

## C H A P. XIV.

*Of the Abuse of Agriculture and Population.*

I HAVE taken notice above of two performances, wherein the authors, with equal ability, have treated of the numbers of mankind; a subject which has a very close connection with political oeconomy.

Although (as I have said) I do not pretend to decide between them as to the point in dispute, I find that in this chapter I shall be naturally led into a chain of reasoning very contrary to that of Mr. Wallace, which is a thing I should have dispensed with, did not the merit of his performance in the eyes of the learned world appear sufficient to draw my attention.

Agriculture is without all doubt the foundation of multiplication, which must ever be in proportion to it; that is, to the earth's productions, as has been said. But it does not follow, that in proportion to multiplication those produced must of course become useful to one another, and useful to the society in general. Now I consider multiplication as no otherwise useful to a state, than in so far as the additional number becomes so, to those who are already existing, whom I consider as the body-politic of the society. If it therefore happens, that an additional number produced do no more than feed themselves, then I perceive no advantage gained to the society by their production. If, without rendering any equivalent service, they are fed by others, there is a loss.

Agriculture may be said to be carried to its utmost extent, when the earth is so laboured as to produce the greatest quantity of fruits possible for the use of man; and in judging of the improvement of two spots of ground of the same extent, that may be said to be most improved which produces the greatest quantity of food: but as to population, the question does not stop there; for let the

quantity be equal on both, yet if the inhabitants of the one be more frugal livers than those of the other, this circumstance alone will make an inequality. If agriculture therefore be considered only with respect to population, we must consider that country as the best peopled, where productions are the most abundant, and where the inhabitants are the most sober. Thus much with regard to the extent of agriculture and population: we come now to consider the inconveniencies which may result to a society from an over-stretch, or from what I call an abuse of either the one or the other.

I call every thing an abuse in society which implies a contradiction to the spirit of it, or which draws along with it an inconveniency to certain classes, which is not compensated by the general welfare.

The political oeconomy of government is brought to perfection, when every class in general, and every individual in particular, is made to be aiding and assisting to the community, in proportion to the assistance he receives from it. This conveys my idea of a free and perfect society, which is, *a general tacit contract, from which reciprocal and proportional services result universally between all those who compose it.*

Whenever therefore any one is found, upon whom nobody depends, and who depends upon every one, as is the case with him who is willing to work for his bread, but who can find no employment, there is a breach of the contract, and an abuse. For the same reason, if we can suppose any person entirely taken up in feeding himself, depending upon no one, and having nobody depending on him, we lose the idea of society, because there are no reciprocal obligations between such a person and the other members of the society.

Those who are for employing the whole of a people in agriculture may answer, that all their time cannot be employed in this occupation, and that in the intervals they may apply themselves to supply reciprocal wants.

I very readily agree, that any person, who would calculate his labour in agriculture, purely for his own subsistence, would find abundance of idle hours. But the question is, whether in good oeconomy such a person would not be better employed in providing *nourishment* for others, than in providing for any other want. When he provides food, he surely provides for a want; and experience shews, that it is better for a man to apply close to one trade, than to turn himself to several.

Hence I conclude, that the best way of binding a free society together, is by multiplying reciprocal obligations, and creating a general dependence between all its members. This cannot be better effected, than by appropriating a certain number of inhabitants, for the production of the quantity of food required for all, and by distributing the remainder into proper classes for supplying every other want. I say farther, that this distribution is not only the most rational, but that mankind fall naturally into it; and misery attends and has ever attended those who have been found without a particular employment.

It must not be concluded from this reasoning, that abuse is always implied when we find any of the classes of the free hands of a state casually employed in agriculture.

There is such a variety of circumstances in every country, that without a peculiar talent of laying principles together, so as to answer every combination, the most perfect theory which can be proposed must appear defective.

In countries ill-improved, where industry begins to take root, we are not to conclude, that good policy requires a sudden and immediate separation between the dwellings of the husbandmen and free hands. Sudden revolutions are constantly hurtful, and a good statesman ought to lay down his plan of arriving at perfection by gradual steps.

If he finds, as is the case of rude and uncivilized societies, that many are occupied, partly, in providing subsistence for their own family,

family, partly, in other useful pursuits, he may by degrees detach as many as he can from every other branch of industry, except that of agriculture. The most wealthy are the most proper to carry this branch to any degree of perfection. The landed men ought to be encouraged by every means to apply to the study of farming. This employment has been considered as honourable in all ages of the world, and very well suits the rank, the interest, and the amusement of gentlemen.

The next step is to introduce manufactures into the country, and to provide a ready market abroad for every superfluous part of them. The allurements of gain will soon engage every one to pursue that branch of industry which succeeds best in his hands. By these means many will follow manufactures and abandon agriculture; others will prosecute their manufactures in the country, and avail themselves at the same time, of small portions of land, proper for gardens, grass for cows, and even for producing certain kinds of fruit necessary for their own maintenance.

This I do not consider as a species of farming. It is more properly, in a political light, a sort of village life, only the village here appears dispersed over a large extent; and I call it a village life, because here the occupation of the inhabitants is principally directed towards the prosecution of their trades: agriculture is but a subaltern consideration, and will be carried on so far only, as it occasions no great avocation from the main object. It will however have the effect to parcel out the lands into small possessions: a system admirably calculated for the improvement of the soil, and advantageous to population, when the spirit of industry is not thereby checked. This is the case when such possessors apply totally to agriculture, and content themselves with a bare subsistence from it, without prosecuting any other branch of industry, or forming any plan of ambition for themselves, or for their children's emerging from so circumscribed a sphere of life: from this alone proceeds, in most countries, the inconveniency of a minute subdivision of land property.

We shall presently see, by various examples, the truth of this proposition; and from what observations I have been able to make, it appears, that a great inconvenience flows from it; the *property* of the lands, and not the *bare possession* of them, is vested in the lower classes. While they only remain as tenants, the interest of the proprietor, on one hand, will lead him to incorporate these small possessions into larger farms, the moment the possessors, by relaxing from their principal occupation, (industry) are no longer able to pay a rent above the value of the grounds when let in farms; and the interest of these tenants, on the other hand, will frequently lead them to abandon such small possessions, when the prosecution of their industry demands a change of habitation. Thus the interest of agriculture will go hand in hand with that of industry, and classes will separate their habitations, according as their respective interests require.

It is certainly the interest of every landlord, whose land is ill improved, to multiply habitations upon it, providing he makes choice of such people as can live by some other branch of industry than bare agriculture: and, in many cases, it may be his advantage to incorporate his lands into farms as soon as they are fully cultivated. By this plan he will advance the improvement of his land; he will multiply the useful inhabitants; and he will at the same time share the profits of their industry beyond the value of the land rent.

By these means has the woollen manufacture in England, and the linen in Ireland and Scotland been greatly augmented. But as the improvement of land goes on, this oeconomy will decline: towns will swell in consequence of the principles we are now going to deduce; the lands will become more thinly inhabited; and farms will by degrees grow more extensive. I appeal to experience for the justness of this opinion.

Hence it plainly appears, that, in every light this matter can be represented, we still find it impossible to employ usefully above a certain part of a people in agriculture. The next question is,  
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how to determine the just proportion. For this purpose we must have recourse to facts, not to theory. We have, in a former chapter, examined the state of this question with regard to one country. I shall here only add, that, in proportion to the culture of the soil, and to the number of crops it is made to produce, a greater or less number will be required; and in proportion to the surplus of food above what is necessary to maintain the labourers, will a number of free hands be provided for. If therefore a species of agriculture can be found established, which produces little or no surplus, *there* little or no industry can be exercised; few wants can be supplied: this will produce a wonderful simplicity of manners, will ruin the system of modern policy, and produce what I must call an abuse. Let me look for some examples, in order to set this question in a clearer light.

In the wine-provinces of France, we find the lands which lie round the villages divided into very small lots, and there cultivation is carried to a very extraordinary height. These belong *in property* to the peasants, who cultivate the vines. No frugality can be greater than in the consumption of this produce, and the smallest weed which comes up among the grain, is turned to account, for the food of animals. The produce of such lands, I may say, is intirely consumed by the proprietor and his family, who are all employed in the cultivation, and there is no superfluous quantity here produced for the maintenance of others. Does not this resemble the distribution of lands made by the Romans in favour of 5000 Sabine families, where each received two *pletra* of ground. [See Numbers of Mankind, p. 117.] Now let me examine the political state of agriculture, and of other labour performed by my French vine-dresser.

By the supposition we imply, that the bit of land is sufficient for maintaining the man and his family, and nothing more; he has no grain to sell, no food can by him be supplied to any other person whatever; but the state of other lands capable of yielding a surplus, such as the vineyard, produces a demand for his labour.

This

This labour, considered with respect to the vine-dresser, is a fund for providing all his wants in manufactures, salt, &c. and what is over must be considered as his profits, out of which he pays the royal impositions. The same labour, considered with regard to the proprietor of the vineyard, enters into that necessary deduction out of the fruits, which, when deducted, leaves the remainder, which we call surplus, or what answers to the land rent. This belongs to the proprietor, and becomes a fund for supplying all his wants.

Here we have an idea of society. The vine-dresser depends upon the proprietor for the price of his labour; the proprietor upon the vine-dresser for his surplus. But did we suppose all the kingdom parcelled out, and laboured, as the spot which lies round the village, what would become of the vine-dresser with regard to all his other wants; there would be no vines to dress, no surplus nourishment any where found, consequently no employment, not even life, for those who had no land. From this example we discover the difference between agriculture exercised *as a trade* and *as a direct means of subsisting*, a distinction to be attended to, as it will very frequently occur in the prosecution of our subject. We have the two species in the vine-dresser: he labours the vineyard as a trade, and his spot of ground for subsistence. We may farther conclude, that, as to the last part, he is only useful to himself; but, as to the first, he is useful to the society, and becomes a member of it; consequently, were it not for his trade, the state would lose nothing, though the vine-dresser and his land were both swallowed up by an earthquake. The food and the consumers would both disappear together, without the least political harm to any body: consequently, such a species of agriculture is no benefit to a state; and consequently, neither is that species of multiplication, implied by such a distribution of property, any benefit. Thus an over-extension of agriculture and division of lands becomes an abuse, and so, consequently, does an over-multiplication.

Here I am obliged to conclude, that those passages of Roman authors which mention the frugality of that people, and the small extent

extent of their possessions cannot be rightly understood, without the knowledge of many circumstances relative to the manners of those times. For if you understand such a distribution of lands to have extended over all the Roman territory, the number of the citizens would have far exceeded what they appear to have been by the Census, and even surpass all belief. But farther, I may be allowed to ask, whether or no it be supposed that these frugal Romans laboured this small portion of lands with their own hands and consumed the produce of it? If I am answered in the affirmative, (which is necessary to prove the advantages of agriculture's being exercised by all the classes of a people) then I ask, from whence were the inhabitants of Rome, and other cities, ~~supposed to come~~ who fed the armies when in the field? If these were fed by foreign grain imported, or plundered from their neighbours, where was the advantage of this subdivision of lands, and of this extensive agriculture, which could not feed the inhabitants of the state? If it be said, that notwithstanding this frugal distribution of property among the citizens, there was still found surplus enough to supply both Rome and the armies, will it not then follow, that there was no necessity for employing all the people in agriculture, since the labour of a part might have sufficed.

*That number of husbandmen, therefore, is the best, which can provide food for all the state; and that number of inhabitants is the best, which is compatible with the full employment of every one of them.*

Idle mouths are only useful to themselves, not to the state; consequently, are not an object of the care of the state, any farther than to provide employment for them; and their welfare (while they remain useless to others) is, in a free country, purely a matter of private concern. Let me take another example for the farther illustration of this matter.

Those who travel into the southern provinces of Spain, find large tracts of land quite uncultivated, producing only a scanty pasture for herds of the lesser cattle. Here and there are found interspersed some spots of watered lands, which, from the profusion of every

gift which nature can bestow, strike a northern traveller with an idea of paradise. In such places villages are found, and numbers of inhabitants. It must be allowed that industry and labour do not here go forward as in other countries; but to supply this want charity steps in. Charity in Spain (in proportion to its extent) is as powerful a principle towards multiplication as industry and labour. *Whatever gives food gives numbers*: but charity cannot extend beyond superfluity, and this must ever be in proportion to industry. These watered lands are well laboured and improved. The value of them in one sense, is in proportion to their fertility, and the surplus of the labourers should naturally be given for an equivalent in money or work: but this equivalent cannot be found, because the consumers have neither the one nor the other. If the Spaniards, therefore, were not the most charitable people upon earth, it is very plain that the labouring of these watered lands would diminish, until it came upon a level with the wealth and industry of the consumers. But here it is otherwise: labour goes on mechanically, and without combination of circumstances, and the poor live in ease, in proportion to the plenty of the year.

Here then is a third principle of multiplication. The first is slavery, or a violent method of making mankind labour; the second is industry, which is a rational excitement to it; the third is charity, which resembles the manna in the desert, the gift of God upon a very extraordinary occasion, and when nothing else could have preserved the lives of his people. Whether, in all cases, this principle of christianity advances the prosperity of a modern society (when complied with from obedience to precept, without consulting reason as to the circumstances of times and situations) is a question which lies out of my road to examine. The action, considered in the intention of the agent, must in every case appear highly beautiful, and we plainly see how far it contributes to multiplication, though we do not so plainly perceive how this again is advantageous to society.

Now

Now if we examine the state of agriculture in the territory of this Spanish village, we find, upon the whole, no more surplus of fruits than upon the French vine dresser's portion of land; consequently, if all Spain was laboured and inhabited like this village and its small garden, as it is called, it would be the most populous country in the world, the most simple in the manner of living; but it never could communicate the idea of a vigorous or a flourishing state. It is the employment alone of the inhabitants which can impress that character.

Now in this last example, what a number of free hands do we find! are not all the poor of this class? Would it not be better if all these by their labour could purchase their subsistence, than be obliged to receive it in the precarious manner they do? Can one suppose all these people industrious, without implying what I call superfluity of labour? Is not this luxury, according to my definition of it? Where would be the harm if the Spanish farmer, who gives a third of his crop in charity, should in return receive some changes of raiment, some convenient furniture for his house, some embellishment to his habitation; these things would cost him nothing; he would receive them in exchange for what he now gives from a principle of charity, and those who have a precarious, would have a certain livelihood. Let us travel a little farther in search of the abuse of population.

In Germany, we find many small towns, formed into corporations, which enjoy certain privileges. The freedom of such towns is not easily purchased; and one, upon considering outward circumstances, must be not a little surprized to hear of the sums refused, when offered, to obtain it. Round these towns there is a small territory divided into very small portions, and not able to maintain the inhabitants: these lands therefore are infinitely overstocked with husbandmen; for every proprietor, less or more, concerns himself with the cultivation. Here, one who would aspire to extend his possession, would, according to the sentiment of Manius Curtius Dentatus, certainly be considered as a dangerous citizen, and a hurtful

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member of the society. Those lots are divided among the children of the proprietors, who are free of the town, by which means they are constantly splitting by multiplication, and consolidating by death, and by marriage: these nearly balance one another, and property remains divided as before. A stranger is at a loss to find out the reason why the liberty of so poor a little town should be so valuable. Here it is; first there are certain advantages enjoyed in common, such as the privilege of pasture on the town lands, and others of a like nature; but I find the charges which the burgeses are obliged to pay, may more than compensate them. The principal reason appears to be, that no one who has not the liberty of the town, can settle in a way of industry so as to marry and have a family: because without this his labour can only be directed towards furnishing the wants of peasants who live in villages; these are few, and little ingenuity is required for it. In towns there is found a greater diversity of wants, and the people there have found out mechanically, that if strangers were allowed to step in and supply them, their own children would starve; therefore the heads of the corporation, who have an interest to keep up the price of work, have also an interest to hold the liberty of their town at a high value. This appears to me a pretty just representation of the present state of some towns I have seen, relative to the present object of inquiry.

But as industry becomes extended, and trade and manufactures are established; this political oeconomy must disappear.

Such a change, however, will not probably happen without the interposition of the sovereign, and a new plan of administration; what else can give a turn to this spirit of idleness, or rather, as I may call it, of this trifling industry? Agriculture can never be a proper occupation for those who live in towns: this therefore is an abuse of it, or rather indeed an abuse of employment.

Ease and plenty can never enter a little town, but by the means of wealth; wealth can never come in but by the produce of labour going out; and when people labour purely for their own subsistence, they

they only make the little money they have circulate, but can acquire nothing new; and those who with difficulty can maintain themselves, can never hope to increase their numbers.

If in spite of the little industry set on foot in such towns, the generative faculty shall work its effect and increase numbers, this will make the poor parents still divide, and misery will ensue: this again may excite compassion, and that will open the chests of those who have a charitable disposition: hospitals are founded for the relief of the poor, they are quickly filled, and as many necessitous remain as ever. The reason is plain; the hospital applies a palliative for the abuse, but offers no cure. A tree is no sooner discharged of its branches than it pushes new ones. It has been said, that numbers are in proportion to food; consequently, poor are in proportion to charity. Let the King give his revenue in charity, he will soon find poor enough to consume it. Let a rich man spend 100,000*l.* a year upon a table, he will find guests (the best in the kingdom) for every cover. These things, in my way of considering them, are all analogous, and flow from the same principle. And the misery found in these little German towns, is another modification of the abuse of population. These examples shew the inconveniencies and abuses which result from a misapplication of inhabitants to agriculture, which produces a population more burthensome than beneficial to a modern state.

If the simplicity of the antients is worthy of imitation, or if it appears preferable to the present system, which it is not my business to decide, then either slavery must be introduced to make those subsist who do not labour, or they must be fed upon charity. Labour and industry can never, I think, be recommended on one hand, and the effects of them proscribed on the other. If a great body of warlike men (as was the case in Sparta) be considered as essential to the well being of the state; if all trade and all superfluity be forbid amongst them, and no employment but military exercises allowed; if all these warriors be fed at public tables; must you not either have a set of helotes to plow the ground for them, or a parcel of charitable Spanish farmers to feed them gratis.

Thus

Thus much I have thought might be of use to say to illustrate the principles I have laid down. I find these very contrary to the reasoning which runs through the whole of the performance which I mentioned above, and which I have had in my eye. A more particular examination of it might be useful, and even amusing; but it would engage me in too long a disquisition for the nature of this work. I cannot however help, in this place, adding one observation more, in consequence of our principles, which *seems* contrary to the strain of our ingenious author's reasoning. I say *seems*, because almost all difference of opinion upon such subjects proceeds from the defect of language in transmitting our ideas when complex or abstract.

The effect of diseases which sweep off numbers of people does not essentially diminish population, except when they come suddenly or irregularly, any more than it would necessarily dispeople the world if all mankind were to be swept off the stage at the age of forty six years. I apprehend that in man, as in every other animal, the generative faculty is more than able to repair all losses occasioned by regular diseases; and I have shewn, I think, more than once, that multiplication never can stop but for want of food. As long then as the labour of man can continue annually to produce the same quantity of food as at present, and that motives are found to make him labour, the same numbers may be fed, and the generative faculty, which from one pair has produced so many millions, would certainly do more than keep up the stock, although no person were to pass the age above mentioned. Here is the proof: was the life of man confined to forty six years, the state of mortality would be increased in the proportion which those who die above forty six bear to those who die under this age. This proportion is, I believe, as 1 to 10, consequently, mortality would increase  $\frac{1}{10}$ , consequently, numbers would be kept up by  $\frac{1}{10}$  increase upon births; and surely the generative faculty of man far exceeds this proportion, when the other requisites for propagation, to wit, food, &c. are to be found, as by the supposition.

## C H A P. XV.

*Application of the above Principles to the State of Population in Great-Britain.*

A LETTER from Dr. Brakenridge, F. R. S. addressed to George Lewis Scott, Esq; which I found in the Danish Mercury for March 1758; furnishes me with a very good opportunity of applying the principles we have been laying down to the state of population in Great-Britain. I shall therefore, according to my plan, pass in review that gentleman's opinion, without entering upon any refutation of it. I shall extract the propositions he lays down, examine the conclusions he draws from them, and then shew wherein they differ from those which result from the theory established in this inquiry.

The author's calculations and suppositions as to matters of fact shall be taken for granted, as I believe the first are as good as any that can be made, upon a subject where all the data required for solving the problem are quite a piece of guess-work.

I must follow the Mercury, not having the original.

PROP. I. After a very close examination, says our author, I find, that our islands gain, as to population, absolutely no more than what is requisite for repairing their losses, and that, in England itself, numbers would diminish, were they not recruited from Ireland and Scotland.

PROP. II. Men, able to carry arms, that is from 18 to 56 years, make, according to Dr. Halley, the fourth part of a people; and when a people increase in numbers, every denomination, as to age, increases in that proportion: consequently in England, where the number of inhabitants does not exceed six millions, if the annual augmentation upon the whole do not exceed 18,000, as I am pretty

sure it does not, the yearly augmentation of those fit to carry arms will be only 4,500.

PROP. III. In England, burials are to births, as 100 is to 113. I suppose that, in Scotland and Ireland, they may be as 100 is to 124. And as there may be, in these two last kingdoms, about two millions and a half of inhabitants, the whole augmentation may be stated at 15,000; and consequently that, of such as are fit to carry arms, at 3,750. Add this number to those annually produced in England, and the sum total of the whole augmentation in the British isles will be about 8,250.

PROP. IV. The strangers, who arrive in England, in order to settle, are supposed to compensate those who leave the country with the same intent.

PROP. V. It is out of this number of 8,250, that all our losses are to be deduced. If the colonies, wars, and navigation, carry off from us annually 8,000 men, the British isles cannot augment in people: if we lose more, numbers must diminish.

PROP. VI. By calculations, such as they are, our author finds, that, upon an average of 66 years, from 1690 to 1756, this number of 8000 have been annually lost, that is, have died abroad in the colonies, in war, or on the account of navigation.

PROP. VII. That, since the inhabitants of Britain and Ireland are about 8,000,000, and that the augmentation is annually about 8000, we may conclude in general for all Europe, that, for every million of inhabitants, there is an annual augmentation of 1000; consequently, every thousand men slain in war must destroy all the augmentation of a million of inhabitants during a year. Consequently France, which contains 14 millions, according to Sir William Petty, having lost above 14,000 men a-year, during the same 66 years, cannot have augmented in population.

PROP. VIII. That the progress of trade and navigation augmenting the loss of people by sea, must consequently have diminished population over all Europe.

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PROP. IX. The exportation of our corn proves what the above propositions have demonstrated. For supposing the progress of agriculture to compensate the additional quantity distilled of late years, there is still  $\frac{1}{2}$  of the crop exported, which proves that our numbers are small, and that they do not augment.

From these propositions our author concludes, that what stops multiplication in the British isles is, 1st, That living in celibacy is become a-la-mode: 2dly, That wars have been carried on beyond the nation's force: 3dly, That the use of spirituous liquors destroys great numbers of inhabitants.

I shall now shortly apply the principles I have been laying down, in order to resolve every phenomenon here described, as to the population of Great Britain. These I shall willingly take for granted, as it is of no consequence to my reasoning, whether they be exact or not: it is enough that they may be so; and the question here is only to account for them.

England, says he, would diminish in numbers, were it not recruited from Scotland and Ireland. This, I say, is a contingent, not a certain consequence: for did those grown-up adventurers cease to come in, the inhabitants of England themselves would undoubtedly multiply, provided an additional number of breeders could be found, able to bring up their children. Now the importation of grown men into a country in so far resembles the importation of slaves into our colonies, that the one and the other diminishes the price of labour, and thereby prevents marriage among certain classes of the natives, whose profits are not sufficient for bringing up a family: and when any such do marry notwithstanding, they do not multiply, as has been said. Now were the Scots and Irish to come no more into England, the price of labour would rise; those who now cannot bring up children, might then be enabled to do it, and this would make the English multiply themselves; that is, it would augment the number of their own breeders. On the other hand, did the price of labour continue too low to prove a sufficient encouragement for an additional



tional number of English breeders, the contingent consequence would take place; that is, numbers would diminish, according to our author's supposition, and the exportation of grain would increase, in proportion to that diminution; and did foreign demand for grain also diminish, then agriculture would suffer, and every thing would decline: but of this more as we go along.

The representation he gives of the state of population in these countries, is one modification of what I have called a moral incapacity of a people's increasing in numbers. It is just so in Africa, where the inhabitants are sold; just so in Switzerland, and in many mountainous countries, where inhabitants desert, in order to seek their fortunes elsewhere. The national stock remains at an equal standard, and the augmentation upon births above burials is constantly in proportion to the exportation of inhabitants. Let this proportion rise ever so high, an increase of national population is noways essentially to be implied from this phenomenon alone, but must proceed from other causes.

I can find nothing advanced by our author to prove, or even to induce one to believe, that had the lives of those eight thousands been yearly preserved from extraordinary dangers, numbers would have augmented. England enjoyed in a manner 26 years peace after the treaty of Utrecht. For many years before, a very destructive war had been carried on. Had the bills of births been produced from 1701 to 1713, had they been compared with those from this last period to 1739, when the Spanish war began, had we seen a gradual augmentation from year to year during those last 26 years, such as might be expected from the preservation of a considerable number at least of the 8,250 able healthy men, just in the period of life fit for propagation, one might be tempted to conclude, that the preceding war had done hurt to population, by interrupting the propagation of the species. But if, by comparing the bills of births for a considerable number of years, in war and in peace, one can discover no sensible difference, it is very natural to conclude, either that those wars did not destroy many breeders,

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or that others must have slipt in directly, and bred in the place of those who had been killed. What otherwise can be the reason why the number which our author supposes to have been destroyed abroad, should so exactly compensate the annual augmentation, but only that those nations are stocked to the full proportion of their subsistence: and what is the reason why, after a destructive war, which, by the suddenness of the revolution, sweeps off numbers of the grown men, and diminishes the original stock, numbers should in a few years get up to the former standard, and then stop a-new.

From our author's representation of the bills of births and deaths, I should be apt to suspect, in consequence of my principles, that upon a proper examination it would be found, that, in those years of war, the proportion of births to deaths had been higher than in years of peace, because more had died abroad. And, had the slaughter of the inhabitants gone gradually on, increasing every year beyond the 8,250, I am of opinion, that the proportion of births might very possibly have kept pace with it. On the contrary, during the years of peace, the proportion should have diminished, and had nobody died out of the country at all, the births and deaths would have become exactly equal.

From what I have here said, the reader may perceive, that it is not without reason that I have treated the principles relating to my subject in general, and that I avoid as much as possible to reason from facts alledged as to the state of particular countries. Those our author builds upon may be true, and may be false: the proportion of births and deaths in one place is no rule for another; we know nothing exactly about the state of this question in the British isles; and it may even daily vary, from a thousand circumstances. War *may* destroy population as well as agriculture, and it *may not*, according to circumstances. When the calamity falls upon the breeders, and when these are supposed the only people in the country in a capacity of bringing up their children, births will soon diminish. When it destroys the indigent, who cannot

bring up their children, or who do not marry, births will remain the same. The killing the wethers of a flock of sheep does not diminish the brood of lambs next year; the killing of old pigeons makes a pigeon-house thrive. When the calamity falls upon the farmers, who make our lands produce, agriculture is hurt, no doubt: does it fall upon the superfluities of cities, and other classes of the free hands, it may diminish manufacturers, but agriculture will go on, while there is a demand for its produce; and if a diminution of consumption at home be a consequence of the war, the augmentation upon exportation will more than compensate it. I do not find that war *diminishes* the demand for subsistence.

The long wars in Flanders in the beginning of this century interrupted agriculture now and then, but did not destroy it. That in the Palatinate in the end of the last ruined the country so, that it has hardly as yet recovered it. War has different effects, according to circumstances.

Obj. The population of the British isles is not stopt for want of food, because one-sixth part of the crop is annually exported. I answer, That it is still stopt for want of food, for the exportation only marks that the home demand is satisfied; but this does not prove that the inhabitants are full fed, although they can buy no more at the exportation-price. Those who cannot buy, are exactly those who I say die for want of subsistence: could they buy, they would live and multiply, and no grain perhaps would be exported. This is a plain consequence of my reasoning; and my principal point in view throughout this whole book, is to find out a method for enabling those to buy who at present cannot, and who therefore do not multiply; because they can give no equivalent to the farmers for their superfluity, which consequently they export. By this application of our principles, I have no occasion to call in question our author's facts. It is no matter what be the state of the case: if the principles I lay down be just, they must resolve every phenomenon.

## C H A P. XVI.

*Why are some Countries found very populous in respect of others, equally well calculated for Improvement?*

THIS question comes immediately under the influence of the principles already laid down, and must be resolved in consequence of them. It is with a view to make the application of these, that I have proposed it; and, in the examination, we shall prove their justness, or discover their defects.

It may be answered in general, that every such difference must proceed from what I call the spirit of the government and of the people, which will not only decide as to numbers, but as to many other things. I must however observe, that the question in itself is of little importance, if nothing but numbers be considered; for of what consequence is it to know how many people are in a country, when the employment of them does not enter into the inquiry? Besides, it is only by examining the employment of a people, that I can form any judgment as to this particular. But as the numbers of mankind have been thought a point worthy of examination; I have chosen this title for a chapter, which might perhaps have more properly stood under another.

While slavery prevailed, I see no reason to conclude against the numbers of mankind, as I have said already: when slavery was abolished, and before industry took place, if my principles be true that period I think should mark the time of the thinnest population in Europe; for I believe it will be found, that there never was an example of a country, however fertile by nature, where every one was absolutely free; where there was little or no industry, nor labour, but in agriculture; and where, at the same time, there were many inhabitants, not beggars, nor living upon charity. I have mentioned this so often, that I am afraid of tiring my

my reader with useleſs repetitions. I have brought it in here, only to give him an opportunity of applying this principle to the ſolution of the queſtion before us.

I ſhall begin my inquiry by aſking what is underſtood by a country's being populous; for that term preſents different ideas, if circumſtances are not attended to. I have heard it ſaid, that France was a deſert, and that there was nobody found in it but in towns; while in England one cannot travel half a mile without finding a farm, perhaps two together; and in looking round, one ſees the whole country divided into ſmall poſſeſſions. The difference here found, I apprehend, decides nothing in favour of, or againſt the real populouſneſs of the one or the other, but proceeds entirely from circumſtances relative to agriculture, and to the diſtribution of free hands. Theſe circumſtances will be better underſtood from the examination of facts, than from the beſt theory in the world. Let one conſider the ſtate of agriculture in Picardy and in Beauce, and then compare it with the practice in many provinces in England, and the contraſt will appear ſtriking. Were there more foreſt in England, to ſupply the inhabitants with fuel, I imagine many incloſures, uſeful at firſt for improving the grounds, would be taken away, and the country laid more open; were wolves leſs common in France, there would be found more ſcattered farms. Cattle there muſt be ſhut up in the night, and cannot be left in the fields; this is a great diſcouragement to incloſing. Where there are no incloſures, there are few advantages to be found from eſtabliſhing the farm-houſe exactly upon the ſpot of ground to be laboured; and then the advantages which reſult to certain claſſes of inhabitants, from being gathered together, the farmers with the trademen, are found to preponderate. Thus the French farmers are gathered into villages, and the Engliſh remain upon their fields. But farther, in Picardy and Beauce agriculture has been long eſtabliſhed, and, I imagine, that, at the time when lands were firſt broken up, or rather improved, their habitations muſt have been cloſer together.

This drawing together of inhabitants muſt leave many ruinous poſſeſſions, and this, by the by, is one reaſon why people cry out upon the deſolation of France, becauſe ruinous houſes (which may often times be a mark of improvement, not of deſertion) are found in different places in the country. Paris has grown conſiderably in bulk, and from this it naturally happens, that the country round is purged of idle mouths. If this makes labour dear in the country, it is the city alone which ſuffers by it, the country muſt certainly be the gainers. So much for two ſpecies of population in two of the beſt inhabited countries of Europe. I now come to another in one of the worſt.

In ſome countries you find every farm-houſe ſurrounded with ſmall huts, poſſeſſed by numbers of people, ſuppoſed to be uſeful to the farmer. Theſe in Scotland are called cottars, (cottagers) becauſe they live in cottages. If you conſider them in a political light, they will appear to be inhabitants appropriated for agriculture. In one ſenſe they are ſo, if by that you underſtand the gathering in of the fruits; in another they are not, if by agriculture you underſtand the turning up the ſurface. I bring in this example, and ſhall enlarge a little upon it, becauſe I imagine it to be, leſs or more, the picture of Europe 400 years ago.

The Scotch farmer muſt have hands to gather in a ſcanty produce, ſpread over a large extent of ground. He has ſix cottars, I ſhall ſuppoſe; but theſe cottars muſt have wives, and theſe wives will have children, and all muſt be fed before the maſter's rent can be paid. It never comes into the cottar's head to ſuppoſe that his children can gain money by their labour; the farmer never ſuppoſes that it is poſſible for him to pay his rent without the aſſiſtance of his cottars to tend his cattle, and gather in his crop; and the maſter cannot go againſt the cuſtom of the country, without laying his land waſte. All theſe children are ready at the farmer's diſpoſal; he can, without any expence, ſend what parcels of ſheep he pleaſes, to different diſtances of half a mile or more, to feed upon ſpots of ground which, without the conveniency of theſe children, would

would be entirely lost. By this plan of farming, landlords who have a great extent of country which they are not able to improve, can let the whole in a very few farms, and at the same time all the spontaneous produce of the earth is gathered in and consumed. If you compare the rent of these lands with the extent, it appears very small; if you compare it with the numbers fed upon the farm, you will find that an estate in the highlands maintains, perhaps, ten times as many people as another of the same value in a good and fertile province. Thus it is in some estates as in some convents of the begging order, the more mouths the better cheer.

I shall now suppose our modern policy to inspire an ingenious or public spirited lady to set up a weaver or two at a farm-house. The cottars begin to spin; they will be a long time in attaining to a dexterity sufficient to appear at the weaver's house, in competition with others who are accustomed to the trade; consequently this manufacture will be long in a languishing condition; but if the undertaking is supported with patience, these obstacles will be got the better of. Those who tended herds of cattle for a poor maintenance, will turn themselves to a more profitable occupation; the farmer will find more difficulty in getting hands, he will complain, perhaps give way; the master will lose a year's rent, and no body will take so extensive a farm; it must be divided, then it must be improved, and then it produces more grain upon one tenth, than perhaps formerly was produced upon the whole. This grain is bought with the price of spinning; the parents divide with the children, who are fed, and spin in their turn. When this is accomplished, what is the revolution? Why, formerly the earth fed all the inhabitants with her spontaneous productions, as I may call them; now more labour is exercised upon turning up her surface, this she pays in grain, which belongs to the strong man for his labour and toil; women and children have no direct share, because they have not contributed thereto, as they did in feeding cattle. But they spin, and have money to buy what they have not force to produce;

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consequently they live; but as they become useless as cottars, they remove from their mother earth, and gather into villages. When this change is effected the lands appear less inhabited; ruinous huts (nay, villages I may call them) are found frequently, and many would be apt to conclude, that the country is depopulated; but this is by no means found to be the case, when the whole is taken together.

The spirit therefore of the principal people of a country determines the employment of the lower classes; the employment of these determines their usefulness to the state, and their usefulness, their multiplication; The more they are useful, the more they gain, according to the definition of the contract of society; the more they gain, the more they can feed; and consequently the more they will marry and divide with their children. This increases useful population, and encourages agriculture. Compare the former with the present situation, as to numbers, as to ease, as to happiness!

Is it not plain, that when the earth is not improved it cannot produce so much nourishment for man as when it is? On the other hand, if industry does not draw into the hands of the indigent, wherewith to purchase this additional nourishment, no body will be at a considerable first expence to break up grounds in order to produce it. The withdrawing therefore a number of hands from a trifling agriculture forces, in a manner, the husbandman to work the harder; and by hard labour upon a small spot, the same effect is produced as with slight labour upon a great extent.

I have said, that I imagined the state of agriculture in the Scotch farm, was a pretty just representation of the general state of Europe about 400 years ago: if not in every province of every country, at least in every country for the most part. Several reasons induce me to think so: first, where there is no industry, nothing but the earth directly can feed her children, little alienation of her fruits can take place. Next, because I find a wonderful analogy between the way of living in some provinces of different countries with what I have been describing. Pipers, blue bonnets, and oat meal, are

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known in Swabia, Auvergne, Limouſin, and Catalonia, as well as in Lochar: numbers of idle, poor, ufeleſs hands, multitudes of children, whom I have found to be fed, no body knows how, doing nothing at the age of fourteen, keeping of cattle and going to ſchool, the only occupations ſuppoſed poſſible for them. If you aſk why they are not employed, they tell you becauſe commerce is not in the country: they talk of commerce as if it was a man, who comes to reſide in ſome countries in order to feed the inhabitants. The truth is, it is not the fault of theſe poor people, but of thoſe whoſe buſineſs it is to find out employment for them.

Another reaſon I derive from the nature of the old tenures, where we find lands which now produce large quantities of grain, granted for a mere trifle, when at the ſame time others in the neighbourhood of cities and abbies are found charged with conſiderable preſtations. This I attribute to the bad cultivation of lands at that time, from which I infer, a ſmall population. In thoſe days of trouble and confuſion, confiſcations were very frequent, large tracts of lands were granted to the great lords upon different revolutions, and theſe finding them often deſerted, as is mentioned in hiſtory, (the vaſſals of the former, being either deſtroyed or driven out to make place for the new comers) uſed to parcel them out for ſmall returns in every thing but perſonal ſervice. Such ſudden and violent revolutions muſt diſpeople a country; and nothing but tranquillity, ſecurity, order and induſtry, for ages together, can render it populous.

Befides theſe natural cauſes of population and depopulation (which proceed, as we have obſerved, from a certain turn given to the ſpirit of a people) there are others which operate with irrefiſtible force, by ſudden and violent revolutions. The King of Pruſſia, for example, attempted to people a country all at once, by profiting of the deſertion of the Saltzburghers. America is become very poorly peopled in ſome ſpots upon the coaſt, and in ſome iſlands, at the expence of the exportation of millions from Europe and from Africa; ſuch methods never can ſucceed in proportion to the attempt. Spain,

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on the other hand, was depopulated by the expulſion of its anti-chriſtian inhabitants. Theſe cauſes work evident effects, which there is little occaſion to explain, although the more remote conſequences of them may deſerve obſervation. I ſhall, in another place, have occaſion to examine the manner of our peopling America. In this place, I ſhall make a few obſervations upon the depopulation of Spain, and finiſh my chapter.

That country is ſaid to have been antiently very populous under the government of the Moors. I am not ſufficiently verſed in the politics, oeconomy and manners of that people, to judge how far theſe might be favourable to population: what ſeems, however, to confirm what we are told, is, the large repositories they uſed for preſerving grain, which ſtill remain entire, though never once made uſe of. They watered the kingdoms of Valencia, Murcia and Granada. They gathered themſelves into cities of which we ſtill can diſcover the extent. The country which they now poſſeſs (though drier than Spain) furniſhes Europe with conſiderable quantities of grain. The palace of the Moorish King at Granada, ſhews a taſte for luxury. The moſque of Cordoua ſpeaks a larger capital. All theſe are ſymptoms of population, but they only help one to gueſs. The numbers which hiſtory mentions to have been driven out, is a better way ſtill of judging, if the fidelity of hiſtorians could be depended upon, when there is any queſtion about numbers.

Here was an example of a country depopulated in a very extraordinary manner: yet I am of opinion, that the ſcarcity of inhabitants complained of in that country, for a long time after the expulſion, did not ſo much proceed from the effects of the loſs ſuſtained, as from the conſtrai between the ſpirit of thoſe chriſtians who remained after the expulſion, and their catholic deliverers. The chriſtians who lived among the Moors, were really Moors as to manners, though not as to religion. Had they adopted the ſpirit of the ſubjects of Caſtile, or had they been governed according to their own, numbers would ſoon have riſen to the former ſtandard. But as

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the christian lord governed his Murcian, Andalouſian, and Granada ſubjects, according to the principles of christian policy, was it any wonder that in ſuch an age of ignorance, prejudice, and ſuperſtition, the country (one of the fineſt in the world) ſhould be long in recovering? Recover, however, it did; and ſooner perhaps than is commonly believed: for I ſay it was recovered ſo ſoon as all the flat and watered lands were brought into cultivation; becauſe I have reaſon to believe that the Moors never carried their agriculture farther in theſe ſouthern provinces.

From this I ſtill conclude, that no deſtruction of inhabitants by expulſion, captivity, war, peſtilence or famine, is ſo permanently hurtful to population, as a revolution in that ſpirit which is neceſſary for the increaſe and ſupport of numbers. Let that ſpirit be kept up, and let mankind be well governed, numbers will quickly increaſe to their former ſtandard, after the greateſt reduction poſſible: and while they are upon the augmenting hand, the ſtate will be found in more heart and more vigour, than when arrived even at the former height; for ſo ſoon as a ſtate ceases to grow in proſperity, I apprehend it begins to decay both in health and vigour.

## C H A P. XVII.

*In what Manner and according to what Proportion do Plenty and Scarcity affect a People?*

**I**N a former chapter I have examined this queſtion, relatively to mankind fed by the hand of nature: I now come nearer home, and ſhall keep cloſe to modern times, conſidering circumſtances and effects which by daily experience we ſee and feel.

I have often ſaid, that numbers are in proportion to the produce of the earth. I now ſay, that in moſt countries of Europe, the food produced in the country is *nearly* conſumed by the inhabitants: and by *nearly* I underſtand, that the part exported bears a ſmall proportion to the home-conſumption. I do by no means eſtabliſh this as an univerſal propoſition; but I ſay it is true *for the moſt part*: and the intention of this chapter is to enable us to judge how far theſe limitations ſhould extend. I allow, for example, that Holland, not producing food for its inhabitants, muſt draw it from ſome country which produces a ſuperfluity, regularly: but let it be obſerved that Poland, Germany, Flanders, and England, with many other countries, contribute their contingents to ſupply the demand of the Dutch; and of ſeveral large trading towns which have ſmall territories. This being the caſe, the quota furniſhed by each country, muſt be in a ſmall proportion to the reſpective quantity growing in it. But theſe are general concluſions upon vague ſuppoſitions, which throw no light on the queſtion. I ſhall therefore endeavour to apply our reaſoning to facts, and then examine conſequences.

There are few countries, I believe, in Europe more abounding in grain than England: I ſhall therefore keep that kingdom in my eye while I examine this matter. Nothing is more common than to hear that an abundant crop furniſhes more than three years ſubſiſtence;

sistence: nay, I have found it advanced by an author of consideration, (Advantages and disadvantages of France and Great Britain, &c. article Grain) that a plentiful year produces five years nourishment for the inhabitants. If this be a mistake, it may prove a very hurtful one in many respects. I am, on the contrary, apt to believe, that no annual produce of grain ever was so great in England as to supply its inhabitants fifteen months, *in that abundance with which they feed themselves in a year of plenty*. If this be the case, at what may we compute the surplus in ordinary good years? I believe it will be thought a very good year which produces *full* subsistence for fifteen months; and crops which much exceed this are, I believe, very rare. Here follow my reasons for differing so widely from the gentleman whom I have cited. If I am in the wrong, I shall have the most sensible pleasure in being set right; and nothing will be so easy to any one who has access to be better informed as to facts than I can pretend to be.

I consider all the yearly crop of grain in England as consumed at home, except what is exported; for I cannot admit that any considerable quantity is lost: that it may be abused, misapplied, drank when it should be eat, I do not deny. These are questions which do not regard the present inquiry. Whether therefore it be consumed in bread, beer, spirits, or by animals, I reckon it consumed; and in a year when the greatest consumption is made at home, this I call *the abundance with which the inhabitants feed themselves in years of plenty*. Now I find in the performance above cited, a state of exportations for five years, from 1746 to 1750 inclusive, where the quantity exported amounts in all to 5,289,847 quarters of all sorts of grain. This is not one year's provision, according to Sir William Petty's calculation, of which we have made mention above. The bounties upon corn (continues the author abovementioned) have amounted in one year to 500,000*l.* sterling. He does not mention the year, and I am little able to dispute that matter with him. I suppose it to be true; and still farther, let it be understood that the whole exportation was made out of the produce of one crop. I do not find that this sum

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answers to the bounty upon 3,000,000 of quarters, which, according to Sir William Petty, make six months provision. I calculate thus. The bounty upon wheat is 5*s.* a quarter, that upon rye 3*s.* 6*d.* that upon barley 2*s.* 6*d.* these are the species of grain commonly exported: cast the three premiums together, and divide by three, the bounty will come to 3*s.* 8*d.* at a medium; at which rate 500,000*l.* sterling will pay the bounty of 2,727,272 quarters of grain. An immense quantity to be exported! but a very inconsiderable part of a crop supposed capable to maintain England for five years. It may be answered, that the great abundance of a plentiful year is considerably diminished when a scanty crop happens to precede it, or to follow upon it. In the first case, it is sooner begun upon; in the last, it supplies the consumption in the year of scarcity, considerably. This I allow to be just; but as it is not uncommon to see a course of good years follow one another, the state of exportation at such times must certainly be the best, nay, the only method of judging of the real extent of superfluity.

On the other hand, I am apt to believe, that there never was a year of such scarcity as that the lands of England did not produce greatly above six months subsistence, *such as the people are used to take in years of scarcity*. Were six months of the most slender subsistence to fail, I imagine all Europe together might perhaps be at a loss to supply a quantity sufficient to prevent the greatest desolation by famine.

As I have no access to look into records, I content myself with less authentic documents. I find then by the London news-papers, that, from the 9th of April to the 13th of August 1757, while great scarcity was felt in England, there were declared in the port of London no more than 71,728 quarters of wheat, of which 15,529 were not then arrived. So that the whole quantity there imported to relieve the scarcity, was 56,199 quarters. Not one month's provision for the inhabitants of that city, reckoning them at 800,000 souls! One who has access to look into the registers of the trade in grain, might in a moment determine this question.

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Another reason which induces me to believe what the above arguments seem to prove, I draw from what I see at present passing in Germany; I mean the universal complaints of scarcity in those armies which are now assembled, [1757] When we compare the numbers of an army, let it be of a hundred thousand men, suppose the suite of it to be as many more, and forty thousand horses, all strangers, (for the others I reckon nothing extraordinary) what an inconsiderable number does this appear, in proportion to the inhabitants of this vast country of Germany! Yet let us observe the quantity of provisions of all sorts constantly coming down the Rhine, the Moselle, and many other rivers, collected from foreign provinces on all hands; the numbers of cattle coming from Hungary; the loads of corn from Poland; and all this in a year which has produced what at any other time would have been called an excellent crop. After these foreign supplies, must not one be astonished to find scarcity complained of in the provinces where the war is carried on, and high prices every where else. From such circumstances I must conclude, that people are generally very much deceived in their estimation of plenty and scarcity, when they talk of two or three years subsistence for a country being found upon their lands at once. I may indeed be mistaken in my conclusions; but the more I have reflected upon this subject, the more I find myself confirmed in them, even from the familiar examples of the sudden rise of markets from very inconsiderable monopolies, and of their sudden fall by inconsiderable quantities imported. I could cite many examples of these vicissitudes, were it necessary, to prove what every one must observe.

I come now to resolve a difficulty which naturally results from this doctrine, and with which I shall close the chapter.

If it be true, that a crop in the most plentiful year is nearly consumed by the inhabitants, what becomes of them in years of scarcity; for nobody can deny, that there is a great difference between one crop and another. To this I answer, first, That I believe there is also a very great deceit, or common mistake, as to

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the difference between crops: a good year for one soil, is a bad one for another. But I shall not enlarge on this; because I have no sufficient proof of my opinion. The principal reason upon which I found it, is, that it is far from being true, that the same number of people consume always the same quantity of food. In years of plenty every one is well fed; the price of the lowest industry can procure subsistence sufficient to bear a division; food is not so frugally managed; a quantity of animals are fatted for use; all sorts of cattle are kept (in good heart); and people drink more largely, because all is cheap. A year of scarcity comes, the people are ill fed, and when the lower classes come to divide with their children, the portions are brought to be very small; there is great oeconomy upon consumption, few animals are fatted for use, cattle look miserably, and a poor man cannot indulge himself with a cup of generous ale. Add to all these circumstances, that in England the produce of pasture is very considerable, and it commonly happens, that a bad year for grain, which proceeds from rains, is for the same reason a good year for pasture; and in the estimation of a crop, every circumstance must be allowed to enter.

From what has been said I must conclude in general, that the best corn country in the world, provided slavery be not established, does not produce wherewithal fully to maintain, as in years of plenty, one third more than its own inhabitants; for if this should be the case, all the policy of man would not be able to prevent the multiplication of them, until they arose nearly up to the mean proportion of the produce in ordinary years, and it is only what exceeds this standard, and proceeds from unusual plenty, which can be exported. [Were plentiful years more common, mankind would be more numerous; were scarcity more frequent, numbers would be less. Numbers therefore must ever be, in my humble opinion, in the ratio of food, and multiplication will never stop until the balance comes to be nearly even.]



## C H A P. XVIII.

*Of the Causes and Consequences of a Country's being fully peopled.*

**I**N the titles of my chapters, I rather seek to communicate a rough idea of the subject than a correct one. In truth and in reason, there is no such thing as a country actually peopled to the full, if by this term numbers only are meant, without considering the proportion they bear to the consumption they make of the productions of their country. I have in a former chapter established a distinction between the physical and moral impossibility of increasing numbers. As to the physical impossibility, the case can hardly exist, because means of procuring subsistence from other countries, when the soil refuses to give more, seem, if not inexhaustible, at least very extensive. A country therefore fully peopled, that is, in a physical impossibility of increasing their numbers, is a chimerical and useless supposition. The subject here under consideration is, the situation of a people, who find it their interest to seek for subsistence from abroad. This may happen, and commonly does, long before the country itself is fully improved: it decides nothing as to the intrinsic fertility of the soil, and proves no more, than that the industry of the free hands has made a quicker progress in multiplying mouths, than that of the farmers in providing subsistence. To illustrate this idea, let me propose the following question.

Is multiplication the efficient cause of agriculture, or is agriculture that of multiplication?

I answer, that multiplication is the efficient cause of agriculture, though I allow, that, in the infancy of society, the spontaneous fruits of the earth, which are free to all, are the efficient cause of a multiplication, which may rise to the exact proportion of them; as has been said above. This must be explained.

I have already distinguished the fruits of agriculture from the earth's spontaneous production: I must farther take notice, that when I employ the term agriculture in treating of modern policy, I always consider it to be exercised as a trade, and producing a surplus, and not as the direct means of subsisting, where all is consumed by the husbandman, as has been fully explained above. We have said, that it is the surplus produced from it, which proves a fund for multiplying inhabitants. Now there must be a demand for this surplus. Every person who is hungry will make a demand, but every such demand will not be answered, and will consequently have no effect. The demander must have an equivalent to give: it is this equivalent which is the spring of the whole machine; for without *that* the farmer will not produce any surplus, and consequently he will dwindle down to the class of those who labour for actual subsistence. The poor, who produce children, make an ineffectual demand, and when they cannot increase the equivalent, they divide the food they have with the new comers, and prove no encouragement to agriculture. By dividing, the whole become ill fed, miserable, and thus extinguish. Now because it is the *effectual* demand, as I may call it, which makes the husbandman labour for the sake of the equivalent, and because this demand increases, by the multiplication of those who have an equivalent to give, therefore I say that multiplication is the cause, and agriculture the effect. On the other hand, I think the spontaneous fruits of the earth, as in the supposition, may be considered as the cause of a certain limited multiplication; because in that case there is no equivalent demanded. The earth produces, whether her fruits be consumed or not: mankind are fed upon these gratuitously, and without labour, and the existence of the fruits is anterior to the production of those who are to consume them. Those who are first fed, draw their vigour from their food, and their multiplication from their vigour. Those who are produced, live freely upon their parent earth, and multiply until all the produce be consumed: then multiplication stops, as we have said; *but establish agriculture*, and multiplication will go on a-new.

Consequently, my reader will say, agriculture is as much the cause of this new multiplication, as the spontaneous fruits were of the first. Here is a very natural conclusion, which seems directly to contradict what we have been endeavouring to prove; but the knot is easily untied. We have seen how the existence of agriculture must depend upon the industry of man; that is, on the only means of *establishing agriculture*: now, as this industry is chiefly promoted by the motive of providing for our children, the procreation of them must be considered as the first, or at least the most palpable political cause of setting mankind to work, and therefore may be considered as anterior to agriculture; whereas, on the other hand, the earth's <sup>own</sup> productions being in small quantity, and quite independent of man, appear, as it were, to be furnished by nature, in the same way as a small sum is given to a young man, in order to put him in a way of industry, and of making his fortune. The small sum sets him a-going, but it is his industry which makes the fortune. From this illustration it appears, that if the demand for food can be more readily supplied from abroad than from home, it will be the foreign subsistence, which will preserve numbers, produced from *industry*, not from *domestic agriculture*; and these numbers will, in their turn, produce an advancement of it at home, by inspiring a desire in the husbandman to acquire the equivalent which their countrymen give to strangers.

Such nations, whose statesmen have not the talent to engage the husbandmen to wish for the equivalent, which the labour of their fellow-citizens can produce; or, in other words, who cannot create reciprocal wants and dependencies among their subjects, must stand in a moral incapacity of augmenting in numbers. Of such states we have no occasion to treat in this chapter, any more than of those who are supposed to be in the physical incapacity of multiplying: our point of view is, to examine the natural consequences resulting from a demand for subsistence extending itself to foreign countries. This I take to be the mother of industry at home, as well as of trade abroad; two objects which come to be treated of in the second book.

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A country may be fully peopled (in the sense we understand this term) in several different ways. It may be fully stocked at one time with six millions, and at another may maintain perhaps eight or even nine millions with ease, without the soil's being better cultivated or improved. On the other hand, a country may maintain twenty millions with ease, and by being improved as to the soil, become overstocked with fifteen millions. These two assertions must be explained:

The more frugal a people are, and the more they feed upon the plentiful productions of the earth, the more they may increase in numbers.

Were the people of England to come more into the use of living upon bread, and give over consuming so much animal food, inhabitants would certainly increase, and many rich grass fields would be thrown into tillage. Were the French to give over eating so much bread, the Dutch so much fish, the Flemish so much garden stuff, and the Germans so much fourkraut, and all take to the English diet of pork, beef, and mutton, their respective numbers would soon decay, let them improve their grounds to the utmost. These are but reflections, by the by, which the reader may enlarge upon at pleasure. The point in hand is, to know what are the consequences of a country's being so peopled, no matter from what cause, that the soil, in its actual state of fertility, refuses to supply a sufficient quantity of such food as the inhabitants incline to live upon. These are different according to the diversity of spirit in the people.

If they be of an indolent disposition, directed in their political oeconomy by established habits and old prejudices, which prevent innovations, although a change of circumstances may demand them, the effect will be to put a stop to population; which cannot augment without an increase of food on one hand, and of industry on the other, to make the first circulate. These must go hand in hand: the precedence between them is a matter of mere curiosity and speculation.

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If, on the contrary, a spirit of industry has brought the country to a certain degree of population, this spirit will not be stopt by the want of food; it will be brought from foreign countries, and this new demand, by diminishing among them the quantity usually produced for their own subsistence, will prompt the industrious to improve their lands, in order to supply the new demand without any hurt to themselves. Thus trade has an evident tendency towards the improvement of the world in general, by rendering the inhabitants of one country industrious, in order to supply the wants of another, without any prejudice to themselves. Let us make a step further.

The country fully stocked can offer in exchange for this food, nothing but the superfluity of the industry of the free hands, for that of the farmers is supposed to be consumed by the society; except indeed some species of nourishment or productions, which, being esteemed at a higher value in other countries than in those which produce them, bring a more considerable return than the value of what is exported, as when raw silk and delicate wines, &c. are given in exchange for grain and other provisions.

The superfluity of industry must, therefore, form the principal part of exportation, and if the nation fully stocked be surrounded by others which abound in grain and articles of subsistence, where the inhabitants have a taste for elegance, and are eager of acquiring the manufactures and improvements of their industrious neighbours; it is certain, that a trade with such nations will very considerably increase the inhabitants of the other, though fully stocked, relatively to the production of their own soil; and the additional numbers will only increase that of manufacturers, not of husbandmen. This is the case with Holland, and with many large trading cities which are free and have but a small territory.

If, on the contrary, the nation fully stocked be in the neighbourhood of others who take the same spirit as itself, this supply of food will become in time more difficult to be had, in proportion as their neighbours come to supply their own wants. They must therefore

therefore seek for it at a greater distance, and as soon as the expence of procuring it comes to exceed the value of the labour of the free hands employed in producing the equivalent, their work will cease to be exported, and the number of inhabitants will be diminished to the proportion of the remaining food.

I do not say that trade will cease on this account; by no means. Trade may still go on, and even be more considerable than before; but it will be a trade which never can increase inhabitants, because for this purpose there must be subsistence. It may have however numberless and great advantages: it may greatly advance the wealth of the state, and this will purchase even power and strength. A trading nation may live in profound peace at home, and send war and confusion among her enemies, without even employing her own subjects. Thus trade without increasing the inhabitants of a country can greatly add to its force, by arming those hands which she has not fed, and employing them for her service.

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#### C H A P. XIX.

*Is the Introduction of Machines into Manufactures prejudicial to the Interest of a State, or hurtful to Population?*

THIS I find has been made a question in modern times. The ancients held in great veneration the inventors of the saw, of the lathe, of the wimble, of the potters wheel; but some moderns find an abuse in bringing mechanism to perfection: (see *Les Interets de la France mal entendus*, p. 272. 313.) the great Montequieu finds fault with water mills, though I do not find that he has made any objection against the use of the plow.

Did people understand one another, it would be impossible that such points could suffer a dispute among men of sense; but the circumstances

cumstances referred to, or presupposed, which authors almost always keep in their eye, though they seldom express them, render the most evident truths susceptible of opposition.

It is hardly possible suddenly to introduce the smallest innovation into the political oeconomy of a state, let it be ever so reasonable, nay ever so profitable, without incurring some inconveniencies. A room cannot be swept without raising dust, one cannot walk abroad without dirtying one's shoes; neither can a machine, (which abridges the labour of men) be introduced *all at once* into an extensive manufacture, without throwing many people into idleness.

In treating every question of political oeconomy, I constantly suppose a statesman at the head of government, systematically conducting every part of it, so as to prevent the vicissitudes of manners, and innovations, from hurting any interest within the commonwealth, by their natural and immediate effects or consequences. When a house within a city becomes crazy, it is taken down; this I call systematical ruin: were it allowed to fall, the consequences might be fatal in many respects. In like manner, if a number of machines are all at once introduced into the manufactures of an industrious nation, (in consequence of that freedom which must necessarily be indulged to all sorts of improvement, and without which a state cannot thrive) (it becomes the business of the statesman to interest himself so far in the consequences) as to provide a remedy for the inconveniencies resulting from the sudden alteration. It is farther his duty to make every exercise even of liberty and refinement an object of government and administration; not so as to discourage or to check them, but to prevent the revolution from affecting the interests of the different classes of the people, whose welfare he is particularly bound to take care of.

The introduction of machines can, I think, in no other way prove hurtful by making people idle, than by the suddenness of it: and I have frequently observed, that all sudden revolutions, let them be ever so advantageous, must be accompanied with inconveniencies. A safe, honourable, and lasting peace, after a long, dangerous, and expensive war, forces a number of hands to be idle, and deprives them

them of bread. Peace then may be considered as a machine for defending a nation, at the political loss of making an army idle; yet no body, I believe, will alledge that in order to give bread to soldiers, cutlers, and undertakers, the war should be continued. But here I must observe, that it seems to be a palpable defect in policy, if a statesman shall neglect to find out a proper expedient (at whatever first expence it may be procured) for giving bread to those who, at the risk of their lives, have gone through so many fatigues for the service of their country. This expence should be charged to the account of the war, and a state ought to consider, that as their safety required that numbers should be taken out of the way of securing to themselves a lasting fund of subsistence, which would have rendered them independent of every body, (supposing that to have been the case) they become bound by the contract of society, which ties all together, to find them employment. Let me seek for another illustration concerning this matter.

I want to make a rampart cross a river, in order to establish a bridge, a mill, a sluice, &c. For this purpose, I must turn off the water, that is, stop the river; would it be a good objection against my improvement to say, that the water would overflow the neighbouring lands, as if I could be supposed so improvident as not to have prepared a new channel for it? Machines stop the river; it is the business of the state to make the new channel, as it is the public which is to reap the benefit of the sluice: I imagine what I have said will naturally suggest an answer to all possible objections against the introduction of machines; as for the advantages of them, they are so palpable that I need not insist upon them. There is however one case in which I think they may be disapproved of; but it seems a chimerical supposition, and is brought in here for no other purpose than to point out and illustrate the principle which influences this branch of our subject.

If you can imagine a country peopled to the utmost extent of the fertility of the soil, and absolutely cut off from any communication with other nations; all the inhabitants fully employed in

supplying the wants of one another, the circulation of money going forward regularly, proportionally, and uniformly through every vein, as I may call it, of the political body; no sudden or extraordinary demand at any time for any branch of industry; no redundancy of any employment; no possibility of increasing either circulation, industry, or consumption. In such a situation as that I should disapprove of the introduction of machines, as I disapprove of taking physic in an established state of perfect health. I disapprove of a machine only because it is an innovation in a state absolutely perfect in these branches of its political oeconomy; and where there is perfection there can be no improvement. I farther disapprove of it because it might force a man to be idle, who would be found thereby in a physical impossibility of getting his bread, in any other way than that in which he is supposed to be actually employed.

The present situation of every country in Europe, is so infinitely distant from this degree of perfection, that I must consider the introduction of machines, and of every method of augmenting the produce or facilitating the labour and ingenuity of man, as of the greatest utility. Why do people wish to augment population, but in order to compass these ends? Wherein does the effect of a machine differ from that of new inhabitants?

As agriculture, exercised as a trade, purges the land of idle mouths, and pushes them to a new industry which the state may turn to her own advantage; so does a machine introduced into a manufacture, purge off hands which then become superfluous *in that branch*, and which may quickly be employed in another.

If therefore the machine proves hurtful, it can only be because it presents the state with an additional number of hands bred to labour; consequently, if these are afterwards found without bread, it must proceed from a want of attention in the statesman: for an industrious man made idle, may constantly be employed to advantage, and with profit to him who employs him. What could an act of naturalization do more, than furnish industrious hands forced

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to be idle, and demanding employment? Machines therefore I consider as a method of augmenting (virtually) the number of the industrious, without the expence of feeding an additional number; this by no means obstructs natural and useful population, for the most obvious reasons.

We have shewn how population must go on, in proportion to subsistence, and in proportion to industry: Now the machine eats nothing, so does not diminish subsistence, and industry (in our age at least) is in no danger of being overstocked in any well governed state; for let all the world copy your improvements, they still will be the scholars. And if, on the contrary, in the introduction of machines you are found to be the scholars of other nations, in that case you are brought to the dilemma of accepting the invention with all its inconveniencies, or of renouncing every foreign communication.

In speculations of this kind, one ought not, I think, to conclude, that experience *must* of necessity prove what we imagine our reasoning has pointed out.

The consequences of innovations in political oeconomy, admit of an infinite variety, because of the infinite variety of circumstances which attend them: no reasoning, therefore, however refined, can point out a priori, what upon such occasions must indispensably follow. The experiment must be made, circumstances must be allowed to operate; inconveniencies must be prevented or rectified as far as possible; and when these prove too many, or too great to be removed, the most rational, the best concerted scheme in theory must be laid aside, until preparatory steps be taken for rendering it practicable.

Upon the whole, daily experience shews the advantage and improvement acquired by the introduction of machines. Let the inconveniencies complained of be ever so sensibly felt, let a statesman be ever so careless in relieving those who are forced to be idle, all these inconveniencies are only temporary; the advantage is perma-

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ment, and the necessity of introducing every method of abridging labour and expence, in order to supply the wants of luxurious mankind, is absolutely indispensable, according to modern policy, according to experience, and according to reason.

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C H A P. XX.

*Miscellaneous Observations upon Agriculture and Population.*

I HAVE hitherto considered the object of agriculture, as no more than the raising of grain; the food of mankind has been estimated by the quantity they consume of that production; and husbandmen have been supposed to have their residence in the country. As my subject has but an indirect connection with the science of agriculture, I have simplified many things complex in themselves, the better to adapt them to the principal object of my inquiry, and the better to keep my attention fixed upon one idea at a time. I am now going to return to some parts of my subject, which I think I have treated too superficially; and to examine, as I go along, some miscellaneous questions which will naturally arise from what is to be said.

QUEST. I. Almost every one who has writ upon population, and upon agriculture, considered as an essential concomitant of it, has recommended the equal distribution of the property of lands as useful to both: a few reflections upon this question, after what has been thrown out in the course of the foregoing chapters, may not be improper; more in order to examine and apply the principles laid down, than with a view to combat the opinion of others.

I have already, upon several occasions, taken notice of the great difference between the political oeconomy of the antients, and that

of modern times; for this reason, among others, that I perceive the sentiments of the antients, which were founded upon reason and common sense, relative to their situation, have been adopted by some moderns, who have not perhaps sufficiently attended to the change of our manners, and to the effects which this change must operate upon every thing relative to our oeconomy. The antients recommended strongly an equal distribution of lands as the best security for liberty, and the best method, not only to preserve an equality among the citizens, but also to increase their number.

In those days, the citizens did not compose one half of the state relatively to numbers; and there was almost no such thing as an established monied interest, which can no where be founded but upon trade, and an extensive industry. In those days there was no solid income but in land: and that being equally divided among the citizens, was favourable to their multiplication and produced equality. But in our days, riches do not consist in lands only; nay we sometimes find the most considerable proprietor of these in very indifferent circumstances; loaded with debts, and depending upon the indulgence of men who have not an acre, and who are their creditors. Let us therefore divide our lands as we please; we shall never produce equality by it. This is an essential difference between us and the antients, with respect to one point. Now as to the other, population.

The equal division of lands, no doubt, greatly tends to increase the numbers of one class of inhabitants, to wit, the landlords. In antient times, as has been observed, the chief attention was to increase the citizens, that is the higher classes of the state; and the equal division of property so effectually produced this effect, that the Greek states were obliged to allow the exposition of children; and Aristotle looked upon it as a thing indispensably necessary, as M. de Montesquieu has very judiciously observed. The multiplication of the lowest classes, that is of the slaves, never entered into the consideration of the public, but remained purely a matter of private

private concern; and we find it was a question with some, whether or not it was worth while to breed from them at all. But in our days the principal object is to support the lower classes from their own multiplication, and for this purpose, an unequal division of property seems to me the more favourable scheme; because the wealth of the rich falls naturally into the pockets of the industrious poor; whereas the produce of a very middling fortune, does no more than feed the children of the proprietor, who in course become very commonly and very naturally an useless burthen upon the land. Let me apply this to an example. Do we not familiarly observe, that the consolidation of small estates, and the diminution of gentlemen families of middling fortunes, do little harm to a modern state. There are always abundance of this class of inhabitants to be found whenever there is occasion for them. When a great man buys up the lands of the neighbouring gentry, or small proprietors, all the complaints which are heard, turn upon the distress which thence result to the lower classes, from the loss of their masters and protectors; but never one word is heard of that made by the state, from the extinction of the former proprietor's family. This abundantly shews that the object of modern attention is the multiplication of the lower classes, consequently it must be an inconsistency to adopt the practice of the antients, when our oeconomy is entirely opposite to theirs.

Let this suffice to point out how far the difference of our manners should influence the division of our lands. I shall now examine a  
QUEST. II. question relative to the science of agriculture, not considered as a method of improving the soil, (this will come in more naturally afterwards) but of making it produce to the best advantage, supposing it to be already improved.

In treating of the productions of the earth, in consequence of agriculture, I have all along distinguished them from those which spontaneously proceed from the force of nature: these are the immediate gift of God, those are the return of the labour of his creatures. Every one knows that the labour of mankind is not in proportion

portion to their numbers, but to their industry. The produce therefore of agriculture must be estimated, not according to the quantity of fruits only, but also according to the labour employed to produce them. These things premised, the question here proposed to be examined arises, viz. Which species of agriculture is the most advantageous to a modern society, that which produces the greatest quantity of fruits *absolutely* taken, or that which produces the greatest quantity *relatively* taken, I mean to the labour employed?

This question might easily be resolved, in general, by the application of principles already deduced; although it cannot admit of a direct answer, in the manner I have put it. One, therefore, may say indeterminate, that species is the best which produces a surplus the best proportioned to the industry, and to the demands of all the free hands of the state. But as this solution would not lead me to the object I have in view, I have thrown in an alternative in order to gain attention to the principles which I am going to examine, and which influence and determine the establishment of the one or the other species of agriculture.

The principal difficulty I find in the examination of this question, is to distinguish the effects of agriculture from those of the spontaneous production of the earth. The returns from pasture, for example, relatively taken, are, as we have observed, both from reason and from experience, far greater than those of corn fields, (vid. supra, chap. 8.) though I little doubt but that, absolutely taken, the case is quite otherwise; that is to say, that an acre of the finest corn land will produce more nourishment for man, than an equal portion of the finest pasture: but here we are following the proportion of space and produce, not of labour; for if the produce of both acres be considered relatively to the labour necessary for the cultivation, as well as to the extent; the produce of pasture will be found far greater: this however I ascribe to the spontaneous operation of nature, and not to the superior utility of this kind of agriculture.

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Since therefore it is impossible, rightly to separate the effects of nature from those of art and industry, in this species of improvement, let us confine our speculations to those only which have for their object the turning up the surface, and the sowing or cultivating annual vegetables. For the better conveying our ideas, let us take an example, and reason from a supposition.

Let me suppose an island of a small extent and fruitful soil, sufficiently improved, and cultivated after the manner of the best lands of England, in the ordinary method of farming.

In that case we may infer, from what was laid down in the 8th chapter, that the number of people employed about farming may be nearly about one half of the whole society. Let the whole inhabitants of the island be called 1000, that is 500 farmers, and as many free hands. The 500 farmers must then feed 1000; the 500 free hands must provide for all the other wants of 1000. By this supposition, and allowing that there is an equal degree of industry in these two classes, the providing of food will appear to be an occupation just equal to that of providing for all other wants. From this let me draw a few consequences, by the by, before I proceed.

Experience shews that in all countries there are found many who are here understood to be included in the class of free hands, who consumed infinitely more of other things than of food; consequently we must conclude, that as the wants of some do far exceed the proportion of their food, so in order to bring the balance even, the wants of others must fall far below it.) That this is the case, I believe, will be found by experience. Let me follow this thought a little farther.

In proportion as a greater number than one half of the people becomes employed in agriculture, must it not follow, that all other work must come to bear a smaller proportion than formerly to the food consumed; consequently the manner of living must become more simple. Now we have shewn that what we call wants, (in contradistinction to food, can only be supplied by the free hands, and that these again can only be fed from the surplus of the farmers; consequently

consequently the fewer wants, and the fewer free hands, the less surplus, which of course infers an agriculture less productive, relatively to the number of farmers. Were, therefore, a whole society employed in agriculture, carried on as a direct method of subsisting, there would be no surplus, consequently no free hands; consequently no work for supplying any want but food. This may be thought an impossible supposition. If you suppose agriculture exercised as a trade, I allow it to be so, but not if it be carried on as a method of subsisting only; and if you throw away the idea of labour altogether, and suppose mankind in its infancy, that is in paradise, living upon the spontaneous fruits of the earth, and quite naked, you will find the case not only supposable, but exactly so. It is exactly so among the cattle: every one of them may be considered in a parallel situation with a husbandman who works for his own nourishment. They feed upon the spontaneous fruits of the earth, and have no surplus; and having no other want, they are freed from every other care. Let me return now to the island.

The 500 farmers feed 1000; and we suppose the lands laboured as in a good English farm. One of the society proposes to augment the number of inhabitants by introducing a more opulent species of agriculture, the produce of which may be *absolutely* greater, though relatively less.

The first question the statesman would naturally put to this reformer would be, What is your view in increasing the number of our inhabitants, is it to defend us against our enemies, is it to supply the wants of strangers, and thereby to enrich ourselves, is it to supply our own wants with more abundance, or is it to provide us more abundantly with *food*? I can hardly find out any other rational view in wishing for an additional number of people in any country whatsoever. Let it be answered, that all these ends may be thereby obtained: and now let us examine how far this reformation upon agriculture will have the effect of increasing inhabitants, how far such increase will procure the ends proposed, and how far the execution



cution of such a plan is a practicable scheme to an industrious people.

If the inhabitants be not sufficiently fed, which is the only thing that can prevent their multiplication, it must proceed from one of two causes. Either *first*, that those do procreate who cannot produce an equivalent for the food of their children; or *secondly*, that industry making a quicker progress than agriculture, the industrious come too strongly in competition with one another, for the surplus of food to be found; which has the effect of raising the prices of it, and reducing the portions too low to suffer a division; and thereby of preventing marriage and multiplication in the lower classes of the free hands.

In the first case, it is to no purpose to increase the produce of agriculture, by rendering it more expensive; for those who have no equivalent to give when food is cheap, will still be in greater necessity when it rises in the price. In the second case, it is to no purpose to diminish the surplus of the farmers, because the supposition proves that the balance is already too heavy upon the side of the free hands, that is, that the surplus of the farmers is already become insufficient fully to feed them.

Two remedies may be proposed for this inconveniency, the one tending to population, the other to depopulation; and as the end to be compassed is to set the balance even between husbandmen and free hands, I shall explain both, and point out *how far* from principles it appears, that in either way the end may be attained.

That tending to increase population is the remedy proposed, and, no doubt, was it possible to introduce a new system of agriculture of a larger absolute production, although the relative production should be less, the inhabitants of the state becoming thereby better fed, though at a greater cost, would infallibly multiply. Let me therefore examine this first part before I say any thing of the other; and for the greater distinctness I shall return to my example, and examine both the consequences and the possibility of putting such a plan in execution.

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Let me suppose, that by using the spade and rake, instead of the plow and harrow, the lands of our island might be brought to produce with more abundance; this is a method of increasing the expence of agriculture, which would require an additional number of husbandmen.

Now, by the supposition, 500 farmers fed, though scantily, the whole of the inhabitants, that is 1000 persons. If therefore 100 of the free hands can be engaged to become farmers, the end may be attained: more nourishment will be produced; the people will be better fed; they will multiply; that is, their number will rise above 1000. Let us next endeavour to form a judgment of this increase, and of the consequence of the revolution.

The society will now be composed of 600 farmers and 400 free hands. The 600 will certainly produce more fruits than formerly; but as their labour is relatively less productive by the supposition, it will be impossible for them to furnish surplus equal to their own consumption; consequently, the free hands never will be able to rise to a number equal to theirs; that is, the society will never get up to 1200. But we supposed, that the other wants of the society required the industry of one half of the inhabitants to supply them; that is, of all the 500 free hands; and, as the number of these has been already reduced, and can never more rise to that proportion, as has been said, must not either the people voluntarily adopt a more simple way of living; or must not the demand for work rise very considerably? Let me consider the consequences in both cases. In the first, you perceive, that if the inhabitants themselves are obliged to simplify their way of living, for want of hands to supply what they formerly consumed, three of the four objects proposed by the reformation become impossible to be attained; to wit, the defending themselves against their enemies, the supplying the wants of strangers, and the supplying their own with more abundance. And with regard to the fourth, the being better fed, that must cease to be the case, the moment the end is obtained; that is, the moment the inhabitants are multiplied up to the proportion of additional food. Consequently, by simplifying their way of life,

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and allowing farming to stand upon the new footing, they compass not any one of the ends they proposed.)

Next, if we suppose, that the inhabitants do not incline to simplify their way of life, but that the wealthy among them insist upon purchasing all the instruments of luxury which they formerly were used to enjoy, must not demand for work greatly rise, and must not, of consequence, an additional encouragement be given to that species of labour which had been diminished, in taking 100 persons from industry, to throw them into the class of farmers? Will not this make them quickly desert their spade, and the rather, as they have taken to an employment less lucrative than that of farming, according to the former systems?

So much for the consequences which would follow, in case the plan proposed was found practicable; that is, supposing it to be a thing possible to transport into agriculture a part of an industrious society, already otherwise employed, and to change *all at once* the relative proportion between those who supply food, and those who purchase it with their industry. We have begun, by taking that first step for granted; and now I am to shew what obstacles will be found in the execution.

We have said, that it is the multiplicity and complexity of wants which give an encouragement to agriculture, and not agriculture, or an abundance of food, which inspires mankind with a disposition to labour. Now, if this principle be true, the supposition we have proceeded upon is absurd. I am afraid, both reason and experience will abundantly prove that it is so.

The natural and necessary effect of industry, in trades and manufactures, is to promote the increase of relative husbandry; which, by augmenting the surplus, tends of course to increase the proportion of the free hands relatively to the farmers. A river may as easily ascend to its source, as a people voluntarily adopt a more operose agriculture than that already established, supposing the lands to be fully improved, the spirit of industry to prevail on one hand, and the farmers to have profit only in view on the other.

What

What farmer could sell the surplus of an expensive agriculture in competition with another who exercised a species relatively more productive?

When lands are improved, the simplification of agriculture is a necessary concomitant of industry, because diminishing expence is the only method of gaining a preference at market.

Whether industry has done hurt to population, by augmenting QUEST. III. the relative, and diminishing the absolute produce of agriculture; or whether it has done good to it, by encouraging the science in general, and extending the exercise of it over the face of the earth, is a matter of fact which I shall leave to others, better informed than I am, to determine. For my own part, I believe that thousands of examples may be found of the one and the other. I know corn fields, where villages formerly stood, the inhabitants of which fed themselves with the pure produce of absolute agriculture; that is, with a bit of garden ground, and the milk of a cow: there surely is depopulation: but, at a small distance from the place where those villages stood, I see corn fields; where nothing but heath was to be met with; this marks population. I seek no more than to explain from facts the principles I am endeavouring to discover, and shall leave general conclusions to others, as I have already said.

There is a maxim in law, which may be extended almost to every thing in this world, *unum quodque eodem modo solvitur quo colligatum est.* Industry forms this species of absolute agriculture; industry destroys it. A military force raised the Roman greatness; a military force destroyed it. A spirit of liberty may form a noble constitution, and a spirit of liberty may break the same to pieces. The States of Denmark restrained the royal power and established a free government; the same States rendered that very power unlimited, and established there the purest monarchy in Christendom. But these reflections are foreign to our subject: *Né sutor ultra crepidam.* I return.

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When industry is set on foot, it gives encouragement to agriculture exercised as a trade: and by the allurements of ease, which a large surplus procures to the farmers, it does hurt to that species which is exercised as a method of subsistence. Lands become more generally and less thoroughly laboured. In some countries tillage is set on foot and encouraged; this is an operose agriculture: While industry goes forward, and while a people can remain satisfied with a nourishment consisting chiefly of bread, this system of agriculture will subsist, and will carry numbers very high. If wealth increases, and if those who have it begin to demand a much greater proportion of work than formerly, while they consume no more food, then I believe numbers may diminish from the principles I am now going in quest of.

I return to the council of the island where the proposition laid down upon the carpet is, *The scanty subsistence of the inhabitants requires redress.*

A Machiavelian stands up (of such there are some in every country) and proposes, in place of multiplying the inhabitants, by rendering agriculture more operose, to diminish their number, by throwing a quantity of corn fields into grass. What is the intention of agriculture, says he, but to nourish a state? By our operose method of plowing and sowing, one half of the whole produce is consumed by those who raise it; whereas by having a great part of our island in pasture, one half of the husbandmen may be saved. Pray what do you propose to do with those whom you intend to make idle? replies a citizen. Let them betake themselves to industry. But industry is sufficiently, nay more than sufficiently stocked already. If, says Machiavel, the supernumerary husbandmen be thrown out of a way of living, they may go where they please; we have no occasion for them, nor for any one who lives only to feed himself. But you diminish the number of your people, replies the citizen, and consequently your strength; and if afterwards you come to be attacked by your enemies, you will wish to have those back again for your defence, whom in your security you despised.

To this the other makes answer: there you trust to the Egyptian reed. If they be necessary for feeding us at present, how shall we be able to live while we employ them as soldiers? We may live without many things, but not without the labour of our husbandmen. Whether we have our grounds in tillage or in pasture, if that class be rightly proportioned to the labour required, we never can take any from it. In those countries where we see princes have recourse to the land to recruit their armies, we may safely conclude, that there the land is overstocked; and that industry has not as yet been able to purge off all the superfluous mouths: but with us the case is different, where agriculture is justly proportioned to the number of husbandmen. If I propose a reform, it is only to augment the surplus, upon which all the state, except the husbandmen, are fed; if the surplus after the reform is greater than at present, the plan is good, although 250 of our farmers should thereby be forced to starve for hunger.

Though no man is, I believe, capable to reason in so inhuman a style, and though the revolution here proposed be an impossible supposition, if meant to be executed all at once, the same effects however must be produced, in every country where we see corn fields by degrees turned into pasture; only the change is gradual, industry is not overstocked any where, and subsistence may be drawn from other countries, where the operose species of agriculture can be carried on with profit.

Familiar experience proves the truth of this. I have a corn farm, where I maintain ten horses and four servants for the cultivation alone: at the end of the year I find my surplus equal to 40*l.* sterling. If, by throwing my grounds into grass, I can dismiss three servants and eight horses, and at the end of the year raise my surplus to 50*l.* sterling, who doubts of my doing it? Is not this following the doctrine above laid down? But there is nothing odious in this; because I do not see these three servants die for hunger, nor is it a consequence they should, as states are formed. They turn themselves to industry, and food comes from abroad, in proportion as

the country itself produces a less quantity. Fact and experience prove this assertion, and I cite Holland as an example, where every branch of opulent agriculture is exploded, except for such productions as cannot be brought from other countries. I introduced the rough Machiavelian only to set principles in a strong light, and particularly that concerning the recruiting of armies from the land, which I take to be both a true one, and one necessary to be attended to, to wit, that those who must labour for the subsistence of the society, can be of little use for the defence of a state, in case of any emergency. Princes have found out the truth of this, and in proportion as industry has extended itself, regular armies have been found necessary to be kept up in times of peace, in order to be had in times of war. A militia composed of people truly industrious, I take to be far better in speculation than in practice. How would a militia do in Holland? how admirable was it not formerly in Scotland, Poland, and Catalonia? And how admirably does it still succeed in the armies of the house of Austria? I may however be mistaken; for a military and an industrious spirit may be found compatible with one another in some particular nations: time perhaps will clear up this matter. Thus much with regard to a militia. Now as to recruiting a regular army.

The more they are recruited from the land, the less they desert. The army of the Russians, for example, now assembled (1758) hardly knows desertion, those of the house of Austria, taken from certain provinces where there is almost no industry, are in the same case, also the militia of France which I consider as regular troops. On the other hand, those armies which are raised in the countries where industry has taken root are chiefly composed of loose fellows, the excrements of populous cities, the sons of vice and idleness, who have neither domicile nor attachment. These are soldiers truly by trade, and make a trade of it; how many thousands of such are now to be found? they come to market every season, and the best bidder has them while he can hold them. Some princes make a point not to receive their own deserters back, but accept of those  
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who have committed the same infidelity to others; while others content themselves with punishing those who fail in their attempt to desert, but receive them back when they return of their own accord, after having accomplished their desertion. All is now become commerce, and seems to be regulated by the principles of it. I return to our agriculture.

Does not the exposition we have now given of these principles tend to cast a light upon the first question dismissed in this chapter, to wit, the effects of an equal and an unequal distribution of the property of lands?

When these are once well cultivated and improved, it is of no consequence to whom the property belongs; for by the property of such lands I only can mean the surplus, as we have abundantly explained elsewhere. Let therefore the property of all the lands of a kingdom, fully improved, belong to the state, or to any number of individuals, however few, there is no question of improvement; no difference as to agriculture, no difference as to population, according to modern policy. So long as the whole is well cultivated and made to produce, by a set of men I call farmers, the end is fully obtained; and according to the nature of the agriculture, which many different circumstances of taste and manner of living has introduced, larger or smaller portions of land must be allotted to each of them.

If you suppose a country not as yet improved, as many are, then the case becomes quite different, and small possessions are necessary, both for multiplying the inhabitants and for improving the soil. In this supposition the most opulent agriculture may be carried on in competition with the most lucrative; because when there is a question of improvement, there is frequently a considerable outgoing instead of any surplus after paying the labour.

Agriculture for improvement can be carried on by none but those who have wealth and superfluity, and is prosecuted with a view to future, not to present advantage: of this we shall treat in another place. For I consider it as a quite different operation, influenced by  
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different principles, and no ways to be confounded with the present subject of inquiry. But I have insensibly been wandering through an extensive subject, and it is now time to return.

I have said above that a river might as easily ascend to its source, as an industrious people voluntarily adopt a more operose system of agriculture than that already established, while the spirit of industry prevails on one hand, and while farmers have profit only in view on the other. In consequence of this position, I have treated the plan proposed for augmenting the inhabitants of the island, by the introduction of a more operose agriculture as absurd, and so it certainly is: but let me throw in a circumstance which affects the spirit of that people, and the plan becomes plausible and easy.

Let a part of the wealthy proprietors of the lands take a taste for agriculture. Let a Tull, a Du Hamel turn agriculture into an object of luxury, of amusement. Let this science be turned into a Mississippi, or South Sea scheme. Let the rich be made to believe that treasures are to be found at a small expence, laid at first out upon farming, and you will soon see the most operose species of the science go forward, and the produce of it come to market and be sold, in spite of all competition. My Lady Duchefs's knotting may be sold at so much a pound, as well as that performed by a girl who does not spend six pence a day; but if the one and the other be considered relatively to the expence of the manufacturer, every knot of my Lady's will be found to have cost as much as a pound of the other. The Duchefs's pound, however, increases the quantity of knots; and so does my Lord's farm the mass of subsistence for the whole society. The nation also gains by his extravagance having taken a turn, which may produce the permanent good effect of improving a part of the country, though at an expence infinitely beyond the value of it. I must now again touch upon another part of my subject, which I think has been treated too superficially.

In a former chapter I have shewn how industry has the natural effect of collecting into towns and cities the free hands of a state, leaving the farmers in their farms and villages. This distribution

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served the purpose of explaining certain principles; but when examined relatively to other circumstances which at that time I had not in my eye, it will be found by far too general. Let me therefore add some farther observations upon that matter.

The extensive agriculture of plowing and sowing, is the proper employment of the country, and is the foundation of population in every nation fed upon its own produce. Cities are commonly surrounded by kitchen gardens, and rich grass fields; these are the proper objects of agriculture for those who live in suburbs, or who are shut up within the walls of small towns. The gardens produce various kinds of nourishment, which cannot easily be brought from a distance, in that fresh and luxuriant state which pleases the eye, and conduces to health. They offer a continual occupation to man, and very little for cattle, therefore are properly situated in the proximity of towns and cities. The grass fields again are commonly either grazed by cows, for the production of milk, butter, cream, &c. which suffer by long carriage; or kept in pasture for preserving fatted animals in good order until the markets demand them; or they are cut in grass for the cattle of the city. They may also be turned into hay with profit; because the carriage of a bulky commodity from a great distance is sometimes too expensive. Thus we commonly find agriculture disposed in the following manner. In the center stands the city surrounded by kitchen gardens; beyond these lies a belt of fine luxuriant pasture or hay fields; stretch beyond this and you find the beginning of what I call operose farming, plowing and sowing; beyond this lie grazing farms for the fattening of cattle; and last of all come the mountainous and large extents of unimproved or ill improved grounds, where animals are bred. This seems the natural distribution, and such I have found it almost every where established, when particular circumstances do not invert the order.

The poorness of the soil near Paris, for example, presents you with fields of rye corn at the very gates, and with the most extensive kitchen gardens and orchards, even for cherries and peaches,

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at a considerable distance from town. Other cities I have found, and I can cite the example of that which I at present inhabit, Padoua, where no kitchen garden is to be found near it, but every spot is covered with the richest grain; two thirds with wheat, and the remaining third with Indian corn. The reason of this is palpable. The town is of a vast extent, in proportion to the inhabitants; the gardens are all within the walls, and the dung of the city enables the soil to produce constantly. Hay is brought from a greater distance, because the expence of distributing the dung over a distant field, would be greater than that of transporting the hay by water-carriage. The farm houses here appear no larger than huts, as they really are, built by the farmers; because the space to be laboured is very small, in proportion to the produce; hence it is, that a farmer here pays the value of the full half of the crop to the landlord, and out of the remaining half, not only sows the ground and buys the dung, but furnishes the cattle and labouring instruments, nay even rebuilds his house, when occasion requires.

When first I examined these fertile plains, I began to lament the prodigal consumption of such valuable lands, in a multitude of very broad high-ways, issuing to all quarters; many of which I thought might be saved, in consideration of the vast advantage accruing upon such oeconomy: but upon farther reflection I perceived, that the loss was inconsiderable; for the fertility of the soil proceeding chiefly from the manure laid upon it, the loss sustained from the roads ought to be computed at no more than the value of the land when uncultivated. The case would be very different, were roads now to be changed, or new ones carried through the corn fields; the loss then would be considerable, though even that would be temporary, and only affect particular persons: for the same dung, which now supports these lands in their fertility, would quickly fertilize others in their place, and in a few years matters would stand as at present.

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These last reflections lead me naturally to examine a question which has been treated by a very polite French writer, the author of *L'Ami de l'homme*, and which comes in here naturally enough, before I put an end to this first book. Here it is.

Does an unnecessary consumption of the earth's productions, QUEST. IV. either in food, cloathing, or other wants; and a prodigal employment of fine rich fields, in gardens, avenues, great roads, and other uses which give small returns, hurt population, by rendering food and necessaries less abundant, in a kingdom such as France, in its present situation?

My answer is, That if France were fully cultivated and peopled, the introduction of superfluous consumption would be an abuse, and would diminish the number of inhabitants; as the contrary is the case, it proves an advantage. I shall now give my reasons for differing in opinion from the gentleman whose performance I have cited.

As the question is put, you perceive the end to be compassed is, to render food and necessaries abundant; because the abuse is considered in no other light, than relatively to the particular effect of diminishing the proper quantity of subsistence, which the king would incline to preserve, for the nourishment and uses of his people. I shall therefore confine myself chiefly to this object, and if I shew, that these superfluous employments of the surface of the earth, and prodigal consumptions of her fruits, are really no harm, but an encouragement to the improvement of the lands of France in her present state, I shall consider the question as sufficiently resolved: because if the abuse, as it is called, proves favourable to agriculture, it can never prove hurtful to population. However, from the inattention of the government, it may affect foreign trade, but this is an object entirely foreign to the question. But before I enter upon the subject, it is proper to observe, that I am of opinion, that any system of oeconomy which necessarily tends to corrupt the manners of a people, ought by every possible means to be

be discouraged, although no particular prejudice should result from it, either to population, or to plentiful subsistence.

Now, in the question before us, the only abuse I can find in these habits of extraordinary consumption, appears relative to the character of the consumers, and seems in no way to proceed from the effects of the consumption. The vices of men may no doubt prove the cause of their making a superfluous consumption, but the consumption they make can hardly ever be the cause of this vice. The most virtuous man in France may have the most splendid table, the richest clothes, the most magnificent equipages, the greatest number of useless horses, the most pompous palace, and most extensive gardens. The most enormous luxury to be conceived, in our acceptation of the term, so long as it is directed to no other object than the consumption of the labour and ingenuity of man, is compatible with virtue as well as with vice. This being premised, I come to the point in hand.

France, at present, is in her infancy as to improvement, although the advances she has made within a century excite the admiration of the world. I shall not go far in search of the proof of this assertion. Great tracts of her lands are still uncultivated, millions of her inhabitants are idle. When all comes to be cultivated, and all are employed, then she will be in a state of perfection, relatively to the moral possibility of being improved. The people are free, slavery is unknown, and every man is charged with feeding himself, and bringing up his children. The ports of the country are open to receive subsistence, and that nation, as much as any other, may be considered as an individual in the great society of the world; that is, may increase in power, wealth, and ease, relatively to others, in proportion to the industry of her inhabitants. This being the case, all the principles of political oeconomy, which we have been inquiring after, may freely operate in this kingdom.

France has arrived at her present pitch of luxury, relatively to consumption, by slow degrees. As she has grown in wealth, her desire of employing it has grown also. In proportion as her demands

mands have increased, more hands have been employed to supply them; for no article of expence can be increased, without increasing the work of those who supply it. If the same number of inhabitants in the city of Paris consume four times as much of any necessary article as formerly, I hope it will be allowed, that the production of such necessaries must be four times as abundant, and consequently, that many more people must be employed in providing them.

What is it that encourages agriculture, but a great demand for its productions? What encourages multiplication, but a great demand for people; that is, for their work? Would any one complain of the extravagant people in Paris, if, instead of consuming those vast superfluities, they were to send them over to Dover, for a return in English gold? What is the difference between the prodigal consumption, and the sale? The one brings in money, the other brings in none: but as to food and necessaries, for providing the poor and frugal, their contingent, in either case, stands exactly the same.

But, says one, were it not for this extraordinary consumption, every thing would be cheaper. This I readily allow; but will any body say, that reducing the price of the earth's productions is a method to encourage agriculture, especially in a country where grounds are not improved, and where they cannot be improved; chiefly, because the expence surpasses all the profits which possibly can be drawn from the returns? High prices therefore, the effect of great consumption, are certainly advantageous to the extension of agriculture. If I throw my rich corn fields into gravel-walks and gardens, I suppose they will no more come into competition with those of my neighbour, the laborious husbandman. Who will then lose by my extravagance? Not the husbandman. It will perhaps be said, the nation in general will lose; because you deprive them of their food. This might be true, were the laying waste the corn fields a sudden revolution, and extensive enough to affect the whole society; and were the sea-ports and barriers of the kingdom

kingdom shut: but that not being the case, the nation, upon the smallest deficiency, goes to market with her money, and loses none of her inhabitants.

OBJ. But if living is made dear, manufacturers must starve, for want of employment.

ANSW. Not those who supply home consumption, but only those who supply foreigners living more cheaply; and of such I know but few. The interest of this class shall be fully examined in another place. At present I shall only observe, that the laying waste corn fields in an industrious country, where refinement has set on foot a plan of useful husbandry, will have no other effect, than that of rendering grain for a while proportionally dearer: consequently, agriculture will be thereby encouraged; and in a few years the loss will be repaired, by a farther extension of improvement. This will make food plentiful and cheap: then numbers will increase, until it become scarce again. It is by such alternate vicissitudes, that improvement and population are carried to their height. While the improvement of lands goes forward, I must conclude, that demand for subsistence is increasing; and if this be not a proof of population, I am much mistaken.

I can very easily suppose, that a demand for *work* may increase considerably, in consequence of an augmentation of riches only; because there is no bounds to the consumption of *work*; but as for articles of nourishment the case is quite different. The most delicate liver in Paris will not put more of the earth's productions into his belly, than another: he may pick and choose, but he will always find, that what he leaves will go to feed another: victuals are not thrown away in any country I have ever been in. It is not in the most expensive kitchens where there is found the most prodigal dissipation of the abundant fruits of the earth; and it is with such that a people is fed, not with ortolans, truffles, and oysters, sent from Marenne.

OBJ.

OBJ. Roads of a superfluous breadth are carried many times through the finest fields, belonging to the poor and industrious, without a proper indemnity being given.

ANSW. The with-holding the indemnity is an abuse; the loss of the fields is none *to the state*, except in such countries where the quantity of arable lands is small, as in mountainous provinces; there a proper consideration should be had to the breadth, because the loss cannot be made up. In such countries as I here describe, and I cite the <sup>trial</sup> ~~trial~~ for an example, I have found all the inhabitants in a manner <sup>trial</sup> ~~trial~~ employed in that species of agriculture, which is exercised as a method of subsisting. The little ground that is arable, is divided into very small lots; the people multiply very much, and leave the country. Those who remain are usually employed in cutting wood, for building and burning, which they send down the rivers, and in return buy corn, which comes from the south and from the north. This is the best plan of industry they can follow, without the assistance of their sovereign. Roads here are executed to great perfection, with abundance of solidity, and with a tender regard for the little ground there is. I return to France.

OBJ. A multitude of superfluous horses are kept in Paris, which consume what would feed many more inhabitants.

ANSW. True: but he who feeds the horses, because *he thinks* he has use for them, would not feed those inhabitants, because *he is sure* he has no use for them: and did he, in complaisance for the public, dismiss his cattle, the farmer, who furnishes the hay and oats, would lose a customer, and nobody would gain. These articles are produced, because they are demanded: when additional inhabitants are produced, who will demand and can pay, their demand will be answered also, as long as there is an unemployed acre in France.

OBJ. The increase of the consumption of wood for firing is hurtful to population, because it marks the extension of forests.

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ANSW.



ANSW. This consequence I deny; both from fact and reason. From fact, because forests are not extended, and that nothing but the hand of nature, in an ill-inhabited country, seems capable of forming them. In France, forests are diminishing daily; and were it not for the jurisdiction of the *Table de marbre*, they would have been more diminished than they are. I agree, that the consumption of wood is at present infinitely greater than formerly, and likewise, that the price of it is greatly risen every where. These two circumstances rather seem to mark the contraction, than the extension of forests. But the increase of consumption and price proceed from other causes, as I shall shew, in order to point out some new principles relative to this extensive subject. 1. The increase of consumption proceeds from the increase of wealth. 2. The increase of price proceeds from the increase upon the value of labour, and not from the scarcity of forest, nor the height of the demand for firing. As to the first, I believe the fact will not be called in question, as it is one of the superfluities of consumption complained of, and put down to the account of luxury and extravagance. As to the second, the true cause of the rise of the price of that commodity demands a little more attention, and in order to point it out with some distinctness, I must first shew the political impossibility of forests becoming extended over the *arable* lands of France in her present situation.

The best proof I can offer to support my opinion is, to compare the inconsiderable value of an acre of standing forest in the king's adjudications, where thousands are sold at a time, with the value of an acre of tolerable corn lands, and then ask, if the present value of forests is so considerable, as to engage any proprietor to sow such a field for raising wood, when he must wait, perhaps 40 years, before it be fit for cutting? Add to this, that whoever plants a tree in France, comes under the jurisdiction above-mentioned, and is not at liberty to cut it down, and dispose of it, without their permission. It is in a great measure for this reason, that few trees are seen about French villages; and I never heard of one

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example,

example, of corn lands being sown with the seeds of forest-trees, with a view to improvement. That forests, which are well kept, may extend themselves over grounds not worth the cultivation, I do not deny; but this surely can do no harm to agriculture; and it is only in that respect, I pretend that forests in France are not at present in a way of gaining ground.

Now as to the rise in the price of wood for burning, I say, it proceeds not from the rise of the price of timber growing in forests, so much as from the increase of the price of labour, and principally of the price of transportation. This is not peculiar to France alone, but is common to all Europe almost, for the reasons I shall presently give. But in the first place, as to the matter of fact, that the rise in the price proceeds from the cause assigned, may be seen, by comparing the low price of an acre of standing forest, with the great value of the timber when brought to market: the first is the neat value of the wood; the last includes that of the labour.

Next as to the price of labour; the rise here is universal in all industrious nations, from a very plain reason, easily deducible from the principles above laid down.

While the land remained loaded with a number of superfluous mouths, while numbers were found in every province employed in agriculture, for the sake of subsistence, merely, such people were always ready to employ their idle hours and days, for a very small consideration from those who employed them. They did not then depend upon this employment for their subsistence; and a penny in their pocket purchased some superfluity for them. But when modern policy has by degrees drawn numbers from the country, the few that remain for the service of the public must now labour for ~~its~~ <sup>their</sup> subsistence; and he who employs them, must feed them, clothe them, and provide for all their other wants. No wonder then, if labour be dearer: there is a palpable reason for the augmentation.

The price of all necessaries has risen, no doubt, partly for the same reason, and this circumstance certainly enters into the combination:

bination: but work, in the country especially, has risen far beyond the proportion of the price of necessaries, and will rise still more as the lands become better purged of superfluous mouths.

Notwithstanding what I have said, I readily allow, that the great consumption of wood for burning, but more particularly for forges, has considerably raised the intrinsic value of forest lands; but the consequence has not been, to extend the forests, as we have shewn, but to produce a general revenue from them all over the kingdom; whereas formerly, in many provinces, they produced almost nothing. When they were cut, cattle were turned in, and by eating up the tender shoots from year to year, the forest ran into a wild, neither producing timber, nor pasture. This practice was established upon the ruling principle of private interest. The land was not worth the expence of grubbing up the timber; the timber when grown, did not compensate the loss of a few years pasture. No jurisdiction, however well administered, can check the operation of that principle; and a statesman who would attempt it, would be called a tyrant: he would distress the husbandman, and do no service to the state.

From what has been said, I must conclude, that while the consumption of the earth's produce, and of the work of man tend to excite industry, in providing for extraordinary demands; when the interest of foreign trade does not enter into the question; and while there are lands enough remaining unimproved, to furnish *the first matter*; there can be no political abuse from the misapplication or unnecessary destruction of either fruits or labour. The misapplier, or dissipator, is punished by the loss of his money; the industrious man is rewarded by the acquisition of it. We have said, that vice is not more essentially connected with superfluity, than virtue with industry and frugality. But such questions are foreign to my subject. I would however recommend it to moralists, to study circumstances well, before they carry reformation so far, as to interrupt an established system in the political oeconomy of their country.

## C H A P. XXI.

*Recapitulation of the First Book.*

I SET out by distinguishing government from political oeconomy; INTROD. calling the first the power to command, the second the talent to execute. Thus the governor may restrain, but the steward must lead, and, by direct motives of self-interest, gently conduct free and independent men to concur in certain schemes ultimately calculated for their own proper benefit.

The object is, to provide food, other necessaries and employment, not only for those who actually exist, but also for those who are to be brought into existence. This is accomplished, by engaging every one of the society to contribute to the service of others, in proportion only as he is to reap a benefit from reciprocal services. To render this practicable, the spirit of the people must be studied, the different occupations prescribed to each must first be adapted to their inclinations, and when once they have taken a taste for labour, these inclinations must be worked upon by degrees, so as to be bent towards such pursuits as are most proper for attaining the end desired.

He who sits at the head of this operation, is called the statesman. CHAP. I. I suppose him to be constantly awake, attentive to his employment, able and uncorrupted, tender in his love for the society he governs, impartially just in his indulgence for every class of inhabitants, and disregarding of the interest of individuals, when that regard is inconsistent with the general welfare.

Did I propose a plan of execution, I confess this supposition would be absurd; but as I mean nothing farther than the investigation of principles, it is no more so, than to suppose a point, a straight line, a circle, or an infinite, in treating of geometry.

CHAP. II. To prepare the way for treating this subject, in that order which the revolutions of the last centuries have pointed out as the most natural, I have made the distribution of my plan in the following order. Population and agriculture are the foundations of the whole. Civil and domestic liberty, introduced into Europe by the dissolution of the feudal form of government, set trade and industry on foot; these produced wealth and credit; these again debts and taxes; and all together established a perfectly new system of political oeconomy, the principles of which it is my intention to deduce and examine.

Population and agriculture, as I have said, must be the basis of the whole, in all ages of the world; and as they are so blended together in their connections and relations, as to make the separation of them quite incompatible with perspicuity and order, they have naturally been made the subject of the first book.

CHAP. III. I have shewn, that the first principle of multiplication is generation; the second is food: the one gives existence and life; the other preserves them.

The earth's spontaneous fruits being of a determined quantity, never can feed above a determined number. Labour is a method of augmenting the productions of nature, and in proportion to the augmentation, numbers may increase. From these positions, I conclude,

CHAP. IV. That the numbers of mankind must ever have been in proportion to the produce of the earth; and this produce must constantly be in the compound ratio of the fertility of the soil, and labour of the inhabitants. Consequently, there can be no determined universal proportion over the world, between the number of those necessary for labouring the soil, and of those who may be maintained by its produce. Here I am led to examine the motives which may induce one part of a free people to labour, in order to feed the other.

This I shew to proceed from the different wants to which mankind are liable.

Here

Here I introduce a statesman, as being necessary to model the spirit of a society. He contrives and encourages reciprocal objects of want, which have each their allurements. This engages every one in a different occupation, and must hurt the former simplicity of manners. I shew how essential it is, to keep a just balance throughout every part of industry, that no discouragement may be cast upon any branch of it, either from superfluity, or want; and I have pointed out, how the dividing of food between parents and children, is the means of bringing on scarcity, which inconvenience can only be removed by an augmentation of labour.

If a society does not concur in this plan of reciprocal industry, their numbers will cease to increase; because the industrious will not feed the idle. This I call a state of a moral impossibility of increase in numbers, and I distinguish it from the physical impossibility, which can take place only when nature itself, not man, refuses to produce subsistence. From this I apply to each particular society what I had before found applicable to mankind in general; to wit,

That the inhabitants of every country must be in the compound proportion of the quantity of food produced in it, and of the industry of the lower classes. If the food produced surpasses the proportion of industry, the balance of food will be exported; if the industry surpasses the proportion of food, its deficiency must be supplied by imports.

Reciprocal wants excite to labour; consequently, those whose labour is not directed towards the cultivation of the soil, must live upon a surplus produced by those who do. This divides the society into two classes. The one I call farmers, the other free hands.

As the creating these reciprocal wants was what set the society to work, and distributed them naturally into the two classes we have mentioned; so the augmentation of wants will require an augmentation of free hands, and their demand for food will increase agriculture.

Here



CHAP. VI. Here I define luxury to mean no more than the consumption of superfluity, or the supplying of wants not essentially necessary to life; and, I say, that a taste for superfluity will introduce the use of money, which I represent as the general object of want, that is of desire, among mankind; and I shew how an eagerness to acquire it becomes an universal passion, a means of increasing industry among the free hands; consequently, of augmenting their numbers; consequently, of promoting agriculture for their subsistence.

The whole operation I have been describing proceeds upon one supposition, to wit, that the people have a taste for labour, and the rich for superfluity. If these be covetous and admirers of simplicity; or those be lazy and void of ambition, the principles laid down will have no effect: and so in fact we find, that it is not in the finest countries in the world where most inhabitants are found, but in the most industrious.

Let it therefore never be said, there are too many manufacturers in a free country. It is the same thing as if it was said, there are too few idle persons, too few beggars, and too many husbandmen.

CHAP. VII. Here I break off my subject, to answer an objection arising from these principles.

OBJ. How could the simplicity of the antients be compatible with a great multiplication?

ANSW. In antient times men were forced to labour the ground because they were slaves to others. In modern times the operation is more complex, and as a statesman cannot make slaves of his subjects, he must engage them to become slaves to their own passions and desires; this is the only method to make them labour the ground, and provided this be accomplished, by whatever means it is brought about, mankind will increase.

CHAP. VIII. This question being dismissed, I point out a method of estimating the proportion of numbers between the farmers and free hands of a country, only as an illustration of the principle already laid down,

to

to wit, that it is the surplus of the farmers which goes for the subsistence of the others.

This surplus I shew to be the same thing as the value of the land rents; and hence I conclude,

1st, That the rising of the rents of lands proves the augmentation of industry, and the multiplication of free hands; but as rents may rise, and yet the number of inhabitants continue the same as before, I infer,

2dly, That the revolution must then mark the purging of the lands of superfluous mouths, and forcing these to quit their mother earth, in order to retire to towns and villages, where they may usefully swell the number of the free hands and apply to industry.

3dly, That the more a country is in tillage, the more it is inhabited, and the fewer free hands are to be found: that the more it is laid into pasture, the less it is inhabited, and the greater is the proportion of free hands.

Next I consider the principles which determine the place of residence. CHAP. IX.

The farmers must live upon, or near the spot they labour; that is, either upon their farms or in their villages.

The free hands I divide into two conditions. The first composed of the proprietors of the surplus of food, that is the landlords; together with those who can purchase it with a revenue already acquired, that is, the monied interest. The second condition is composed of those who must purchase some of this surplus with their daily labour.

Those of the first condition may live where they please; those of the second must live where they can.

When those of the first choose to live together, a considerable number of those of the second must follow them, in order to supply their consumption. This forms towns and cities.

When a statesman places the whole administration of public affairs in the same city, this swells a capital.

When manufacturers get together in bodies, they depend not directly upon consumers, but upon merchants. The situation of their residence depends upon circumstances relative to their occupation, provision and transportation of their work. From this hamlets swell into villages, and villages into towns. Sea ports owe their establishment to the increase of foreign trade.

CHAP. X. As the collecting such numbers of inhabitants together is a late revolution in the political oeconomy of Europe, I endeavour to give a short historical representation of it, and examine the consequences which result from it, both to the state from the growth of cities, and to the land proprietors from the desertion, as I may call it, of so many vassals and dependents. One principal effect I observe to be, the additional occupation it has given to statesmen; that is to say, political oeconomy is thereby become more complex.

CHAP. XI. Formerly the inhabitants were dispersed, and by sucking, as it were, their mother earth, were more easily subsisted: now industry has gathered them together, and industry must support them. The failing of industry, is like the cutting off the subsistence of an army. This is the care of a general to prevent, that the care of a statesman.

The supporting industry means no more than employing those who must live by it; and keeping their numbers in proportion to their work. The first point, therefore, is to find work for the present inhabitants; the second is, to make them multiply, if the demand for their labour increases.

Increasing numbers will never remove, but rather augment such inconveniencies, as proceed from the abuses of those already existing.

In order to employ a people rightly, it is proper to know the exact state of numbers necessary for supplying the demand for every occupation; to distribute those who must live by their industry into proper classes; and to make every class (as far as possible) at least, support their own numbers by propagation.

Where

Where the value of any species of industry is not sufficient for that purpose, a proper remedy must be applied. When any are found incapable, from age or infirmities, to gain their livelihood, they must be maintained. Infants exposed by their parents must be taken care of, and thrown back into the lowest classes of the people; the most numerous always, and the most difficult to be supported by their own propagation. Marriage, without assistance will not succeed in a class who gain no more by their industry than a personal physical necessary. Here our oeconomy differs widely from that of the antients. Among them marriage was encouraged in many ways; but it was only for the free. These did not amount to one half of the people. The slaves who represented our lower classes were recruited from other countries, as they are at present in America.

CHAP. XII.

If, therefore, according to modern oeconomy, the lowest species of labour must be kept cheap, in order to make manufactures flourish, the state must be at the expence of the children; for as matters stand, either the unmarried gain as much as the married should do, and become extravagant; or the married gain no more than the unmarried can do, and become miserable. An unequal competition between people of the same class, always implies one of these inconveniencies; and from these principally proceeds the decay and misery of such numbers in all modern states, as well as the constant complaints of the augmentation of the price of labour.

Every individual is equally inspired with a desire to propagate. A people can no more remain without propagating, than a tree without growing: but no more can live than can be fed; and as all augmentations of food must come at last to a stop, so soon as this happens, a people increase no more; that is to say, the proportion of those who die annually increases. This insensibly deters from propagation, because we are rational creatures. But still there are some who, though rational, are not provident; these marry and produce. This I call vicious propagation. Hence I distinguish propagation into two branches, to wit, multiplication, which goes on

among these who can feed what they breed, and mere procreation, which takes place among those who cannot maintain their offspring.

This last produces a political disease, which mortality cures at the expence of much misery; as forest trees which are not pruned, dress themselves and become vigorous at the expence of numbers which die all around. How to propose a remedy for this inconvenience, without laying some restraint upon marriage; how to lay a restraint upon marriage without shocking the spirit of the times, I own I cannot find out; so I leave every one to conjecture.

CHAP.  
XIII.

Although a complete remedy cannot be obtained against the effects of abusive procreation; yet with the help of accurate lists of births and deaths for every class of people, many expedients may be fallen upon to preserve the few who escape the dangers of their infancy, from falling back into the unhappy class which produced them. From these lists the degree of mortality and nature of diseases, as well as the difference between the propagation of the easy and of the miserable, will plainly appear; and if it be the duty of a statesman to keep all his people busy, he certainly should acquire the most exact knowledge possible of the numbers and propagation of those of every denomination, that he may prevent any class from rising above or sinking below the standard, which is best proportioned to the demand for their respective industry.

CHAP.  
XIV.

Population and agriculture have so close a connection with one another, that I find even the abuses to which they are severally liable, perfectly similar. I have observed how naturally it must happen, that when too many of a society propagate, a part must starve; when too many cultivate, a part must starve also. Here is the reason:

The more of a people cultivate a country, the smaller portion of it must fall to every man's share; and when these portions are reduced so low as to produce no more than what is necessary to feed the labourers, then agriculture is stocked to the utmost.

From this I divide agriculture into two branches; the one useful, the other abusive. The first is a trade, that is, a method of producing

ducing not only subsistence for the labourers, but also a surplus to be provided for the free hands of the state, for their subsistence, and for an equivalent either in work itself, or for the produce of it. The second is no trade, because it implies no alienation, but is purely a method of subsisting. If, therefore, in any country where agriculture is exercised as a trade, and where there are many free hands, the farmers should be allowed to multiply up to the proportion of the whole produce; would not all the free hands be forced to starve? What would be the advantage of having so many farmers; for there is one evident loss? Every one would be entirely taken up in feeding himself, wants would disappear; life indeed would be simplified to the last degree, but the bond of society, mutual dependence, would be dissolved: therefore I call this species abusive, in proportion as these effects are produced. I cite several examples of this abusive agriculture in different countries, where I take occasion to observe, that the christian virtue, charity, in proportion to its extent, is as conducive to multiplication as either slavery, or industry: whatever gives food must give numbers. I do not say that charity is conducive to industry.

CHAP.  
XV.

I next apply these general principles to a particular representation given of the state of population in the British isles; from which I conclude, that population there is not obstructed, either by losses sustained from war and commerce, or from the exportation of their subsistence, but from the political situation of that country, which throws it at present into a moral incapacity of augmenting in numbers.

CHAP.  
XVI.

The establishment of trade and industry naturally rectifies this misapplication of agriculture, by purging the land of superfluous mouths, and thereby reduces it, as it ought to be, to a trade calculated to furnish a surplus, which comes to be sold for the labour of all the industrious. It is this alone which can rivet the bond of general dependence among free men who must live by their industry; by making one part laborious farmers, and the other ingenious tradesmen and manufacturers. It is by the vibration of the balance between these two classes, that multiplication and agriculture

culture are carried to their height. When industry goes on too fast, free hands multiply above the standard, that is, their scale sinks; this raises the price of food, and gives an additional encouragement to agriculture: when this again becomes the more weighty, food becomes plentiful and cheap, then numbers augment a-new. These reflections lead me to consider the effects of plentiful and scarce years in modern times, when famines are almost things unknown; and I conclude,

CHAP. XVII.

That were plentiful years more common, mankind would be more numerous; that were scarce years more frequent, numbers would diminish. Then applying this observation to the state of exportations of grain from England, I am tempted to infer, that this kingdom, the most fertile perhaps in Europe, has never been found to produce, in one year, eighteen months full subsistence for all its inhabitants; nor ever less than ten months scanty provision in the years of the greatest sterility.

CHAP. XVIII.

When a country is fully peopled and continues to be industrious, food will come from abroad. When a loaf is to be had, the rich will eat it, though at the distance of a mile; and the poor may starve, though at the next door. It is the demand of the rich, who multiply as much as they incline, which encourages agriculture even in foreign nations; therefore I conclude, that this multiplication is the cause, and that the progress of agriculture is but the effect of it.

A country once fully stocked may diminish in numbers, and still remain stocked. This must proceed from a change in the manner of living; as when an indolent people quit the consumption of the more abundant productions of the earth, to seek after delicacies. On the other hand, the industrious bring an additional supply from abroad, and by furnishing strangers with the produce of their labour, they still go on and increase in numbers. This is the case of Holland: and this scheme will go on, until abuses at home raise the price of labour; and experience abroad, that universal school mistress, teaches foreigners to profit of their own advantages.

When food ceases to be augmented, numbers come to a stand; but trade may still go on and increase wealth: this will hire armies

of foreigners; so the traders may read of their own battles, victories, and trophies, and by spending their money, never smell gunpowder.

When they cannot augment their numbers, they will introduce machines into many manufactures; and these will supply the want, without adding to the consumption of their food. Foreigners, astonished at a novelty which lowers prices, and checks their growing industry, will copy the inventions; but being no more than scholars, who go awkwardly to work, this improvement will throw many of their hands into idleness: the machines will be cried down, and the traders will laugh in their sleeves, well knowing that nothing is more easy than to put work into the hands of an industrious man made idle. Wit and genius, in short, will always set him who possesses them above the level of his fellows, and when one resource fails him, he will contrive another.

CHAP. XIX.

The wit I here mention is not that acquired in the closet; for there one may learn, that an equal distribution of lands was so favourable to multiplication in antient times, that it must be owing to a contrary practice, that our numbers now are so much smaller. But he who walks abroad, and sees millions who have not one moment's time to put a spade in the ground, so busily are they employed in that branch of industry which is put into their hands, must readily conclude, that circumstances are changed, and that the fewer people are necessary for feeding the whole society, the more must remain free to be employed in providing every other thing that can make life agreeable, both to themselves and to strangers; who in return deliver into the hands of their industrious servants, the ensigns of superiority and dominion, money. Who is best employed, he who works to feed himself, or he who works to be fed, clothed, and supplied, disposing only of his superfluities to those whom, consequently, he shortly must command. This is obtained by the introduction of the useful species of agriculture, and by the explosion of the abusive. And when strangers are so kind as to allow their neighbours the privilege of clothing and adorning them, good nature, not to say self-interest, demands, in return,

CHAP. XX.

return, that the first be indulged in a permission to exercise those branches of toil and labour which are the least profitable, though the most necessary for the subsistence of the latter.

When the eye of humanity considers the toil of the farmer, and the indifference of his rich countryman in squandering, the abuse appears offensive. The rich man is advised to consider of the pain incurred by the poor husbandman, in consequence of his dissipation. Upon this the rich, touched with compassion, simplifies his way of life. The husbandman in a fury falls upon the reformer, and, in his rough way, gives him to understand, that he by no means looks upon him as his friend: for, says he, do you take me for the rich man's slave; or do you imagine that I toil as I do, either by his command, or for any consideration for him? Not in the least, it is purely for his money; and from the time you persuaded him to become an oeconomist, here am I, and my poor family, starving. We are not the only people in this situation; there is my neighbour who has all his hay and oats upon hand, since, by your instigation, likewise, he dismissed his useless horses. Do you think he will give his oats in charity to feed the poor? He is poor enough himself, and all those who have been working to get this provision together are in no better humour than I am. Hold your tongue, says the reformer, you are a parcel of extravagant fellows, you labourers. A hundred years ago, one could have got as many of you as one pleased, for the half of what you cost us at present. Give us back our lands, says the other, at the rate we had them; and let us all be well fed before we give you a farthing, and you shall have us as cheap as ever. But do you think that after you have chased one half of us into towns, and raised your rents with the price of their food, that we can work twice as hard, and serve you as formerly? No, Sir! you ought to have more sense than to expect it.

This is a sketch of the first book; I thought a short abridgment of it might be of service for recollecting ideas, and ranging them in order before I proceed.

END OF THE FIRST BOOK.

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AN  
I N Q U I R Y  
I N T O T H E  
P R I N C I P L E S O F P O L I T I C A L O E C O N O M Y .

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B O O K I I .  
O F T R A D E A N D I N D U S T R Y .

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I N T R O D U C T I O N .

**B**EFORE I enter upon this second book, I must premise a word of connexion, in order to conduct the ideas of my reader by the same way through which the chain of my own thoughts, and the distribution of my plan have naturally led me.

My principal view hitherto has been to prepare the way for an examination of the principles of modern politics, by inquiring into those which have, less or more, operated regular effects in all the ages of the world.

In doing this, I confess, it has been impossible for me not to anticipate many things which, according to the plan I have laid down, will in some measure involve me in repetitions.

I propose to investigate principles which are all relative and depending upon one another. It is impossible to treat of these with  
VOL. I. Y distinctness,