, and at Chalons it will be said that the exchange for Paris is 2½ per cent below par, because in these circumstances he who will give money at Chalons for a letter of exchange for Paris will give only 97 livres 10 sols to receive 100 livres at Paris. And it is evident that the City or Place where exchange is above par is in debt to that where it is below par so long as the exchange continues on this basis. Exchange at Paris is 2½ per cent above par for Chalons only because Paris is indebted to Chalons and that the money for this debt must be carried from Paris to Chalons. This is why when exchange is commonly seen to be below par in one city as compared with another it may be concluded that this first city owes a balance of trade to the other, and that when the exchange at Madrid or Lisbon is above par for all other countries it shows that these two capitals must send specie to other countries.

In all places and cities which use the same money and the same gold and silver specie like Paris and Chalons sur Marne, London and Bristol, the charge for exchange is known and expressed by giving and taking so much per cent above or below par. When 98 livres are paid in one place to receive 100 livres in another it is said that exchange is about 2 per cent below par when 102 livres, are paid in one place to receive only 100 livres in another it is said that the exchange is exactly 2 per cent above par, when 100 livres are given in one place for 100 livres in another it is said that the exchange is at par. There is no difficulty or mystery in all this.

But when exchange is regulated between two cities or places where the money is quite different, where the coins are of different size, fineness, make, and names, the nature of exchange seems at first more difficult to explain, though at bottom this exchange differs from that between Paris and Chalons only in the jargon of bankers. At Paris one speaks of the Dutch exchange by reckoning the ecu of three livres against so many deniers de gros of Holland, but the parity of exchange between Paris and Amsterdam is always 100 ounces of gold or silver against 100 ounces of gold or silver of the same weight and fineness. 102 ounces paid at Paris to receive 100 ounces at Amsterdam always comes to 2 per cent above par. The banker who effects the remittance of the balance of trade must always know how to calculate parity. But in the language of foreign exchange the price of exchange at London with Amsterdam is made

by giving a pound sterling in London to receive 35 Dutch escalins at the bank: with Paris in giving at London 30 deniers or pence sterling to receive at Paris one ecu or three livres tournois. These methods of speech do not say whether exchange is above or below par, but the banker who remits the balance of trade reckons it up well and knows how much foreign money he will receive for the money of his own country which he despatches.

Whether we fix the exchange at London for English silver in Muscovy roubles, in Mark Lubs of Hamburg, in Rixdollars of Germany, in Livres of Flanders, in Ducats of Venice, in Piastres of Genoa or Leghorn, in Millreis or Crusadoes of Portugal, in Pieces of Eight of Spain, or Pistoles, etc. the parity of exchange for all these countries will be always 100 ounces of gold or silver against 100 ounces; and if in the language of exchange it happens that one gives more or less than this parity, it comes to the same in effect as if exchange is said to be so much above or below par, and we shall always know whether or not England owes a balance to the place with which the exchange is settled just as in our example of Paris and Chalons.

Chapter 3
Further explanations of the nature of the Exchanges

We have seen that the exchanges are regulated by the intrinsic value of specie, that is at par, and their variation arises from the costs and risks of transport from one place to another when the valance of trade has to be sent in specie. Argument is unnecessary in a matter which we see in fact and practice. Bankers sometimes introduce refinements into this practice.

If England owes France 100,000 ounces of silver for the balance of trade, if France owes 100,000 ounces to Holland, and Holland 100,000 to England, all these three amounts may be set off by bills of exchange between the respective bankers of these three states without any need of sending silver on either side.

If Holland sends to England in January merchandise of the value of 100,000 ounces of silver and England only sends to Holland in the same month merchandise to the value of 50,000 ounces (I suppose the sale and payment made in January on both sides) there will be due to Holland in this month a balance of trade of 50,000 ounces, and the exchange on Amsterdam will be in London in January 2 or 3 per cent above par, or in the language of exchange, the exchange on Holland which was in December at par or at 35 escalins to the pound sterling in London will rise there in January to about 36 escalins. But when the Bankers have sent this balance of 50,000 ounces to Holland the exchange on Amsterdam will naturally fall back to par or 35 escalins in London.

But if an English banker foresees in January, owing to the sending into Holland of an unusual quantity of merchandise, that at the time of payments and sales in March Holland will be indebted considerably to England, he may instead of sending the 50,000 ecus or ounces due in January to Holland, furnish in that month bills of exchange on his Amsterdam correspondent payable at double usance or two months, the amount of the value to be paid on maturity, and by this method profit on the exchange which in January was above par and in March will be below par, and so gain doubly without sending a sol to Holland.

This is what bankers call speculation, which often causes variations in the exchanges for a short period independently of the balance of trade; but in the long run we must get back to this balance which fixes the constant and uniform rule of exchange. And though the speculations and credits of bankers may sometimes delay the transport of the sums which one city or state owes to another, in the end it is always necessary to pay the debt and send the balance of trade in specie to the place where it is due.

If England gains regularly a balance of trade with Portugal and always loses a balance with Holland the rates of exchange with Holland and Portugal will make this evident: it will be seen that at London the exchange on Lisbon is below par and that Portugal is indebted to England. It will be seen also that the exchange on Amsterdam is above par and that England is indebted to Holland. But the quantity of the debt cannot be seen from the exchanges. It will not be seen whether the balance of silver drawn from Portugal will be greater or less than what has to be sent to Holland.

There is however one thing which will always show at London whether England gains or loses the general balance of her trade (by general balance is understood the difference of the individual balances with all the foreign states which trade with England), and that is the price of gold and silver metal but especially of gold (now that the proportion between gold and silver in coined money differs from the market rate, as will be explained in the next chapter). If the price of gold metal in the London market, which is the centre of English trade, is lower than the price at the Tower where guineas or gold coins are minted, or at the same price as these coins intrinsically, and if gold metal is taken to the Tower in exchange for their value in guineas or minted coins, it is a certain proof that England is a gainer in the general balance of her trade. It proves that the gold taken from Portugal suffices not only to pay the balance which England sends into Holland, Sweden, Muscovy, and the other states where she is indebted, but that there remains some of the gold to be sent to the Mint, and the quantity or sum of this general balance of trade is known from that of the specie coined at the Tower of London.

But if the gold metal is sold in the London market above the Tower price, which is usually £3.18.0 an ounce, the metal will no longer be taken to the Mint, and this is a certain sign that so much gold is not drawn from abroad (from Portugal for instance) as must be sent into the other countries where England is indebted. It is a proof that the general balance of trade is against England. This would not be known but for the prohibition in England to send gold coin out of the country. But this prohibition is the reason why the timid London bankers prefer to buy gold metal (which they are allowed to send abroad) at £3.18.0 up to £4 an ounce for export rather than send out guineas or gold coins at £3.18.0 against the law and at the risk of confiscation. Some of them take this risk, others melt the gold coins to send them out as bullion, and it is impossible to judge how much gold England loses when the general balance of trade is against her.

In France the cost of minting is deducted, usually 1½ per cent, i.e. the price for coin is always higher than for uncoined metal. To know whether France loses in the general valance of her trade, it will suffice to know whether the bankers send French coins abroad. If they do so it is a proof that they do not find bullion to buy for export, since the bullion though at a lower price than coined money in France, is of greater value than these coins in foreign countries by at least 1½ per cent.

Though the exchanges rarely vary apart from the balance of trade between one country and others, and though this balance is naturally the mere difference in value of the goods and merchandise which the state sends to other countries and receives from them, yet there are often circumstances and accidental causes which cause considerable sums to be conveyed from one state to another without any question of merchandise or trade, and these causes affect the exchanges just as the balance of trade would do.

Such are the sums of money which one state sends into another for its secret services and political aims, for subsidies to allies, for the upkeep of troops, Ambassadors, noblemen who travel, etc., capital which the inhabitants of one state send to another to invest in public or private funds, the interest which these inhabitants receive annually from such investments, etc. The exchanges

vary with all these accidental causes and follow the rule of the transport of silver required. In considering the balance of trade matters of this kind are not separated, and indeed it would be very difficult to separate them. They have very certainly an influence on the increase and decrease of circulating money in a state and on its comparative strength and power.

My subject does not allow me to enlarge on the effects of these accidental causes: I confine myself always to the simple views of commerce lest I should complicate my subject, which is too much encumbered by the multiplicity of the facts which relate to it.

Exchanges rise more or less above par in proportion to the great or small costs and risks of the transport of money and this being granted they naturally rise much more above par in the cities or states where it is forbidden to export money than in those where its export is free.

Suppose that Portugal consumes regularly every year considerable quantities of woollen and other manufactures of England, as well for its own people as for those of Brazil, that it pays for them partly in wine, oils, etc., but for the surplus payment there is a regular balance of trade remitted from Lisbon to London. If the King of Portugal rigorously prohibits under penalty not only of confiscation but of life the transport of any gold or silver metal out of his States, the terror of this prohibition will in the first place stop the Bankers from meddling about sending the balance. The price of the English manufactures will be kept in hand at Lisbon. The English merchants unable to receive their funds from Lisbon will send no more cloth thither. The result will be that cloth will become extraordinarily dear. Though their price has not gone up in England they cease to be sent to Lisbon because their value cannot be recovered. To have these cloths the Portuguese nobility and others who cannot do without them will offer twice the usual price, but as they cannot get enough of them without sending money out of Portugal, the increased price of cloth will become the profit of any one who in spite of the prohibition will export gold or silver. This will encourage various Jews and others to take gold and silver to English vessels in the port of Lisbon, even at the risk of their lives. They will gain at first 100 or 50 per cent in this traffic and this profit is paid by the Portuguese in the high price they give for the cloth. They will gradually familiarise themselves with this manoeuvre after having often practised it successfully, and at length money will be seen to be put on board English ships for a payment of 2 or 1 per cent.

The King of Portugal lays down the law or prohibition. His subjects, even his courtiers, pay the cost of the risk run to circumvent and elude it. No advantage then is gained by such a law, on the contrary it causes a real loss to Portugal since it causes more money of the state to go abroad than if there were no such law.

For those who gain by this manoeuvre, whether Jews or others, send their profits abroad, and when they have enough of them or when they take fright they often themselves follow their money.

If some of these lawbreakers were taken in the act, their goods confiscated and their lives forfeited, this circumstance and execution instead of stopping the export of money would only increase it, because those who formerly were satisfied with 1 or 2 per cent for exporting money will ask 20 or 50 per cent, and so the export must always go on to pay the balance.

I do not know whether I have succeeded in making these reasons clear to those who have no idea of trade. I know that for those who have practical knowledge of it nothing is easier to understand, and that they are rightly astonished that those who govern states and administer the finances of great kingdoms have so little knowledge of the nature of exchanges as to forbid the export of bullion and specie of gold and silver.

The only way to keep them in a state is so to conduct foreign trade that the

balance is not adverse to the state.

Chapter 4
Of the variations in the proportion of values with regard to the metals which serve as money

If metals were as easily found as water commonly is everybody would take what he wanted of them and they would have hardly any value. The metals which are most plentiful and cost the least trouble to produce are also the cheapest. Iron seems the most necessary, but as it is commonly found in Europe with less trouble and labour than copper it is much cheaper.

Copper, silver, and gold are the three metals in general use for money. Copper mines are the most abundant and cost less in land and labour to work. The richest copper mines today are in Sweden. 80 ounces of copper are needed there to pay for an ounce of silver. It is also to be observed that the copper extracted from some mines is more perfect and lustrous than what is obtained from others. The copper of Japan and Sweden is brighter than that of England. That of Spain was, in the time of the Romans, better than that of Cyprus. But gold and silver, from whatever mine extracted, are always of the same perfection when refined.

The value of copper, as of everything else, is proportionable to the land and labour which enter into its production. Beside the ordinary uses to which it is put, like pots and pans, kitchen utensils, locks, etc. it is in nearly all states used as money in small purchases. In Sweden it is used even in large payments when silver is scarce there. During the first five centuries of Rome it was the only money. Silver only began to be employed in exchange in the year 484. The ratio of copper to silver was then rated in the mints at 72 to 1: in the coinage of 512 at 80 to 1: in 537, 64 to 1: in 586 at 48 to 1; in 663 by Drusus and 672 by Sulla at 53 to 1: in 712 by Marcus Antonius and 724 by Augustus 56 to 1: in AD 54 under Nero 60 to 1: in 160 AD under Antoninus 64 to 1; in the time of Constantine AD 330, 120 and 125 to 1: in the age of Justinian about AD 550 at 100 to 1. Since then it has always varied below the ratio of 100 to 1 in the European mints.

Today when copper money is only used in small dealings, whether alloyed with calamine to make yellow copper as in England, or with a small portion of silver as in France and Germany it is generally rated in the, proportion of 40 to 1, though the market price of copper is ordinarily to that of silver as 80 or 100 to 1. The reason is that the cost of coining is generally deducted from the weight of the copper. When there is not too much of this small money for effecting the petty exchanges in the state, coins of copper or copper and alloy pass without difficulty in spite of their defect in intrinsic value . But when it is attempted to pass them in a foreign country they will only be taken at the weight of the copper and the silver alloy. Even in states where through the avarice or ignorance of the governors, currency is given to too great a quantity of this small cash for the transaction of small dealings, and it is ordered that it should be received up to a certain limit in large payments it is unwillingly accepted and small cash is at a discount in silver coin, as in the token money and Ardites in Spain in large, payments. Yet small coins always pass without difficulty in small purchases, the value of the payments being usually small in themselves the loss is still less. This is why they are accepted without difficulty, and that copper is exchanged for small silver coins above the weight and intrinsic value of copper in the state itself, but not in other states, each state having wherewith to carry on its small dealings with its own copper coins.

Gold and silver, like copper, have a value proportionable to the land and labour necessary for their production; and if the public assumes the cost of minting these metals their value in bars and in coin is identical, their market

value and their mint value is the same, their value in the state and in foreign countries is always alike, depending on the weight and fineness, that is on weight alone if the metals are pure and without alloy.

Silver mines have always been found more abundant than those of gold, but not equally in all countries or at all times. Several ounces of silver have always been needed to buy one ounce of gold, sometimes more sometimes less according to the abundance of these metals and the demand for them. In the year AUC 310, 13 ounces of silver were needed in Greece to buy an ounce of gold, i.e. gold was to silver as 1 to 13: AUC 400 or thereabouts 1 to 12, AUC 460 1 to 10 in Greece, Italy and the whole of Europe. This ratio of 1 to 10 seems to have persisted for 3 centuries to the death of Augustus, AUC 767 or AD 14. Under Tiberius gold became scarce or silver more plentiful, and the ratio gradually rose to 1 to 12, 12½, and 13. Under Constantine AD 330 and Justinian AD 550 it was 1 to 14. Later history is more obscure. Some authors think it was 1 to 18 under certain French kings. In AD 840 under Charles the Bald gold and silver coins were struck at 1 to 12. Under St Louis, who died in 1270 the ratio was 1 to 10: in 1361, 1 to 12: in 1421 over 1 to 11: in 1500 under 1 to 12: about 1600, 1 to 12: in 1641, 1 to 14: in 1700, 1 to 15: in 1730, 1 to 14½.

The quantity of gold and silver brought from Mexico and Peru in the last century has not only made these metals more plentiful but has increased the value of gold compared with silver which has been more abundant, so that in the Spanish mints, following the market prices, the ratio is fixed at 1 to 16. The other States of Europe have followed pretty closely the Spanish price in their Mints, some at 1 to 15, others at 15 7/8, 15 5/8, etc. following the ideas and views of the Directors of the Mints. But since Portugal has drawn great quantities of gold from Brazil the ratio has commenced to fall again if no in the Mints at least in the markets, and this gives a greater value to silver than in the past. Moreover a good deal of gold is often brought from the East Indies in exchange for the silver taken thither from Europe, because the ratio is much lower in India.

In Japan where there are a good many silver mines the ratio of gold to silver is today 1 to 8: in China 1 to 10: in the other countries of the Indies on this side 1 to 11, 1 to 12, 1 to 13, and 1 to 14 as we get nearer to the West and to Europe. But if the mines of Brazil continue to supply so much gold the ratio may probably fall eventually to 1 to 10 even in Europe which seems to me the most natural if anything but chance is the guide to the ratio. It is quite certain that when all the gold and silver mines in Europe, Asia and Africa were the most exploited for the Roman republic the ratio of 1 to 10 was the most constant. If all the gold mines regularly produced a tenth part of what the silver mines produce, it could not be determined that for that reason the ratio between these two metals would be as 1 to 10. The ratio would always depend on the demand and on the market price. Possibly rich people might prefer to carry gold money in their pockets rather than silver and might develope a taste for gildings and gold ornaments rather than silver, thus increasing the market price of gold.

Neither could the ratio between these metals be arrived at by considering the quantity of them found in a state. Suppose the ratio 1 to 10 in England and that the quantity of gold and silver in circulation there were 20 million ounces of silver and 2 million ounces of gold, that would be equal to 40 million ounces of silver, and suppose that 1 million ounces of gold be exported from England out of the 2 millions, and 10 million ounces of silver brought in in exchange, there would then be 30 million ounces in of silver and only 1 million ounces of gold, still equivalent in all to 40 million ounces of silver. If the quantity of ounces be considered there are 30 millions of silver and 1 million of gold, and therefore if the quantity of the two metals decided the ratio it would be as 1 to

30, but that is impossible. The ratio in the neighbouring countries is 1 to 10, and it would therefore cost only 10 million ounces of silver with a trifle for the cost of carriage to bring back to the state 1 million ounces of gold in exchange for 10 million ounces of silver.

To judge then of the ratio between gold and silver the market price is alone decisive: the number of those who need one metal in exchange for the other, and of those who are willing to make such an exchange, determines the ratio. It often depends on the humour of men: the bargaining is done roughly and not geometrically. Still I do not think that one can imagine any rule but this to arrive at it. At least we know that in practice it is the one which decides, as in the price and value of everything else. Foreign markets affect the price of gold and silver more than they do the price of any other goods or merchandise because nothing is transported with greater ease and less injury. If there were a free and regular trade between England and Japan, if a number of ships were regularly employed in this trade and the balance of trade were in all respects equal, i.e. if as much merchandise were always sent from England to Japan, having regard to price and value, as was imported from Japan, it would end in drawing at last all the gold from Japan in exchange for silver, and the ratio between gold and silver in Japan would be made the same as it is in England, subject only to the risks of navigation; for in our hypothesis the costs of the voyage would be supported by the trade in merchandise.

Taking the ratio at 1 to 15 in England and 1 to 8 in Japan there would be more than 87 per cent to gain by carrying silver from England to Japan and bringing back gold. But this difference is not enough in the ordinary course to pay the costs of so long and difficult a voyage.

It pays better to bring back merchandise from Japan rather than gold in exchange for silver. It is only the costs and risks of the transport of gold and silver which can leave a difference in the ratio between these metals in different states: in the nearest state the ratio will differ very little, there will be a difference from one state to another of 1, 2 or 3 per cent and from England to Japan the total of all these differences of ratio will amount to more than 87 per cent.

It is the market price which decides the ratio of the value of gold to that of silver. The market price is the base of this proportion in the value assigned to coins of gold and silver. If the market price varies considerably, that of the coinage must be reformed to follow the market rate. If this be not done confusion and disorder set in in the circulation, and coins of one or the other metal will be taken above the Mint value. There are an infinity of examples of this in antiquity. There is a quite recent one in England under the regulations made at the London Mint. The ounce of silver, eleven twelfths fine, is worth there 5s 2d sterling. Since the ratio of gold to silver (which had been fixed at 1 to 16 in imitation of Spain) has fallen to 1 to 15 and 1 to 14½, the ounce of silver sold at 5s 6d sterling, while the gold guinea continued to circulate at 2 1s 6d sterling, which caused the export from England of all the silver crowns, shillings and sixpences which were not worn by circulation, silver money became so scarce in 1728 (though only the most worn pieces remained) that people had to change a guinea at a loss of nearly 5 per cent. The trouble and confusion thus produced in trade and circulation obliged the Treasury to request the celebrated Sir Isaac Newton, Master, of the Tower Mint, to make a Report on the measures he thought most suitable to remedy this disorder.

There was nothing easier. It was only necessary to follow the market price of silver in coining silver at the Tower. And whereas the ratio of gold to silver was of old time by the laws and regulations of the Tower Mint 1 to 15¾, it was only necessary to make the silver coins lighter in the proportion of the market price which had fallen below 1 to 15; and, to anticipate the variation which the gold of Brazil brings about annually in the ratio between these two metals, it

might even have been possible to fix it on the footing of 1 to 14½, as was done in 1725 in France and as they will be forced later to do in England itself.

It is true that the coinage in England might equally have been adjusted to the market price and ratio by diminishing the nominal value of gold coins. This was the policy adopted by Sir Isaac Newton in his Report, and by Parliament in consequence of this Report. But, as I shall explain, it was the least natural and the most disadvantageous policy. Firstly it was more natural to raise the price of silver coins, because the public had already done so in the market, the ounce of silver which was worth only 62d sterling at the Mint being worth more than 65d in the market, and all the silver money being exported except what the circulation had considerably reduced in weight. On the other hand it was less disadvantageous to the English nation to raise the silver money than to lower the gold money considering the sums which England owes the foreigner.

If it is supposed that England owes the foreigner 5 millions sterling of capital, invested in the public funds, it may be equally supposed that the Foreigner paid this amount in gold at the rate of 21s 6d a guinea or in silver at 65d sterling the ounce, according to the market price.

These 5 millions have therefore cost the Foreigner at 21s 6d the guinea 4,651,163 guineas; but now that the guinea is reduced to 21s the capital to be repaid is 4,761,904 guineas, a loss to England of 110,741 guineas, without counting the loss on the interest annually paid.

Newton told me in answer to this objection that according to the fundamental laws of the Kingdom silver was the true and only monetary standard and that as such it could not be altered.

It is easy to answer that the public having altered this Law by custom and the price of the market it had ceased to be a law, that in these circumstances there was no need to adhere scrupulously to it to the detriment of the nation and to pay to foreigners more than their due. If the gold coins were not considered true money, gold would have supported the variation, as in Holland and China where gold is looked upon rather as merchandise than money. If the silver coins had been raised to their market price without touching gold there would have been no loss to the foreigner, and there would have been plenty of silver coins in circulation. They would have been coined at the Mint, whereas now no more will be coined until some new arrangement is made.

By reducing the value of gold (brought about by Newton's Report from 21s 6d to 21s) the ounce of silver which was sold in the London market before at 65 pence and 65½ pence no longer sold in truth but at 64d. But as it was coined at the Tower the ounce was valued in the market at 64d and if it was taken to the Tower to be coined it would be worth no more than 62d. So no more is taken. A few shillings or fifths of crowns have been struck at the expense of the South Sea Company, losing the difference of the market price; but they disappeared as soon as they were put into circulation. Today no silver coins can be seen in circulation if they are of full mint weight, only coins which are worn and do not exceed in weight the market price.

However the value of silver continues to rise imperceptibly in the market. The ounce which was worth only 64 after the reduction of which we have spoken has risen again to 65½ and 66 in the market; and in order to have silver coin in circulation and coined at the Tower, it will be necessary again to reduce the value of the gold guinea from 21s to 20s and to lose to the foreigner double of what is lost already unless it is preferred to follow the natural course and to adjust silver coin to the market price. Only the market price can find the ratio of the value of gold and silver as of all other values. Newton's reduction of the guinea to 21s was devised only to prevent the disappearance of the light and worn coins which remain in circulation, and not to fix in gold and silver coins the true ratio of their price, I mean by their true ratio that which is fixed by market prices. This price is always the touchstone in these matters. Its

variations are slow enough to allow time to regulate the mints and prevent disorders in the circulation.

In some centuries the value of silver rises slowly against gold, in others the value of gold rises against silver. This was the case in the age of Constantine who reduced all values to that of gold as the more permanent; but the value of silver is generally the more permanent and gold is more subject to variation.

Chapter V
Of the augmentation and diminution of coin in denomination

According to the principles we have established the quantity of money circulating in exchange fixes and determines the price of everything in a State taking into account the rapidity or sluggishness of circulation.

We often see however in the increases and decreases practised in France such strange variations that it might be supposed that market prices correspond rather to the nominal value of coin than to its quantity in exchange, the quantity of livres tournois in money of account rather than the quantity of marks and ounces, which seems directly opposed to our principles.

Suppose, as happened in 1714, ecu is current for 5 livres and the King Arret which orders the lowering of the ecu for 20 months, viz 1 per cent per month to nominal value to 4 livres instead of 5. Let us see will be naturally the consequences of this having regard to the spirit of the Nation.

All those who owe money will make haste to pay it during the diminutions so as not to lose by them. Undertakers and Merchants find it easy to borrow which decides the least able and the least increase their enterprise. They borrow money, as fancy, without interest and load themselves with violence of their demands. Vendors have getting rid of their merchandise for money which diminish in their hands in nominal value. They towards foreign merchandise and import considerable quantities of it for the consumption of several years. All this causes money to circulate more rapidly and raises the price of everything. Then high prices prevent the foreigner from taking merchandise from France as usual. France keeps her own merchandise and at the same time imports great quantities. This double operation is the reason why considerable amounts of specie must be sent abroad to pay the balance.

The rate of exchange never fails to show this disadvantage. Exchange is commonly seen at 6 and 10 per cent against France during these diminutions. Enlightened people in France hoard their money in these times. The King finds means to borrow much money on which he willingly loses the diminution, proposing to compensate himself by an augmentation at the end of the diminution.

With this object after several diminutions they begin to hoard money in the King's Treasury, to postpone the payments, pensions, and army pay. In these circumstances money becomes extremely rare at the end of the diminutions both by reason of the sums hoarded by the King and various individuals and by reason of the nominal value of the coin, which value is diminished. The amounts sent abroad also contribute greatly to the scarcity of money, and this scarcity gradually brings it about that the merchandise with which the undertakers are loaded up is offered at 50 or 60 per cent below the prices prevailing at the time of the first diminutions. Circulation falls into convulsions. Hardly enough money can be found to send to market. Many Undertakers and Merchants go bankrupt and their merchandise is sold at bargain prices.

Then the King augments anew the coinage, settles the new ecu or ounce of silver of the new issue at 5 livres, begins with this new coinage to pay the troops and the pensions. The old coinage is demonetised and received at the Mint at a lower nominal value. The King profits by the difference.

But all the sums of new coinage which come from the Mint do not restore the abundance of money in circulation. The amounts kept hoarded by individuals and those sent abroad greatly exceed the nominal increase on the coinage which comes from the Mint.

The cheapness of merchandise in France begins to draw thither the money of the foreigner, who finding it 50 or 60 or more per cent cheaper sends gold and silver metal to France to buy it. In this way the foreigner who sends his bullion to the Mint recoups himself easily from the tax paid there on this bullion. He finds the double advantage of the low price of the merchandise he buys, and the loss of the Mint charge falls really on the French in the sale of their merchandise to the foreigner. They have merchandise enough for several years' consumption. They resell to the Dutch, for example, the spices which they bought of them for two thirds of what they paid. All this takes place gradually, the foreigner decides to buy these merchandises from France only because of their cheapness. The balance of trade, which was against France at the time of the diminutions turns in her favour at the time of augmentation, and the King is able to profit by 20 per cent or more on all the bullion brought into France and taken to the Mint. As Foreigners now owe a trade balance to France and have not in their country coins of the new issue they must take their bullion and coins of the old issue to the Mint to obtain new coins for payment. But this trade balance which Foreigners owe to France arises only from the merchandise which they import from it at low prices.

France is all round the dupe of these operations. She pays very high prices for foreign goods during the diminutions, sells them back at very low prices at the time of the augmentation to the same foreigners, sells her own merchandise at low prices which she had kept so high during the diminutions and so it would be difficult for all the money which left France during the diminutions to come back during the augmentation. If coins of the new issue are counterfeited abroad, as is nearly always the case, France loses the 20 per cent which the King has established as the Mint charge. This is so much gained for the Foreigner who profits further by the low prices of merchandise in France.

The King makes a considerable profit by the Mint tax, but it costs France three times as much to enable him to make this profit.

It is well understood that when there is a current balance of trade in favour of France against the foreigner the King is able to raise a tax of 20 per cent or more by a new coinage and an increase in the nominal value of coins. But if the trade balance was against France at the time of this new coinage and augmentation the operation would have no success and the King would not derive a great profit from it. The reason is that in this case it is necessary to send money continually abroad. But the old ecu is as good in foreign countries as the new. That being so the Jews and Bankers will give a premium or bonus in secret for the old coins and the individual who can sell them above the Mint price will not take them thither. At the Mint they give him only about 4 livres for his ecu, but the Banker will give him at first 4 livres 5 sols, and then 4 livres 10, and at last 4 livres 15. And this is how it may happen that an augmentation of the coinage may lack success. It can hardly happen when the raising is made after the lowerings indicated, because then the balance naturally turns in favour of France, as we have explained.

The experience of the augmentation of 1726 may serve to confirm all this. The diminutions which had preceded this augmentation were made suddenly without warning, which prevented the ordinary operations of diminutions. This prevented the trade balance from turning strongly in favour of France at the augmentation of 1726, few people took their old coin to the Mint, and the profit of the Mint tax which was in view had to be abandoned.

It is not within my subject to explain the reasons of Ministers for lowering the coinage suddenly nor the reasons which deceived them in their project of

the augmentation of 1726. I have mentioned the increases and decreases in France only because their results seem sometimes to clash with the principles I have established that abundance or scarcity of money in a State raises or lowers all prices proportionably.

After explaining the effects of lowering and raising the coinage, as practised in France, I maintain that they neither destroy nor weaken my principles, for if I am told that what cost 20 livres or 5 ounces of silver before the lowering referred to does not even cost 4 ounces or 20 livres of the new money after the augmentation, I will assent to this without departing from my principles, because there is less money in circulation than there was before the diminutions, as I have explained. The difficulties of exchange in the times and operations of which we speak cause variations in the prices of things and in that of the interest of money which cannot be taken as a rule in the ordinary principles of circulation and dealing.

The change in the nominal value of money has at all times been the effect of some disaster or scarcity in the State, or of the ambition of some Prince or individual. In the year A.U.C. 157 Solon increased the nominal value of the drachma of Athens after a sedition and abolition of debt. Between A.U.C. 490 and 512 the Roman Republic several times increased the nominal value of its copper coins, so that their as came to be worth six. The pretext was to provide for the needs of the State and to pay the debts incurred in the first Punic War. This did not fail to cause great confusion. In 663 Livius Drusus, Tribune of the people, increased the nominal value of amount, and this gave occasion to introduce confusion into exchange. In A.U.C. 712 Antony in his Triumvirate increased the nominal of silver by 5 per cent, mixing iron with the silver, to meet the needs of the Triumvirate. Many Emperors subsequently debased or increased coinage. The Kings of France at different times have done likewise. This is why the livre tournois, which was a pound weight of silver has sunk to so little value. These proceedings have never failed to cause disorder in States. It matters little or nothing what is the nominal value of coins provided it be permanent. The pistole of Spain is worth 9 livres or florins in Holland, about 18 livres in France, 37 livres 10 sols at Venice, 50 livres at Parma. In the same proportion values are exchanged between these different countries. The price of everything increases gradually when the nominal valne of coins increases, and the actual quantity in weight and fineness of the coins, taking into account the rapidity of circulation, is the base and regulator of values. A State neither gains nor loses by the raising or lowering of these coins so long as it keeps the same quantity of them, though individuals may gain or lose by the variation according to their engagements. All people are full of false prejudice and false ideas as to the nominal value of their coinage. We have shown in the Chapter on Exchanges that the invariable rule of them is the price and fineness of the current coins of different countries, marc for marc and ounce for ounce. If a raising or lowering of the nominal value changes this rule for a time in France it is only during a crisis and difficulty in trade. A return is always made little by little to intrinsic value, to which prices are necessarily brought both in the market and in the foreign exchanges.

Chapter VI
Of Banks and their Credit

If a hundred economical gentlemen or proprietors of land, who put by every year money from their savings to buy land on occasion, deposit each one 10,000 ounces of silver with a goldsmith or banker in London, to avoid the trouble of keeping this money in their houses and the thefts which might be made of it, they will take from them notes payable on demand. Often they will leave their money there a long time, and even when they have made some

purchase they will give notice to the banker some time in advance to have their money ready when the formalities and legal documents are complete.

In these circumstances the banker will often be able to lend 90,000 ounces of the 100,000 he owes throughout the year and will only need to keep in hand 10,000 ounces to meet all the withdrawals. He has to do with wealthy and economical persons; as fast as one thousand ounces are demanded of him in one direction, a thousand are brought to him from another. It is enough as a rule for him to keep in hand the tenth part of his deposits. There have been examples and experiences of this in London. Instead of the individuals in question keeping in hand all the year round the greatest part of 100,000 ounces the custom of depositing it with a banker causes 90,000 ounces of the 100,000 to be put into circulation. This is primarily the idea one can form of the utility of banks of this sort. The bankers or goldsmiths contribute to accelerate the circulation of money. They lend it out at interest at their own risk and peril, and yet they are or ought to be always ready to cash their notes when desired on demand.

If an individual has 1000 ounces to pay to another he will give him in payment the banker's note for that amount. This other will perhaps not go and demand the money of the banker. He will keep the note and give it on occasion to a third person in payment, and this note may pass through several hands in large payments without any one going for a long time to demand the money from the banker. It will be only some one who has not complete confidence or has several small sums to pay who will demand the amount of it. In this first example the cash of a banker is only the tenth part of his trade.

If 100 individuals or landowners deposit with a banker their income every six months as it is received, and then demand their money back as and when they have need to spend it, the banker will be in a position to lend much more of the money which he owes and receives at the beginning of the half years, for a short term of some months, than he will be towards the end of these periods. And his experience of the conduct of his clients will teach him that he can hardly lend during the whole year more than about one half of the sums which he owes. Bankers of this kind will be ruined in credit if they fail for one instant to pay their notes on their first presentation, and when they are short of cash in hand they will give anything to have money at once, that is to say a much higher interest than they receive on the sums they have lent. Hence they make it a rule based on their experience to keep always in hand enough to meet demands, and rather more than less. Many Bankers of this kind (and they are the greatest number) always keep in hand half the amount deposited with them and lend the other half at interest and put it into circulation. In this second example the Banker causes his notes of 100,000 ounces or ecus to circulate with 50,000 ecus, If he has a great flow of deposits and great credit this increases confidence in his notes, and makes people less eager to cash them, but only delays, his payments a few days or weeks when the notes fall into the hands of persons who are not accustomed to deal with him, and he ought always to guide himself by those who are accustomed to entrust their money to him. If his notes come into the hands of those of his own business they will have nothing more pressing than to withdraw the money from him.

If those who deposit money with the Banker are Undertakers and Merchants who pay in large sums daily and soon after draw them out it will often happen that if the Banker divert more than one third of his cash he will find himself in difficulty to meet the demands.

It is easy to understand by these examples that the sums of money which a Goldsmith or a Banker can lend at interest or divert from his cash are naturally proportionable to the practice and conduct of his clients; that while we have seen Bankers who were safe with a cash reserve of one-tenth, others can hardly keep less than one half or two-thirds, though their credit be as high as that of

the first.

Some trust one Banker, some another. The most fortunate is the Banker who has for clients rich gentlemen who are always looking out for safe employment for their money without wishing to invest it at interest while they wait.

A general national bank has this advantage over the bank of a single Goldsmith that there is always more confidence in it. The largest deposits are willingly brought to it, even from the most remote quarters of the city, and it leaves generally to small Bankers only the deposit of petty sums in their neighbourhood. Even the revenues of the State are paid in to it in countries where the Prince is not absolute. And this, far from injuring credit and confidence in it, serves only to increase them.

If payments in a national bank are made by transfers or clearings there will be this advantage, that they are not subject to forgeries, but if the Bank gives notes false notes may be made and cause disorder. There will be also this disadvantage that those who are in the quarters of the city at a distance from the Bank will rather pay and receive in money than go thither, especially those in the country. But if the bank notes are dispersed they can be used far and near. In the national Banks of Venice and Amsterdam payment is made only in book credit, but in that of London it is made in credit, in notes, and in money at the choice of the individuals, and it is today the strongest Bank.

It will then be understood that all the advantage of Banks, public or private in a city, is to accelerate the circulation of money and to prevent so much of it from being hoarded as it would naturally be for several intervals.

Chapter VII
Further explanations and enquiries as to the utility of a National Bank

It is of little importance to examine why the Bank of Venice and that of Amsterdam keep their books in moneys of account different from current money, and why there is always an agio on converting these book credits into currency. It is not a point of any service for circulation. The Bank of England has not followed it in this. Its accounts, its notes and its payments are made and are kept in current coin, which seems to me more uniform and more natural and no less useful.

I have not been able to obtain exact information of the quantity of sums ordinarily brought to these Banks, nor the amount of their notes and accounts, loans, and sums kept as reserve. Some one who is better informed on these points will be better able to discuss them. As, however, I know fairly well that these sums are not so huge as commonly supposed I will not omit to give an idea of them.

If the bills and notes of the Bank of England which seems to me the most considerable, amount weekly on an average to 4,000,000 ounces of silver or about 1 million sterling, and if they are content to keep regularly in reserve a quarter or £250,000 sterling or 1 million ounces of silver in coin, the utility of this Bank to circulation corresponds to an increase of the money of the State by 3 million ounces or £750,000 sterling which is without doubt a very large sum and of very great utility for the circulation when it has need to be speeded up: for I have remarked elsewhere that there are cases where it is better for the welfare of the State to retard the circulation than to accelerate it. I have heard that the notes and bills of the Bank of England have risen in some cases to 2 millions sterling, but it seems to me this can only have been by extraordinary accident. And I think the utility of this Bank corresponds in general only to about one tenth part of all the money in circulation in England.

If the explanations given to me in round figures in 1719 on the receipts of the Bank of Venice are correct it may be said of national banks generally that their utility never corresponds to the tenth part of the current money circulating in a State. This is approximately what I ascertained there.

The revenues of the State of Venice may amount annually to 4 million ounces of silver, which must be paid in Bank money, and the Collectors set up for that purpose who receive at Bergamo and in the most distant places taxes in money, are obliged to change them into bank money when they make payment of them to the Republic.

All payments at Venice for negociations, purchases and sales above a certain modest sum must by law be made in Bank money. All the retailers who have collected current money in their dealings are compelled to buy Bank money with it to make their payments for large amounts. And those who need for their expenses or for the detail of small circulation to get back current money have to sell their Bank money to obtain it.

It is found that the sellers and buyers of the Bank money are regularly equal when the total of all the credits or inscriptions on the books of the Bank do not exceed the value of 800,000 ounces of silver or thereabout.

Time and experience (according to my informant) have given this knowledge to the Venetians. When the Bank was first set up individuals brought their money to the Bank to have credit at the Bank of the same value. This money deposited at the Bank was later spent for the needs of the Republic and yet the Bank money preserved its original value because there were as many people who had need to buy it as those who had need to sell it. Finally the State being pressed for money gave to the War Contractors credits in Bank money instead of silver and doubled the amount of its credits.

Then the number of sellers of Bank money being much greater than the buyers Bank money began to be at a discount against silver and fell 20 per cent below. By this discredit the revenue of the Republic fell off one fifth and the only remedy found for this disorder was to pledge part of the State revenue to borrow Bank money at interest. By these borrowings of Bank money half of them were cancelled and then the sellers and buyers being about equal the Bank regained its original credit and the total of Bank money was brought back to 800,000 ounces of silver.

It is thus that it has been ascertained that the utility of the Bank of Venice as regards circulation corresponds to about 800,000 ounces of silver: and if it is supposed that all the current money in the States of that Republic amount to 8 million ounces of silver the utility of the Bank corresponds to one tenth of that silver.

A national Bank in the capital of a great Kingdom or State must, it seems, contribute less to the utility of circulation because of the distance of its provinces, than in a small State. And when money circulates there in greater abundance than among its neighbours a national Bank does more harm than good. An abundance of fictitious and imaginary money causes the same disadvantages as an increase of real money in circulation, by raising the price of land and labour, or by making works and manufactures more expensive at the risk of subsequent loss. But this furtive abundance vanishes at the first gust of discreet and precipitates disorder.

Towards the middle of the reign of Louis XIV there was more money in circulation in France than in neighbouring countries, and the King's revenue was collected there without the help of a Bank, as easily and conveniently as it is collected today in England with the help of the Bank of England.

If the clearings at Lyons in one of its four fairs amount to 80 millions of livres, if they are begun and finished with a single million of ready money, they are doubtless of great convenience in saving the trouble of an infinity of transports of silver from one house to another. But with that exception it seems

that with this same million of cash which began and ended these clearings it would be quite feasible to conduct in three months all the payments of 80 millions.

The Paris bankers have often observed that the same bag of money has come back to them 4 or 5 times in the same day when they had a good deal to pay out and receive.

I think pubic banks of very great utility in small States and those where silver is rather scarce, but of little service for the solid advantage of a great State.

The Emperor Tiberius, a Prince strict and economical, had saved up in the Imperial Treasury 2700 millions of sesterces, equal to 25 millions sterling or 100 million ounces of silver, an enormous sum in coin for those times and even for today. It is true that in tying up so much money he embarrassed the circulation and that silver became scarcer at Rome than it had been.

Tiberius, who attributed this scarcity to the monopoly of Contractors and Financiers who farmed the Imperial revenues, ordered by an edict that they should buy land up to at least two thirds of their capital. This Edict, instead of animating the circulation threw it completely into disorder. All the Financiers hoarded and called in their capital under the pretext of putting themselves into a position to obey the Edict by buying land, which instead of rising in value sunk to a much lower price owing to the scarcity, of silver in circulation. Tiberius remedied this scarcity by lending to individuals on good security only 300 million sesterces, a ninth part of the money which he had in his Treasury.

If the ninth part of the Treasury sufficed at Rome to re-establish the circulation it would seem that the establishment of a general Bank in a great Kingdom where its utility would never correspond to the tenth part of the money in circulation when it is not hoarded, would be of no real and permanent advantage, and that considered in its intrinsic value it can only be regarded as an expedient for gaining time.

But a real increase in the quantity of circulating money is of a different nature. We have already spoken of it and the Treasure of Tiberius gives us again occasion to say a word of it here, This treasure of 2700 millions of sesterces, left at the death of Tiberius, was squandered by the Emperor Caligula his successor in less than a year. Money was never seen so abundant at Rome, What was the result? This mass of money plunged the Romans into luxury and into all sorts of crimes to pay for it. More than 60,000 pounds sterling left the Empire every year for the merchandise of the Indies, and in less than 30 years the Empire grew poor and silver became very scarce there without any dismemberment or loss of a Province.

Though I consider a general Bank is in reality of very little solid service in a great State I allow that there are circumstances in which a Bank may have effects which seem astonishing.

In a city where there are public debts for considerable amounts the facility of a Bank enables one to buy and sell capital stock in a moment for enormous sums without causing any disturbance in the circulation. If at London a person sells his South Sea stock to buy stock in the Bank or in the East India Company, or hoping that in a short time he will be able to buy at a lower price stock in the same South Sea Company, he always takes Banknotes, and generally money is not asked for in respect of these notes but only for the interest on them. As one hardly spends one's capital there is no need to change it into coin, but one is always forced to ask the Bank for money for subsistence since cash is needed for small dealings.

If a Landowner who has 1000 ounces of silver pays 200 of them for the interest of public stock and spends 800 ounces of them himself, the thousand ounces will always require coinage. This proprietor will spend 800 and the Owners of the funds will spend 200 of them. But when these Proprietors are in

the habit of speculation, selling and buying public stock, no ready silver is needed for these operations, bank notes suffice. If it were necessary to draw hard cash out of circulation to serve in these purchases and sales it would amount to a great sum and would often impede the circulation, or rather it would happen in that case that the stocks could not be sold and bought so often.

It is doubtless the origin of these capitals or money deposited in the Bank and drawn out only on rare occasions, such as when an owner of capital engages in some transaction or needs cash for small purchases, which explains why the Bank keeps in reserve only the fourth or sixth part of the silver against which it issues notes. If the Bank had not the funds of many of these capitals it wonld in the ordinary course of circulation find itself would in the ordinary course of circulation find itself compelled like private banks to keep half its deposits in hand to be solvent. It is true that the Bank books and its dealings do not distinguish those capitals which pass through several hands in the sales and purchases made in Change Alley. These notes are often renewed at the Bank and changed against others in purchases. But the experience of purchases and sales of stock show clearly that the total of them is considerable, and without these purchases and sales the sums deposited at the Bank would be certainly smaller.

This means that when a State is not in debt and has no need of purchases and sales of stock the help of a Bank will be less necessary and less important.

In 1720 the capital of public stock and of bubbles which were snares and enterprises of private companies at London, rose to the value of 800 millions sterling, yet the purchases and sales of such pestilential stock were carried on without difficulty through the quantity of notes of all kinds which were issued, while the same paper money was accepted in payment of interest. But as soon as the idea of great fortunes induced many individuals to increase their expenses, to buy carriages, foreign linen and silk, cash was needed for all that, I mean for the expenditure of the interest, and this broke up all the systems, This example shows that the paper and credit of public and private Banks may cause surprising results in everything which does not concern ordinary expenditure for drink and food, clothing, and other family requirements, but that in the regular course of the circulation the help of Banks and credit of this kind is much smaller and less solid than is generally supposed. Silver alone is the true sinews of circulation.

Chapter VIII
Of the Refinements of Credit of General Banks

The national Bank of London is composed of a large number of shareholders who make choice of Directors to govern its operations. Their primitive advantage consisted in making a yearly distribution of the profits made by interest on the money lent out of the Bank deposits. Later the public debt was incorporated with it, on which the State pays an annual interest.

In spite of such a solid foundation when the Bank had made large advances to the State and the holders of notes were apprehensive that the Bank was in difficulties, a run on the Bank has been seen and holders of notes went in crowds to the Bank to draw out money. The same thing happened on the collapse of the South Sea Company in 1720.

The refinements introduced to support the Bank and moderate its discredit were first to set up a number of clerks to count out the money to those bringing notes, to pay out large amounts in sixpences and shillings to gain time, to pay some part to individual holders who had been waiting whole days to take their turn; but the most considerable sums were paid to friends who took them away

and brought them back secretly to the Bank to repeat the same manoeuvre the next day. In this way the Bank saved its appearance and gained time until the panic should abate. But when that did not suffice the Bank opened a subscription engaging trusty and solvent people to join as guarantors of large amounts to maintain the credit and circulation of the Bank notes.

It was by this last refinement that the credit of the Bank was maintained in 1720 when the South Sea Company collapsed. As soon as it was publicly known that the subscription list was filled by wealthy and powerful people, the run on the Bank ceased and deposits were brought in as usual.

If a Minister of State in England, seeking to lower the rate of interest or for other reasons, forces up the price of public stock in London and if he has enough credit with the Directors of the Bank (under the obligation of indemnifying them in case of loss) to get them to issue a quantity of bank notes without backing, begging them to use these notes themselves to buy several blocks and capitals of the public stock, this stock will not fail to rise in price through these operations, And those who have sold stock, seeing the high price continue, will perhaps decide (so as not to leave their bank notes idle and thinking from the rumours spread about that the rate of interest will fall and the stock go up further in price) to buy it back at a higher price than they sold it for, If several people seeing the agents of the Banks buy this stock step in and do likewise thinking to profit like them, the public funds will increase in price to the point which the Minister wishes. And it may happen that the Bank will cleverly resell at a higher price all the stock it has purchased at the Minister's request, and will not only make a large profit on it but will retire and cancel all the extraordinary banknotes which it had issued.

If the Bank alone raises the price of public stock by buying it, it will by so much depress it when it resells to cancel its excess issue of notes. But it always happens that many people wishing to follow the Agents of the Bank in their operations help to keep up the price. Some of them get caught for want of understanding these operations, in which there enter infinite refinements or rather trickery which lie outside my subject.

It is then undoubted that a Bank with the complicity of a Minister is able to raise and support the price of public stock and to lower the rate of interest in the State at the pleasure of this Minister when the steps are taken discreetly, and thus pay off the State debt. But these refinements which open the door to making large fortunes are rarely carried out for the sole advantage of the State, and those who take part in them are generally corrupted. The excess banknotes, made and issued on these occasions, do not upset the circulation, because being used for the buying and selling of stock they do not serve for household expenses and are not changed into silver. But if some panic or unforeseen crisis drove the holders to demand silver from the Bank the bomb would burst and it would be seen that these are dangerous operations.