

TWO LECTURES
ON
POPULATION,
DELIVERED BEFORE
THE UNIVERSITY OF OXFORD,
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BY
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POLITICAL ECONOMY.
TO WHICH IS ADDED, A
CORRESPONDENCE BETWEEN THE AUTHOR
AND THE
REV. T. R. MALTHUS.

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ADVERTISEMENT.

MR. MALTHUS has honoured me with a correspondence, which he has permitted me to append to these Lectures.

I feel the disadvantageous contrast to which I expose my own compositions by their juxta-position to those of our most eminent living philosophical writer; but I also feel that nothing could justify me in withholding from the public the instruction contained in Mr. Malthus's Letters.

LECTURE I.

POPULATION.

IN the present and the following Lecture I propose to consider the subject of Population. A subject of which the details are almost endless, but the general principles few and plain. It is indebted probably to the latter circumstance for the degree in which it has attracted the public attention. The doctrines of rent, of value, and of money, are each as important as that of population, but they require the use of highly abstract terms, and depend on long chains of reasoning. They have, therefore, been avoided or neglected by many who are familiar, or suppose themselves to be familiar,

with the simple laws of population. In my introductory Lecture I sketched what appeared to me an outline of those laws in the following proposition :—“ That the population of a given district is limited only by moral or physical evil, or by deficiency in the means of obtaining those articles of wealth ; or, in other words, those necessaries, decencies, and luxuries, which the habits of the individuals of each class of the inhabitants of that district lead them to require.”

The only modification which subsequent reflection induces me to apply to this proposition is, to substitute for the word “ deficiency,” the words, “ the apprehension of a deficiency.” My reasons for this substitution are: first, that the actual deficiency of necessaries is a branch of physical evil ; and, secondly, that it is not the existence of a deficiency, but the *fear* of its existence which is the principal check to population, so far as necessaries are concerned, and the sole check as respects decencies and luxuries.

But before I take this proposition in detail,

I feel that I ought to explain, as precisely as I can, what I mean by the words, necessaries, decencies, and luxuries ; terms which have been used ever since the moral sciences first attracted attention in this country, but have never, within my knowledge, been defined.

It is scarcely necessary to remind you, that they are relative terms, and that some person must always be assigned, with reference to whom a given commodity or service is a luxury, a decency, or a necessary.

By *necessaries* then, I express those things, the use of which is requisite to keep a given individual in the health and strength essential to his going through his habitual occupations.

By *decencies*, those things which a given individual must use in order to preserve his existing rank in society.

Every thing else of which a given individual makes use ; or, in other words, all that portion of his consumption which is not essential to his health and strength, or to the preservation of his existing rank in society, I term *luxury*.

It is obvious, that when consumed by the inhabitants of different countries, or even by different individuals in the same country, the same things may be either luxuries, decencies, or necessaries.

Shoes are necessaries to all the inhabitants of England. Our habits are such, that there is not an individual whose health would not suffer from the want of them. To the lowest class of the inhabitants of Scotland they are luxuries. Custom enables them to go bare-foot without inconvenience and without degradation. When a Scotchman rises from the lowest to the middling classes of society they become to him decencies. He wears them not to preserve his feet, but his station in life. To the highest classes, who have been accustomed to them from infancy, they are as much necessaries as they are to all classes in England. To the higher classes in Asia wine is a luxury, and tobacco a decency. In Europe it is the reverse. The Asiatic drinks, and the European smokes, not in obedience but in oppo-

sition both to the rules of health, and to the forms of society. But wine in Europe and the pipe in Asia are among the refreshments to which a guest is entitled, and which it would be as indecent to refuse in the one country as to offer in the other.

It has been said that the coalheavers and lightermen, and some others among the hard working London labourers could not support their toils without the stimulus of porter. If this be true, porter is to them a necessary. To all others it is a luxury. A carriage is a decency to a woman of fashion, a necessary to a physician, and a luxury to a tradesman.

The question whether a given commodity is to be considered as a decency or a luxury, is obviously one to which no answer can be given, unless the place, the time, and the rank of the individual using it be specified. The dress which in England was only decent one hundred years ago, would be almost extravagant now; while the house and furniture, which now would afford only decent accommodation to a

gentleman, would then have been luxurious for a peer.

The causes which entitle a commodity to be called a necessary, are more permanent and more general. They depend partly on the habits in which the individual in question has been brought up, partly on the nature of his occupation, on the lightness or the severity of the labours and hardships that he has to undergo, and partly on the climate in which he lives.

Of these causes I have illustrated the two first by the familiar examples of shoes and porter. But the principal cause is climate. The fuel, shelter, and raiment which are essential to a Laplander's existence, would be worse than useless under the tropics. And as habits and occupations are very slowly changed, and climate suffers scarcely any alteration, the commodities which are *necessary* to the different classes of the inhabitants of a given district, may, and generally do, remain for centuries unchanged, while their decencies and luxuries are continually varying.

To recur, however, to my original proposition. I have stated, that the population of a given district is limited only by moral or physical evil, or by the apprehension of a deficiency of necessaries, decencies, or luxuries.

It is now generally admitted, indeed it is strange that it should ever have required to be pointed out, that every species of plant, or animal, which is capable of increase, either by generation, or by seed, must be capable of a constantly increasing increase; every addition to its numbers being capable of affording a source of still further additions, or, in other words, that wherever there is a capacity of increase, it must be a capacity of increase, not by mere addition, but by multiplication, or to use the shorter form in which the proposition is usually stated, not in an arithmetical, but in a geometrical ratio. The rate at which any species of plant, or animal, is capable of increasing, must depend on the average power of reproduction, and the average length of

existence of the individuals of which it is constituted. Wheat, we know, is an annual, and its average power of reproduction perhaps about six for one. On that supposition the produce of a single acre might cover the globe in fourteen years.

The rate at which the human race is capable of increasing, has been determined by observation. It has been ascertained, that for considerable periods, and in extensive districts under temperate climates, it has doubled every twenty-five years.

The power of reproduction in the human race, must, under similar climates, be always and every where the same. I say, under similar climates, because the acceleration of puberty which has been sometimes observed in tropical countries, unless checked, as I believe to be the case, by an earlier cessation of child-bearing, would occasion increased fecundity. And the United States of America, the districts in which the rate of increase which I have mentioned has been most clearly ascer-

tained, are not remarkable for the longevity of their inhabitants. We may infer, therefore, that such, at least, is the average power of reproduction, and average duration of life in the individuals constituting the human species, that their number may double every twenty-five years. At this rate the inhabitants of every country would, in the course of every five centuries, increase to above a million times their previous number. At this rate, the population of England, would, in five hundred years, exceed twelve millions of millions. A population which would approach the proportion of a family to every square inch of ground.

Such being the human powers of increase, the question is, by what checks is their expansion controlled? How comes it, that the population of the world, instead of being now a million times as great as it was five hundred years ago, apparently has not doubled within that time, and certainly has not quadrupled?

Mr. Malthus has divided the checks to po-

pulation into the preventive and the positive. The first are those which limit fecundity, the second, those which decrease longevity. The first diminishes the number of births, the second increases that of deaths. And as fecundity and longevity are the only elements of the calculation, it is clear that Mr. Malthus's division is exhaustive.

The positive check to population is physical evil. The preventive checks are promiscuous intercourse, and abstinence from marriage. The first is moral evil; the second is, with very few exceptions, so few that they do not affect the result, founded on an apprehended deficiency of necessaries, decencies, or luxuries, in other words, on prudence. All the preventive and positive checks, may, therefore, be distributed under prudence, moral evil, and physical evil. In the present lecture, I shall consider the positive, in the subsequent lecture the preventive, checks.

We have seen that the positive checks to population include all the causes which tend,

in any way prematurely, to shorten the duration of human existence; such as unwholesome occupations, severe labour, or exposure to the seasons, bad or insufficient food or clothing, bad nursing of children, excesses of all kinds, the corruption of the air from natural causes, or from large towns, wars, infanticide, plague, and famine. Of these, some arise from the laws of nature, and others from the crimes and follies of man; all are felt in the form of physical evil, but the latter are the result of moral evil.

The final and irresistible mode in which physical evil operates, is the want of the necessaries of existence; death produced by hardship or starvation. This is almost the only check to the increase of the irrational animals, and as man descends towards their condition, he falls more and more under its influence. In the lowest savage state it is the principal and obvious check; in a high state of civilization it is almost imperceptible. But it is unperceived only in consequence of its substitutes.

We have seen that, as a general rule, additional labour employed in the cultivation of the land within a given district, produces a less proportionate return. And we have seen that such is the power of reproduction and duration of life in mankind, that the population of a given district is capable of doubling itself at least every twenty-five years. It is clear, therefore, that the rate at which the production of food is capable of being increased, and that at which population, if unchecked, would increase, are totally different. Every addition made to the quantity of food produced, makes, in general, a further addition more difficult. Every addition to the existing population, diffuses wider the means of still further addition. If neither evil, nor the fear of evil, checked the population of England, it would amount in a century to above two hundred millions. Supposing it possible that we might be able to raise, or to import the subsistence of two hundred millions of people, is it possible that a hundred and twenty-five years hence we should be able to

support four hundred millions? or in a hundred and fifty years, eight hundred millions? It is clear, however, that long before the first century had elapsed—long before the period at which, if unchecked, we should have attained two hundred millions, no excellence in our institutions, or salubrity of climate, or unremitting industry, could have saved us from being arrested in our progress by a constantly increasing want of subsistence. If all other moral and physical checks could be got rid of, if we had neither wars, nor libertinism, if our habitations and employments and habits were all wholesome, and no fears of indigence, or loss of station prevented or retarded our marriages, famine would soon exercise her prerogative of controlling, in the last resort, the multiplication of mankind.

But though it be certain that the absence of all other checks would only give room for the irresistible influence of famine, it is equally certain that such a state of things never has existed, and never will exist.

In the first place, the absence of all the other moral and physical evils which retard population, implies a degree of civilization not only high, but higher than mankind have as yet enjoyed. Such a society cannot be supposed to want sagacity sufficient to foresee the evils of a too rapidly increasing population, and prudence sufficient to avert them, especially as that prudence might be exercised even by those who had no thought of public advantage, no idea of abstract reasoning, no care but for their private welfare. In such a state, the preventive check would be in full operation, and its force is quite sufficient to render unnecessary even the approach of any positive check.

And secondly, it is impossible that a positive check so goading and so remorseless as famine should prevail without bringing in her train all the others. Pestilence is her uniform companion, and murder and war are her followers. Whole bodies of men will not tamely lie down to die, and witness, while they are perishing, their wives and children and parents starving

around them. Where there is a diversity of fortunes, famine generally produces that worst form of civil war, the insurrection of the poor against the rich. Among uncivilized nations it produces those tremendous hostile migrations in which a whole people throws itself across a neighbouring frontier, and either perishes in the attempt to obtain a larger or a more fertile territory, or destroys the former possessors, or drives them out to be themselves aggressors in turn.

In fact, almost all the positive checks by their mutual reaction have a tendency to create and aggravate one another : and the destruction of those who perish immediately by one, may generally be found to have been remotely occasioned by one or more of the others. Among nations imperfectly civilized, the widest and most wasting of the positive checks is predatory war. A district exposed to it must suffer in their full force all the others. Mere fear of invasion must keep them pent up in crowded and consequently unwholesome towns ; it must

confine their cultivation to the fields in the immediate neighbourhood of those towns; and if it do not destroy, must so much impede their commerce, as to render it useless as a source of subsistence. And when the invasion does come, it is often followed by the complete extirpation of the invaded community. This is the check which has kept the whole of Africa, the western parts of Asia, and the southern districts of America in their comparatively unpeopled state.

In his passage from Abyssinia to Sennaar, Bruce crossed the territory of Atbara, subject to the incursions of the Daveina Arabs. The whole country seems to have been a scene of desolation. He passed a night at Garigara, a village of which the crops had been destroyed a year before. The inhabitants had all perished with hunger, and their remains were unburied and scattered over the ground where the village had stood. The travellers encamped among the bones: no space could be found free from them. His next stage was Teawa. "Its con-

sequence," he observes, "was to remain only till the Daveina Arabs should resolve to attack it; when its corn-fields being burnt and destroyed in a night by a multitude of horsemen, the bones of its inhabitants, scattered upon the earth, would be all its remains, like those of the miserable village of Garigara."

Among the positive checks to the population of uncivilized, or partially civilized nations, the next in importance to war is famine.

I have already observed, that there is so much reaction among the positive checks, that one of them alone is seldom experienced. But when a people depends principally on that subsistence which is most abundant, (and such is the case among the nations in question,) the mere variations of the seasons must, from time to time, produce destructive want. Where society is better constituted, the evil of these variations is mitigated, partly from the superfluity of the more opulent classes, partly by importation, and principally by a recurrence to a less expensive diet; but in a barbarous, and

consequently a poor and uncommercial country, they are the most frightful forms of national calamity. The histories which we possess of such countries, always particularize periods of dearth as amongst the most memorable events recorded. They seem in a constant oscillation, between the want endured by a population that has increased to the utmost limits of subsistence, and the plenty enjoyed by the survivors, after that population has been thinned by war, pestilence, or famine.

The remainder of the positive checks, such as infanticide, and unwholesomeness of climate, habits, or situation, appear rather to act as substitutes for the preventive checks, than to produce any actual diminution, or prevent any actual increase.

Infanticide has been supposed to be rather favourable to population, by opposing to the prudential check to marriage a mode of disposing of its offspring, which may appear easy in contemplation, but from which the feelings of the parents eventually recoil. The un-

wholesomeness of some districts is unquestionably such, as to keep them totally unpeopled, or inhabited by strangers, whose numbers must be constantly recruited. Such, for instance, appears to be the case in the most unhealthy parts of Italy; and such is the case with large manufacturing towns, even in the most favourable climates, unless great skill and great care are directed towards their cleanliness and ventilation. And in a newly colonized country, like the back settlements in America, where the abundance of land, and the constantly increasing means of subsistence, would render any preventive check unnecessary, any cause diminishing longevity must retard increase. But, with these exceptions, unhealthiness rather causes the successive generations of mankind to pass more rapidly away, than diminishes their actual number. In some of the healthiest districts of Switzerland, the average annual mortality does not exceed one in fifty; in many of the marshy villages of Holland it exceeds one in twenty-three. But

it would be rash to expect the population of the former to be more dense, or to increase more rapidly, than that of the latter. The case is, in fact, the reverse. In the Swiss villages of which I have been speaking, the births are as rare as the deaths: the population is thin and stationary. Among the Dutch the births somewhat exceed the deaths: the population is dense, and is increasing. It is obvious indeed, that the proportion of annual births to the whole number of people being given, the rate of increase must depend on the proportion borne by the annual deaths. And the proportion of deaths to the whole number of people being given, it must depend on the proportion borne by the births; or, to use a shorter form of expression, given the longevity, it must depend on the fecundity; and given the fecundity, it must depend on the longevity. If both are given, the rate of increase may be calculated; but from only one the conclusion must be the disjunctive. If the annual births bear a large proportion to the existing

number of people, we may conclude either that the population is rapidly increasing, or that the positive checks are in powerful operation. On the other hand, from a small proportion of annual deaths may be inferred either a rapid increase of numbers, or a strong prevalence of the preventive checks. The average duration of life in England is greater than in the United States of America; but so much greater is the force of the preventive checks, that the rate of increase in America is double that in England. Again, the average duration of life in the Swiss villages that I have before referred to, is the same as it is in England; but the preventive check in England, strong as it appears when compared with its force in America, is so much weaker than it is in some districts in Switzerland that with the same annual mortality the population is in the one country stationary, in the other rapidly progressive.

But although the average longevity in a country affords no decisive evidence as to the increasing or stationary number of its inhabi-

tants, it is among the least deceitful tests of their prosperity: far less so than that on which statesmen formerly relied, the number of births. There is not an evil, moral or physical, which has not a tendency, directly or indirectly, to shorten life, but there are many which have a direct tendency to increase fecundity. The extraordinary duration of life in England, exceeding, as it does, the average of any other equally extensive district, is a convincing proof of the general excellence of our climate, our institutions, and our habits.

In my next Lecture I shall consider the preventive checks to population.

LECTURE II.

POPULATION.

I OBSERVED in my last Lecture that the expansive power of population is such that it necessarily and inevitably will be restrained by some check, positive or preventive. I then considered the positive checks, and found them to consist of the different modifications of physical evil. In the present lecture, I propose to consider the preventive checks. We have seen that they are promiscuous intercourse and abstinence from marriage.

The first does not appear to me to be of sufficient importance to require much consider-

ation. It is said to produce some effect in checking the increase of the higher classes in Otaheite, and in some of the other South Sea Islands; and it appears to produce the same effect to a considerable extent among the West Indian Negroes. But the nobility of the South Seas scarcely deserve to be separately considered. And where the other forms of moral and physical evil are accumulated as they are among the West Indian slaves, it is probable that the removal of this obstacle alone would do little to facilitate their increase.

But with these exceptions, there are scarcely any females whose fecundity is prevented or diminished by promiscuous intercourse, except those unhappy individuals whose only trade is prostitution. And they form so small a proportion of the population of the whole world, that the check to population occasioned by their unfruitfulness may safely be disregarded.

The only remaining check is abstinence from marriage. You are of course aware that by the word "marriage," I mean to express not

the peculiar and permanent connexion which alone, in a Christian country, is entitled to that name: but any agreement between a man and woman to cohabit exclusively for a period, and under circumstances likely to occasion the birth of progeny. I observed, in my last Lecture, that abstinence from marriage is almost uniformly founded on the apprehension of a deficiency of necessaries, decencies, or luxuries, or, in other words, on prudence. Some cases certainly occur in which men remain unmarried, although their fortunes are so ample that the expenses of a family would be unperceived. But the number of persons so situated is so small, that they create an exception which would scarcely deserve attention, even if this conduct were as common among them, as it is in fact rare.

We shall scarcely, therefore, be led into error if, in considering the preventive checks, we confine our attention to prudence, and assume that, as nothing but physical evil diminishes the longevity of mankind, nothing but an ap-

prehended deficiency of luxuries, decencies, or necessaries, prevents their fecundity.

The check from an apprehended deficiency of luxuries is but slight. The motives, perhaps I might say the instincts, that prompt the human race to marriage, are too powerful to be much restrained by the fear of losing conveniences, unconnected with health or station in society.

The fear of losing decencies, or perhaps more frequently the hope to acquire, by a longer accumulation during celibacy the means of purchasing the decencies of a higher social rank, is a check of far more importance. Want of actual necessaries is seldom apprehended by any except the poorest classes in any country. And in England, though it sometimes is felt, it probably is anticipated by none. When an Englishman stands hesitating between love and prudence, a family really starving is not among his terrors. Against actual want he knows that he has the fence of the poor laws. But, however humble his desires,

he cannot contemplate, without anxiety, a probability that the income which supported his social rank while single, may be insufficient to maintain it when he is married; that he may be unable to give to his children the advantages of education which he enjoyed himself; in short, that he may lose his caste. Men of more enterprise are induced to postpone marriage, not merely by the fear of sinking, but also by the hope, that in an unencumbered state they may rise. As they mount, the horizon of their ambition keeps receding, until sometimes the time has passed away for realizing those plans of domestic happiness which probably every man has formed in his youth.

There are few triter subjects of declamation than the contrast between ancient simplicity and modern luxury. Few virtues, however useful, have received more applause than the contented and dignified poverty, the indifference to display, and the abstinence from unnecessary expense which all refined nations at-

tribute to their ancestors. Few vices, however mischievous, have been more censured than the ostentatious expenditure which every succeeding generation seems to consider its own peculiar characteristic.

It certainly appears, at first sight, that habits of unnecessary expense, as they have a tendency to diminish the wealth of *an individual*, must have the same effect on the wealth of a nation. And, separately considered, it appears clear that each act of unproductive consumption, whatever gratification it may afford to the consumer, must be *pro tanto* detrimental to the rest of the community. It is so much taken from the common stock and destroyed. And, as the national capital is formed from the aggregate savings of individuals, it is certain, that if each individual were to expend to the utmost extent of his means, the whole capital of the country would be gradually wasted away, and general misery would be the result. But it appears to me equally certain,

that if each individual were to confine his expenditure to mere necessaries, the result would be misery quite as general and as intense.

We have seen that the powers of population, if not restrained by prudence, must inevitably produce almost every form of moral and physical evil. In the case which I am supposing, the wants of society would be confined to the food, raiment, and shelter, essential to the support of existence. And they would all consist of the cheapest materials. It may be worth while to trace some of the consequences which would follow, if such a change of the objects of human desire could take place in England.

At present the cultivation of the land does not employ more than a third of our population, and a great part of the labourers so employed are producers of luxuries. Indeed, as potatoes afford a food, five or six times as abundant as corn, and more than twenty times as abundant as meat, and as far as can be judged from the appearance and powers of

the lower Irish, quite as wholesome, meat and corn may be considered as decencies or luxuries to the extent in which they are more expensive than potatoes. Nor is our present mode of cultivation directed to the obtaining the largest possible return. The object is always to obtain the largest possible return that is consistent with profitable farming, but in the pursuit of this object, quantity of produce is often sacrificed to economy of labour or time.

If there were no desire for luxuries, both the existing partition of the land and the existing division of labour would be varied. No family would wish to occupy more land than the small spot necessary to afford them potatoes and milk; and supposing them to give to it the utmost nicety of garden cultivation, its management would still leave them time to produce the coarse manufactures necessary for their own use. The whole of our population would be agricultural. At present the four millions so employed, although their

labour is far from being directed to the production of the greatest possible amount, provides subsistence for the whole twelve millions. If all were so employed, and if quantity of subsistence were their sole object, it is probable, that in ordinary seasons the soil of England could feed at least one hundred millions of people. And in the absence of any checks more powerful than those experienced in the United States of America, our population might, in seventy-five years, amount to one hundred millions. Indeed, it is probable, that under the circumstances which I am supposing, the increase in England would be, for a considerable time, rather more rapid than that which has taken place in America. Preventive checks would not exist; marriage could not be hindered or even delayed by prudence, since there could be no reason to anticipate want; the habit of early marriages would put an end to profligacy; and as our habits would be eminently healthy, the positive checks which even now affect us less than

they do the inhabitants of America, or indeed of any other extensive district, would be reduced to their minimum.

So far the picture is rather pleasing; it exhibits a nation, not rich certainly, nor refined, but supporting a very numerous population in health and strength, and in the full enjoyment of the many sources of happiness connected with early marriage.

Supposing our population to have increased, as would be the case by the beginning of the next century, to one hundred millions, about an acre and a half would be allotted to each family; and, as I before observed, I think that allotment might be sufficient. But it can scarcely be supposed, that three roods would be enough, which would be their allotment in twenty-five years more, or granting that to be enough, it cannot be supposed that at the end of a further term of doubling a family of four persons could live on the produce of a rood and a half.

Sooner or later, therefore, the increase must

be checked, and we have seen that prudence is the only check that does not involve vice or misery. But such is the force of the passions which prompt to marriage, and such is each man's reliance on his own good conduct, and good fortune, that the evils, whatever they may be, the apprehension of which forms the prudential check, are frequently incurred. Where the evil is the loss of luxuries, or even of decencies, it is trifling in the first instance, and bearable in the second. But in the case which I am supposing, the only prudential check would be an apprehended deficiency of necessaries; and that deficiency, in the many instances in which it would be incurred, would be the positive check in its most frightful form. It would be incurred not only in consequence of that miscalculation of chances to which all men are subject, and certainly those not the least so, who are anxious to marry, but through accidents against which no human prudence can guard. A *single* bad harvest may be provided against, but a succession of

unfavourable seasons, and such successions do occur, must reduce such a people to absolute famine. When such seasons affect a nation indulging in considerable superfluous expenditure, they are relieved by a temporary sacrifice of that superfluity. The grain consumed in ordinary years by our breweries and distilleries is a store always at hand to supply a scarcity, and the same may be said of the large quantity of food used for the support of domestic animals, but applicable to human subsistence. To these resources may be added the importation from abroad of necessaries instead of luxuries, and the materials of luxury; of corn, for instance, instead of wine.

It appears, therefore, that habits of considerable superfluous expenditure afford the only permanent protection against a population pressing so closely on the means of subsistence, as to be continually incurring the misery of the positive checks. And as these habits can exist only in an opulent society, it appears to me equally clear, that as a nation advances

in opulence, the positive checks are likely to be superseded by the preventive. If this be true, the evil of a redundant population, or to speak more intelligibly, of a population too numerous to be adequately and regularly supplied with necessaries, is likely to diminish in the progress of improvement. As wealth increases, what were the luxuries of one generation become the decencies of their successors. Not only a taste for additional comfort and convenience, but a feeling of degradation in their absence becomes more and more widely diffused. The increase, in many respects, of the productive powers of labour, must enable increased comforts to be enjoyed by increased numbers, and as it is the more beneficial, so it appears to me to be the more natural course of events, that increased comfort should not only accompany, but rather precede, increase of numbers.

But I must admit that this is not the received opinion. The popular doctrine certainly is, that population has a tendency to

increase beyond the means of subsistence, or, in other words, that, whatever be the existing means of subsistence, population has a tendency fully to come up with them, and even to struggle to pass beyond them, and is kept back principally by the vice and misery which that struggle occasions. I admit that population has the power (considered abstractedly) so to increase, and I admit, that, under the influence of unwise institutions, that power may be exercised, and the amount of subsistence bear a smaller proportion than before to the number of people; and that vice and misery, more or less intense and diffused, according to the circumstances of each case, must be the result. What I deny is, that, under wise institutions, there is any *tendency* to this state of things. I believe the tendency to be just the reverse.

As the subject is one of great interest and importance, I will lay before you, to be compared with my own views, those of Mr. Malthus, Mr. M'Culloch, and Mr. Mill.

“ There are few states,” observes Mr. Malthus, “ in which there is not a constant effort in the population to increase beyond the means of subsistence. This constant effort as constantly tends to subject the lower classes of society to distress, and to prevent any great permanent melioration of their condition. These effects, in the present state of society, seem to be produced in the following manner. We will suppose the means of subsistence in any country to be just equal to the easy support of its inhabitants. The constant effort towards population, which is found to act even in the most vicious societies, increases the number of people before the means of subsistence are increased. The food, therefore, which before supported eleven millions, must now be divided among eleven millions and a half. The poor, consequently, must live much worse, and many of them be reduced to severe distress. The number of labourers also being above the proportion of work in the

“ market, the price of labour must tend to fall,
 “ while the price of provisions would, at the
 “ same time, tend to rise. The labourer,
 “ therefore, must do more work, to earn the
 “ same as he did before. During this season
 “ of distress the discouragements to marriage,
 “ and the difficulty of rearing a family, are so
 “ great, that the progress of population is re-
 “ tardated. In the mean time, the cheapness of
 “ labour, the plenty of labourers, and the ne-
 “ cessity of an increased industry amongst
 “ them, encourage cultivators to employ more
 “ labour upon their land, to turn up fresh soil,
 “ and to manure and improve more completely
 “ what is already in tillage, till, ultimately, the
 “ means of subsistence may become, in the
 “ same proportion to the population, as at the
 “ period from which we set out. The situation
 “ of the labourer being then again tolerably
 “ comfortable, the restraints to population are
 “ in some degree loosened; and, after a short
 “ period, the same retrograde and progressive
 “ movements, with respect to happiness, are
 “ repeated.”—*Population*, Book i. Chap 2.

And he afterwards repeats the same doctrine more explicitly in the following words:—

“ According to the principle of population,
 “ the human race has a tendency to increase
 “ faster than food. It has, therefore, a con-
 “ stant tendency to people a country fully up
 “ to the limits of subsistence; meaning, by
 “ these limits, the lowest quantity of food which
 “ will maintain a stationary population.”—
 Book iii. Chap. 1, Note.

Among the valuable notes which Mr. M'Culloch has appended to his edition of the *Wealth of Nations*, one of the most interesting treats of population: and one of the objects of that note is to show, that the population of the United States of America cannot continue to increase for any very considerable period, at the rate at which it has increased during the last hundred years.

I am perfectly convinced of the truth of this position, and I shall read to you the following extract, not with any intention to oppose Mr. M'Culloch's anticipations as to America, but

because I am anxious to express my dissent to what I conceive to be his general doctrine on the subject of population ; and am also anxious, by using his own words, to avoid the chance of misrepresenting them.

“ It may be said, perhaps, that allowance
 “ must be made for the effects of the improve-
 “ ments which may be supposed to take place
 “ in agricultural science in the progress of
 “ society, or for the possible introduction, at
 “ some future period, of new and more prolific
 “ species of crops. But it is easy to see, that
 “ the influence of such improvements and
 “ changes must, supposing them to be realized
 “ in the fullest manner, be of very temporary
 “ duration ; and that it cannot affect the truth
 “ of the principle, *that the power of increase in*
 “ *the human species must always, in the long run,*
 “ *prove an overmatch for the increase in the means*
 “ *of subsistence.* Suppose, by some extraor-
 “ dinary improvement, the quantity of food,
 “ and other articles, required for the subsist-
 “ ence and accommodation of man, annually

“ produced in Great Britain, were suddenly
 “ doubled, the condition of all classes being, in
 “ consequence, signally improved, there would
 “ be less occasion for the exercise of moral re-
 “ straint ; the period of marriage would there-
 “ fore be accelerated, and such a powerful
 “ stimulus would be given to the principle of
 “ increase, that in a very short period the
 “ population would be again on a level with
 “ the means of subsistence ; and there would
 “ also, owing to the change which must have
 “ been made in the habits of the people, with
 “ respect to marriage, during the period that
 “ the population was rising to the level of the
 “ increased supply of food, be an extreme
 “ risk, lest it should become too abundant,
 “ and produce an increased rate of mortality.
 “ Although, therefore, it is not possible to
 “ assign any certain limits to the progress of
 “ improvement, it is, notwithstanding, evident,
 “ that it cannot continue for any considerable
 “ period to advance in the same proportion
 “ that population would advance, supposing

“ food were abundantly supplied. The cir-
 “ cumstance of inferior lands, which require
 “ a greater outlay of capital and labour to
 “ make them yield the same supply as those
 “ that are superior, being invariably taken into
 “ cultivation in the progress of society, demon-
 “ strates, what is otherwise indeed sufficiently
 “ obvious to every one, that, in despite of im-
 “ provements, the difficulty of adding to the
 “ supplies of food is progressively augmented
 “ as population becomes denser.

“ Mr. Malthus has endeavoured to show,
 “ that while population has a power to increase
 “ indefinitely in a geometrical proportion, or in
 “ the proportion of 1, 2, 4, 8, 16, 32, 64,
 “ 128, 256, &c., doubling itself every five-
 “ and-twenty years, the supplies of food and
 “ other necessary accommodations could not be
 “ made to increase faster during the same pe-
 “ riods, than in an arithmetical proportion, or
 “ in the ratio of the numbers 1, 2, 3, 4, 5, 6, 7,
 “ 8, &c. But it is impossible to lay down any
 “ fixed or certain principle with respect to the

“ ratio of the increase of food. I should, how-
 “ ever, be inclined to think, that the ratio stated
 “ by Mr. Malthus would be found to be too
 “ high for countries whose best lands have
 “ already been brought under tillage. But
 “ whether Mr. Malthus has over or under
 “ stated the increase of food, is of no conse-
 “ quence to the theory of population. It is, at
 “ all events, unquestionably true on the one
 “ hand, that an increased difficulty of obtain-
 “ ing increased supplies of food, though occa-
 “ sionally obviated for a while by new disco-
 “ veries and inventions, is uniformly experienced
 “ according as society advances, and population
 “ becomes denser; while, on the other hand,
 “ it is equally true, that the power to produce
 “ fresh human beings, a power capable of dou-
 “ bling the population every five and twenty
 “ years sustains no diminution. And hence it
 “ results, as was stated at the commencement
 “ of this note, that the *natural tendency* of po-
 “ pulation is to outrun production; and that
 “ if this tendency be not counteracted by the

“ prevalence of moral restraint, it must be
 “ counteracted by want, misery, and increased
 “ mortality.”—Vol. iv. p. 133.

Mr. Mill's views are to be found in his discussion of wages. *Principles, &c.* Ch. ii. sec. 2.

“ If it were,” he observes, “ the natural
 “ tendency of capital” (under which term Mr. Mill designates the instruments of labour, the materials on which they are to be employed, when produced by labour, and the subsistence of the labourer) “ to increase faster than population, there would be no difficulty in preserving a prosperous condition of the people. If, on the other hand, it were the natural tendency of population to increase faster than capital, the difficulty would be very great. There would be a perpetual tendency in wages to fall. The progressive fall of wages would produce a greater and a greater degree of poverty among the people, attended with its inevitable consequences, misery and vice. As poverty and its consequent misery increased, mortality would

“ also increase. Of a numerous family born, a
 “ certain number only, from want of the means
 “ of well-being, would be reared. By whatever proportion the population tended to increase faster than capital, such a proportion of those who were born would die: the ratio of increase in capital and population would then remain the same, and the fall of wages would proceed no further. That population *has* a tendency to increase faster than, in most places, capital has actually increased, is proved incontestably, by the condition of the population in most parts of the globe. In almost all countries, the condition of the great body of the people is poor and miserable. This would have been impossible, if capital had increased faster than population. In that case wages must have risen, and higher wages would have placed the labourer above the miseries of want.

“ This general misery of mankind is a fact
 “ which can be accounted for, upon one of two
 “ suppositions: either that there is a natural

“ tendency in population to increase faster than
 “ capital, or that capital has, by some means,
 “ been prevented from increasing so fast as it
 “ has a tendency to increase. This, therefore,
 “ is an enquiry of the highest importance.”

As the result of that enquiry Mr. Mill decides the second alternative in the negative, and consequently conceives himself to have established the former, namely, that there is a natural tendency in population to increase faster than capital.

I have nothing to do at present with those portions of capital which consist of the materials and implements of labour. That they *have* increased far more than in proportion to the increase of population, is almost too obvious for remark. My present subject is the relative increase of *subsistence*. A subject on which Mr. M'Culloch, and Mr. Mill, and I think also Mr. Malthus, coincide.

If the present state of the world, compared with its state at our earliest records, be one of relative prosperity, Mr. Mill's reasoning is unan-

swerable. If its means of subsistence continue to bear the same proportion to the number of its inhabitants, it is clear that the increase of subsistence and of numbers has been equal. If its means of subsistence have increased much more than the number of its inhabitants, it is clear not only that Mr. Mill's proposition is false, but that the contrary proposition is true ; and that the means of subsistence have a natural tendency to increase faster than population.

Now, what is the picture presented by the earliest records of those nations which are now civilized? or, which is the same, what is now the state of savage nations? A state of habitual poverty and occasional famine. A scanty population, but still scantier means of subsistence. Admitting, and it must be admitted, that in almost all countries the condition of the great body of the people is poor and miserable; yet as poverty and misery were their original inheritance, what inference can we draw from the continuance of their misery

as to the tendency of their numbers to increase more rapidly than their wealth?

But if a single country can be found in which there is now less poverty than is universal in a savage state, it must be true, that under the circumstances in which that country has been placed, the means of subsistence have a greater tendency to increase than the population.

Now this is the case in *every* civilized country. Even Ireland, the country most likely to afford an instance of what Mr. Mill supposes to be the natural course of things, poor and populous as she is, suffers less from want with her eight millions of people, than when her only inhabitants were a few septs of hunters and fishers. In our early history, famines, and pestilences the consequences of famine, constantly recur. At present, though our numbers are trebled or quadrupled, they are unheard of.

The United States of America afford the best ascertained instance of great and conti-

nued increase of numbers. They have afforded a field in which the powers of population have been allowed to exhaust their energy; but though exerted to their utmost they have not equalled the progress of subsistence. Whole colonies of the first settlers perished from absolute want; their successors struggled long against hardship and privation; but every increase of their numbers seems to have been accompanied or preceded by increased means of support.

If it be conceded, that there exists in the human race a natural tendency to rise from barbarism to civilization, and that the means of subsistence are proportionally more abundant in a civilized than in a savage state, and neither of these propositions can be denied, it must follow that there is a natural tendency in subsistence to increase in a greater ratio than population.

But, although Mr. Malthus has perhaps fallen into the exaggeration which is natural

to a discoverer, his error, if it be one, does not affect the practical conclusions which place him, as a benefactor to mankind, on a level with Adam Smith. Whether, in the absence of disturbing causes, it be the tendency of subsistence or of population to advance with greater rapidity, is a question of slight importance, if it be acknowledged that human happiness or misery depend principally on their relative advance, and that there are causes, and causes within human control, by which that advance can be regulated.

These are propositions which Mr. Malthus has established by facts and reasonings, which, opposed as they were to long-rooted prejudice, and assailed by every species of sophistry and clamour, are now so generally admitted, that they have become rather matter of allusion than of formal statement. To explain what are the causes of the relative increase of subsistence and population is the principal object of the practical branch of political economy,

and the practical and theoretic branches are so interwoven, that my view of those causes is necessarily dispersed throughout my Lectures.

I will only say at present that knowledge, security of property, freedom of internal and external exchange, and equal admissibility to rank and power, are the principal causes which at the same time promote the increase of subsistence, and by elevating the character of the people, lead them to keep at a slower rate the increase of their numbers. And that restrictions on exchange and commerce, artificial barriers excluding the great majority of the community from the chance of social eminence, and, above all, ignorance and insecurity of person or property, are the general causes which both diminish the productiveness of labour, and tend to produce that brutish state of improvidence in which the power of increase, unchecked by prudence, is always struggling to pass the limits of subsistence, and is kept down only by vice and misery. I use the expression *general* causes, to exclude those

causes which, being peculiar to certain nations, require separate consideration. Such are the superstitious desire of offspring in China, the political motives to create freeholders in Ireland, and certain parts of the poor laws in England. But omitting these details, it may be generally stated, that all that degrades the character, or diminishes the productive power of a people, tends to diminish the proportion of subsistence to population, and *vice versa*. And, consequently, that a population increasing more rapidly than the means of subsistence is, generally speaking, a symptom of misgovernment indicating deeper-seated evils, of which it is only one of the results.

APPENDIX.

APPENDIX.

Lincoln's Inn,
March 15, 1829.

MY DEAR SIR,

YOU perceive that I have used your kind permission to lay before you my Lectures on Population.

One of the principal objects of the Statute requiring from the Professor of Political Economy an annual publication, must have been that the public might know the sort of doctrines inculcated at Oxford. I have thought it my duty, therefore, to publish them without alteration. Under other circumstances, I should have made some change in the language in which I have attempted to represent

your opinion. They were written, and indeed delivered, before I had had the advantage of conversing with you on the subject of Population; and I was misled by your use of the word "*tendency*." I supposed you to believe, that the desire of marriage, which tends to increase Population, is a stronger principle, or, in other words, a principle more efficacious in its results than the desire of bettering our condition, which tends to increase subsistence; and, consequently, that in an old country, with a people so fully supplied with necessaries as to make it possible for population to increase in a greater ratio than food, such an increase would, in the absence of disturbing causes, be a more probable event than the opposite event; namely, than an increase of subsistence in a greater ratio than that of population. I believe that I was led into this error principally by the conduct of all those writers who, since the appearance of your work, have written on Population. The multitudes who have followed, and the few who

have endeavoured to oppose you, have all assumed this to be your opinion. And yet when I recur to your writings, I see how inconsistent it is with your uniform statement, that the pressure of population upon subsistence is almost always the most severe in the rudest states of society, where the population is the least dense, and the means of procuring subsistence, supposing they were employed, would be the greatest in proportion to that population.

As the subject is of the utmost importance, I will venture to state, for your correction, my present impression as to your doctrine. I conceive you to hold, that an increase of population in a greater ratio than that of subsistence, is a probable event only under peculiar circumstances. Such as those of America, where the knowledge of an old people has, for a considerable time, been applied to a continent previously almost unoccupied; or those of France, when the confiscation of the greater part of the land operated like an agrarian law, and

the conscription falling on bachelors only, made early marriage a precaution instead of an improvidence. But that in an old country, under wise institutions, in the absence, in short, of disturbing causes, though population is likely to increase, subsistence is likely to increase still faster. In short, that the condition of a people so circumstanced is more likely to be improved than to be deteriorated. If I am right in this view, the only difference between us is one of nomenclature. You would still say, that in the absence of disturbing causes, population has a *tendency* to increase faster than food, because the comparative increase of the former is a mere compliance with our natural wishes, the comparative increase of the latter is all effort and self-denial. I should still say, that, in the absence of disturbing causes, food has a tendency to increase faster than population, because, in fact, it has generally done so, and because I consider the desire of bettering our condition as natural a wish as the desire of marriage.

After all, if I rightly understand you, the difference between us is almost entirely verbal. As to the facts of the case we are agreed. And we agree too in believing, that an increase of population in a greater proportion than that of food so far from being, as before the appearance of your *Work* it was supposed to be, a remote evil, to occur only when the world shall be a garden, is a danger constantly besetting human society in every stage of social existence, and much the most so in the rudest stages, and warded off only by constant exertion and constant self-denial; and that the rate at which capital can be made to increase faster than population, or, in other words, the rate at which social improvement can proceed, principally depends upon the amount of that exertion and self-denial.

Believe me, my dear Sir,

Yours very sincerely,

NASSAU WILLIAM SENIOR.

REV. T. R. MALTHUS.

East India College,
March 23, 1829.

MY DEAR SIR,

I AM much obliged to you for giving me the opportunity of seeing your Lectures on Population, which I have read with great interest.

The difference between us, as you justly observe, is chiefly verbal; though there is still some difference remaining as to facts.

To begin with the verbal difference. I was certainly not aware, that in saying that population had a *tendency* to increase faster than food, I should be considered as denying that it might practically at times increase slower. If I had looked forward to such an interpretation, I should certainly not have used the expression; because, as you remark, there are numerous passages

in my work, in which I state, that the pressure of population upon food is often the most severe in the rudest stages of society, where the population is the least dense. The meaning which I intended to convey by the expression to which you object was, that population was always ready, and inclined, to increase faster than food, if the checks which repressed it were removed; and that though these checks might be such, as to prevent population from advancing upon subsistence, or even to keep it at a greater distance behind; yet, that whether population were *actually* increasing faster than food, or food faster than population, it was true that, except in new colonies, favourably circumstanced, population was always pressing against food, and was always ready to start off at a faster rate than that at which the food was actually increasing.

This constant pressure of population against food, which I have always considered as the essence of the principle which I endeavoured to explain in my work, appeared to me to be

distinctly proved by the universally acknowledged fact, that whenever improvements in agriculture, or the effects of some destructive plague, loosened the restraints which kept down the population, it made a start forward at a greater rate than usual; and that further, notwithstanding the operation of the desire of bettering our condition, there were the strongest reasons to believe that the pressure in question occasioned premature mortality in every old country with which we were acquainted.

The cause of this pressure, I thought, might be described by saying, that the human race had a *tendency* to increase faster than food; and I own it appears to me, that in this position, which it was the great object of my work to prove, not only is the term *tendency* applied in its most natural and ordinary sense; but it conveys a more instructive and useful meaning than the one which you would substitute for it, namely, that food has a *tendency* to increase faster than population; a position which, without further explanation, seems to

convey an incorrect impression of the laws which regulate the increase of the human race.

Your reasons for adopting this position are, first, because you consider it as a fact, that population *has* generally so increased; and, secondly, because you consider the desire of bettering our condition to be as natural a wish as the desire of marriage. Your first reason rests upon the assumption of a fact, which by no means admits of being stated so generally as you have stated it, as will be shown presently; and it is obvious, that a partial relief from a pressure does not imply that a tendency to press is overcome. In regard to your second reason, it appears to me that the desire of bettering our condition, as far as it affects the direct increase of food, is perfectly feeble, compared with the tendency of population to increase. The most intense desire of bettering our condition, can do nothing towards making food permanently increase, at the rate at which population is always ready to increase; and, in

fact, this desire, in reference to the increase of food, operates in a very trifling degree upon the great mass of the labouring classes. They are not the persons who accumulate farming capital, and employ it in agricultural improvements, and the increase of subsistence. In this respect they are almost entirely passive. In another respect, indeed, they are most powerful. Though they cannot much accelerate the increase of food, they are the only body of people who can essentially retard the increase of population. But as this cannot be effected without restraint and self-denial, to which there is certainly a much less *tendency* than to marriage, the practical result is such as might be expected, namely, that although this restraint and self-denial may prevent more misery and vice at one period than at another; though they are often more efficient in civilized and populous countries, than in ignorant and thinly peopled countries; and though we may hope that they will become still more efficient as knowledge advances, yet as far as we can judge

from history, there never has been a period of any considerable length, when premature mortality and vice, specifically arising from the pressure of population against food, has not prevailed to a considerable extent; nor, admitting the possibility, or even the probability of these evils being diminished, is there any rational prospect of a near approach to their entire removal.

In all countries, and at all times, the food wages of labour must be determined by the demand and supply of labour compared with the demand and supply of food. In no old country that I have yet heard of, have the wages of labour, so determined, been for any length of time such as to maintain with ease the largest families. Consequently, in all old states there will always be a constant pressure specifically arising from the tendency of food to increase not being so great as the tendency of population to increase.

And this brings me to our difference in regard to facts. Taking your own application of the term *tendency*, which I cannot think the most natural one, I am compelled to say that

both in your present impression of my doctrine, as given in your letter, and when you state as a fact, that food *has* generally increased faster than population, I am unable to go along with you. If food had increased faster than population, would the earth have been overspread with people since the flood? Would the great migrations and movements of nations of which we read have ever taken place? Would the shepherds of Asia have been engaged in such a constant struggle for room and food? Would the northern nations have ever overrun the Roman empire of the west? Would the civilized Greeks have been obliged to send out numerous colonies? Would these colonies have increased with great rapidity for a certain period, and then have become comparatively stationary? Would history, in short, have been at all what it is?

America is by no means the only instance of the knowledge of an old state being applied to the comparatively unoccupied land of a new one. And in all instances of this kind, where

the food has once been abundant, an actual increase of population faster than food is not only probable, but absolutely certain. In fact, such countries never could be well peopled, if this did not take place.

In old states, the relative increase of population and food has always been found to be practically very variable. It is no doubt true that, in every stage of society, there have been some nations, where, from ignorance and want of foresight, the labouring classes have lived very miserably, and both the food and population have been nearly stationary long before the resources of the soil had approached towards exhaustion. Of these nations, it might safely have been predicted, that in the progress of civilization and improvement, a period would occur when food would increase faster than population. On the other hand, if, from favourable circumstances at any time, the people of a country were very abundantly supplied, it might as safely be predicted that, in their progress towards a full population, a period would occur

when population would increase faster than food. It is absolutely necessary, therefore, to know the actual condition in which a people is living, in regard to subsistence, before we can say whether food or population is likely to increase the fastest. And this condition is certainly not determined exclusively by the state of civilization and population; but is very different in the same nation at different times; and sometimes food is comparatively more abundant at an early period, and sometimes at a later period. Taking only the last five or six hundred years in Europe, it may be remarked, that the States of this more improved part of the world have been exposed to great losses of people by plague, pestilence, famine, and war; and invariably after these losses, population has increased faster than food. In this country, for sixty years during the latter half of the fifteenth century, and the early part of the sixteenth, the labourer appears to have earned nearly two pecks of wheat a-day. At the end of the sixteenth century, he did not

earn so much as three-fourths of a peck. During the sixteenth century, therefore, population must practically have increased much faster than food. From 1720 to 1750 the labourer earned about a full peck of wheat a-day. Since that period, I believe, he has never for five years together earned so much as a peck, hardly, indeed, so much as five-sixths of a peck. Notwithstanding the poverty and misery of Ireland at an early period, I am strongly disposed to believe, that about the time when Arthur Young made his tour in that country (1776 and 1778) food was decidedly more abundant than it has been of late years. With regard to what may be called the present state of the nations of the Continent, many of them seem to have increased their food very rapidly since the revolutionary war; and this increase has been followed by so very rapid an increase of population, that it seems quite impossible it should continue. There is some reason, indeed, to think from the accounts of Mr. Jacob, that population is

now increasing faster than food. It appears, then, that it cannot safely be assumed as a fact, that food *has* generally increased faster than population.

If the population of Great Britain were to go on increasing for two hundred years at the rate at which it increased during the twenty years between the census of 1800 and that of 1820, it would be sixteen times as great as at present. It is not easy to believe that this is possible. A retardation in the rate of increase seems to be absolutely inevitable. And the question is, whether we are entitled from past experience to expect that this will take place without some diminution of corn wages, and some increased difficulty of maintaining a family. At all events, it is quite certain, that no desire, however great, of increasing our subsistence can keep us out of the reach of the most miserable poverty, if we do not, at the same time, exercise the more efficient power we possess of restraining the progress of population by prudential habits.

The rate at which social improvement proceeds, does not depend exclusively upon the rate at which subsistence can be made to increase faster than population. I look forward to the possibility, and even the probability of the labouring classes of society being altogether in a better situation than they are now, when the means of a further increase of food shall be nearly exhausted, and both subsistence and population shall have come nearly to a stand. But, it is obvious, that if this improvement should be accomplished, it cannot be by exertions to increase food, but by the moral restraint which will diminish the misery and vice constantly occasioned by the tendency of population to press against subsistence. Consequently, in discussing our future prospects of social improvement, it cannot but lead to error, to lay down positions calculated to direct the attention towards means which must of necessity be inefficient, while the nature of the difficulty to be contended with, and the only efficient means of contending

with it successfully, and of improving the condition of society, are kept in the back ground. Your position, that food has a tendency to increase faster than population, appears to me, to be open to this objection, and therefore I cannot approve of it.

I know you will excuse the frankness with which I have stated my opinions. We do not, of course, differ in the ends which we are desirous of promoting; the diminution of misery and vice, and the increase of happiness and virtue. We only differ in the mode of treating the subject. The main part of the question with me, relates to the cause of the continued poverty and misery of the labouring classes of society in all old states. This surely cannot be attributed to the tendency of food to increase faster than population. It may be to the tendency of population to increase faster than food.

Believe me, my dear Sir,

Very truly yours,

T. R. MALTHUS.

N. W. SENIOR, Esq.

Lincoln's Inn,
March 26, 1829.

MY DEAR SIR,

PRAY accept my sincerest thanks for the reply with which you have honoured my letter, and for the instruction which it has afforded me.

I find, however, that the differences between us, though still I hope not great, are rather greater than I had imagined. I will venture again to intrude on your attention, in the hope of making them still smaller.

First, as to the facts.

I must have expressed myself ill, if I have led you to suppose that I assert any thing like an *universal* increase of the proportion of subsistence to population. When I say that subsistence *has generally* increased in a greater ratio than population, I mean, that if we look back through the history of the whole world,

and compare the state of each country at distinct periods of two hundred or three hundred years, the cases in which food has increased during the preceding period of two hundred or three hundred years, in a greater ratio than population, will be found to be more numerous than those in which population has increased during the preceding period in a greater ratio than food. I admit that this increase has not been steady; it has been subject to the oscillations which you have so well described. The cessation of a civil war, the acquisition of a new and abundant material of food, mechanical inventions, enabling the importation of a considerable supply of food at a less expense of labour than must have been employed to produce it at home, improved modes of cultivation and transport, and the change from a restricted to a free internal corn trade—each of these causes would be sufficient to occasion an immediate increase of food. In this country every one of them has been experienced. As each has begun to act, it has, no doubt,

been followed by an increase of population; an increase which, in many cases, cannot have fully shown itself until some time after the cause increasing the supply of food had been in full operation. Under such circumstances a retrograde movement must have taken place. Still I apprehend that, in the absence of disturbing causes, the retrogression would not be to the point at which food and population relatively stood, before the first improvement took place. I conceive the progress of human society to resemble the children's puzzle of a snail, which we are told every day crawled up the wall four feet and fell back three. If we had always fallen back the whole four, we should still be ill-fed savages, earning a scanty subsistence by the chase. And yet in England we have many disturbing causes. We have the poor laws to increase our numbers, the corn laws to prohibit, under ordinary circumstances, the importation of subsistence, and a commercial code by which the perverse ingenuity of cen-

turies has laboured to fetter and misdirect our industry.

Secondly. As to the accuracy of our respective forms of expression.

I fully admit, that in all old countries, perhaps in all countries whatever, population is always pressing against food; and that the pressure not only prevents the increase which would take place, if it could be removed, but occasions premature mortality. But as society advances in what appears to me to be our *natural* course, for it is the course for which nature has fitted us, this pressure generally, though not universally, diminishes. The proportion of those who now die in England from want, is probably less than it was two hundred years ago; it certainly is less than it was six hundred years ago. I still think myself, therefore, justified in saying, that there is a tendency in the pressure to diminish. I admit that human nature tends to marriage directly, and to the increase of subsistence only indirectly, and through the intervention of fore-

thought. It may be said that, strictly speaking, man has no natural tendency to *produce food, or to better his condition*, but to *consume food*, and to *have his condition bettered*, and, through the intervention of reason, to the accomplishment of these results. But reason, in some degree or other, is as natural to man as passion. On this ground I speak of man as a rational animal, as having a tendency towards the ends, which he pursues through the intervention of forethought, as well as towards those which he pursues at the dictates of passion. In this sense I speak of any people as having a desire to increase their subsistence, (for that is what I mean when I speak of the tendency of subsistence to increase,) stronger than the desire which leads them to increase their numbers.

The third, and by far the most important question, is the effect which your mode, or my mode, of stating the law of population, is likely to produce on the reader's mind.

I fully agree with you, that a statement

which should imply that the increase of food can, in the absence of constant vigilance, restraint, and self-denial, exceed or even keep pace with that of population, would lead to the most mischievous error. I am grateful to you for having drawn my attention to the possibility of such a consequence being inferred from my expressions, and I certainly shall take care to prevent it for the future. I do not think that any thing which I have said would lead an attentive reader to such a conclusion; but after all the number of attentive readers is so small, that no writer is justified in neglecting the idle and the careless.

But while I admit that false and dangerous inferences may be drawn from the naked and unexplained proposition that food has a tendency to increase faster than population, I must add that inferences as false and as dangerous may be drawn, and in fact have been drawn, from the proposition that population has a tendency to increase faster than food. Nothing can be more accurate than your statement, “ that

population is always ready and inclined to increase faster than food, *if the checks which repress it are removed.*” But many, perhaps the majority of your readers, adopt the proposition without the qualification. They seem to believe that the expansive power of population is a source of evil incapable not only of being subdued, but even of being mitigated. They consider man not as he is, but as he would be if he had neither forethought nor ambition; neither the wish to rise, nor the fear to sink, in society. They deny the possibility of permanent improvement, and regard every partial amelioration as a mere Sisyphæan labour.

Ἀλλ' ὅτε μέλλοι

ἄκρον ὑπερβαλέειν, τότε ἀποστοέψασκε κραταίς.

“ Were the whole mass of human sustenance,” observes a distinguished writer, “ produced by the soil now under cultivation to be increased twofold by the efforts of human in-

“ genuity and industry, we may assert, as an
 “ undoubted truth, that the only effect, after
 “ the lapse of a few years, would be found to
 “ have been the multiplication in a like pro-
 “ portion of the number of its occupants, with,
 “ probably at the same time, a far increased
 “ proportion of misery and crime.”

No one can doubt the anxiety of the eminent person whom I have quoted, to promote the welfare of mankind; but the tendency of this passage is to damp every attempt to make labour more productive.

Unhappily there are many whom indolence or selfishness, or a turn to despondency, make ready recipients of such a doctrine. It furnishes an easy escape from the trouble or expense implied by every project of improvement. “ What use would it be,” they ask, “ to promote
 “ an extensive emigration? the whole vacuum
 “ would be immediately filled up by the neces-
 “ sary increase of population. Why should we
 “ alter the corn laws? If food were for a time

“ more abundant, there would be a proportionate
 “ increase of population, and we should be just
 “ as ill off as before.”

There are many also, particularly among those who reason rather with their hearts than their heads, who are unable to assent to these doctrines, and yet believe them to be among the admitted results of political economy. Such persons apply to the whole science the *argumentum ab absurdo*; and instead of enquiring into the accuracy of the reasoning, refuse to examine the premises from which such objectionable conclusions are inferred.

Undoubtedly these opinions are not fair inferences from your work; they are, indeed, directly opposed to the spirit of the greater part of it; but I think they must be considered as having been occasioned by a misconception of your reasonings. They are prevalent now: before the appearance of your writings, they were never hinted at. I trust, however, that, unsupported as they are by your authority, they will gradually wear away; and I anticipate

from their disappearance not merely the extinguishment of an error, but the removal of an obstacle to the diffusion of political knowledge.

Believe me,

My dear Sir,

Yours, very sincerely,

N. W. SENIOR.

REV. T. R. MALTHUS.

East India College,
March 31, 1829.

MY DEAR SIR,

We do not essentially differ as to facts, when they are explained as you have explained them in your last letter. We are also quite agreed that in the capacity of reason and forethought, man is endowed with a power naturally calculated to mitigate the evils occasioned by the pressure of population against food. We are further agreed that, in the progress of society, as education and knowledge

are extended, the probability is, that these evils will practically be mitigated, and the condition of the labouring classes be improved.

But is the passage which you have quoted in your last letter, when taken with the context, essentially inconsistent with these our opinions? It must be allowed, that it is not expressed with sufficient caution. In pronouncing as an undoubted truth, that the *only* effect of doubling the quantity of food in a country, would, after the lapse of a few years, be found to have been the multiplication in a like proportion of the number of its occupants, with probably a far increased proportion of misery and crime, the author has evidently gone too far; but in what appears to me to be the intended conclusion of the passage, I am disposed to agree with him.

The two main propositions which I have endeavoured to prove from history and experience, are, "That population invariably increases "when the means of subsistence increase, unless "prevented by powerful and obvious checks;" and, "That these checks, and the checks which

“ which keep the population down to the level
 “ of the means of subsistence, are, moral re-
 “ straint, vice, and misery.”

Now I cannot but allow that it is a fair inference from these propositions, that, if in any country means of doubling the quantity of food were suddenly discovered, population would increase with extraordinary rapidity, so as to overtake, or nearly to overtake, the food ; and that the permanent condition of the labouring classes would not depend upon such discovery, but exclusively on the question of the final increase of moral restraint, or the moral condition of the population ; which I think is nearly the substance of the passage which you have quoted, when taken with the context.

In the same manner I must allow that it follows from my principles, that if by a free trade, corn were obtained much cheaper, and a labouring family could really command a much larger quantity of it, population would unquestionably increase with greater rapidity than before, so as to reduce the increased corn wages ; and that

the final condition of the labouring classes would not depend on this change which had taken place in the law, but upon the greater or less prevalence of the moral checks to population after the peculiar stimulus to its increase had subsided ; and repeated experience has shown that the facility of obtaining food at one period is not *necessarily* connected with the formation of more general habits of prudence subsequently.

It does not by any means follow from these principles, that we should not use our utmost endeavours to make two ears of wheat grow where one grew before, or to improve our commercial code by freeing it from restraints. An increase of population is in itself a very decided advantage, if it be not accompanied by an increased *proportion* of vice and misery. And the period during which the pressure of population is lightened, though it may not be of long duration, is a period of comparative ease, and ought by no means to be thrown out of our consideration. It is further to be observed, that the experience of such a period may sometimes operate in giving to the labour-

ing classes a taste for such a mode of living as will tend to increase their prudential habits. But it is obvious, that without this latter effect, the pressure of poverty cannot be permanently lessened. And when the principal question is distinctly respecting the *permanent* condition of the great mass of the labouring classes, as in the latter part of my Essay, the interests of that body, which ought to be considered as the main interests of society, imperiously require that we should not call off their attention to the chances of a great increase of food, but endeavour by every proper means to direct their view to the important and unquestionable truth, that they can do much more for themselves than others can do for them, and that the *only* source of an essential and permanent improvement of their condition, is the improvement and right direction of their moral and religious habits.

I am, my dear Sir,

Very truly yours,

T. ROBT. MALTHUS.

N. W. SENIOR, Esq.

Lincoln's Inn,
April 9, 1829.

MY DEAR SIR,

OUR controversy has ended, as I believe few controversies ever terminated before, in mutual agreement. I think, however, that it may be well to close it by a few remarks on the circumstances by which it was occasioned.

It is obvious that the principal causes by which the situation of a people can be improved, are those which occasion the amount of what is provided for their use to be in a greater proportion than before to their numbers. It seems a consequence equally obvious, that the principal means of improvement are those which promote the production of subsistence and prevent a corresponding multiplication of consumers.

But the old doctrine was, that an increase of numbers is necessarily accompanied, not merely by a positive, but by a relative increase of productive power. Density of population was supposed to be the cause and the test of pros-

perity; its increase to be the chief object of our exertions, and depopulation to be a danger constantly besetting us. And statesmen and legislators were urged to stimulate population with as much earnestness, and about as much good sense, as they are now urged to stimulate consumption.

Your work effected a complete revulsion in public opinion. You proved that additional numbers, instead of wealth, may bring poverty. That in civilized countries the evil to be feared is not the diminution, but the undue increase of inhabitants. That population, instead of being a torpid agent, requiring to be goaded by artificial stimulants, is a power almost always stronger than could be desired, and producing, unless restrained by constant prudence and self-denial, the worst forms of misery and vice.

These views are as just as they are important. But they have been caricatured by most of your followers. Because additional numbers *may* bring poverty, it has been supposed that they necessarily *will* do so. Because increased

means of subsistence *may* be followed and neutralized by a proportionate increase in the number of the persons to be subsisted, it has been supposed that such *will* necessarily be the case.

These were the doctrines which I found prevalent when I began my Lectures.

The points of view in which we have respectively considered the subject, have, perhaps, been materially influenced by the state of public opinion at the periods when we began to write. You found the principle of population disregarded, or rather unknown; and justly thinking the prevalent errors most mischievous, you bestowed on them an almost exclusive attention. I found that principle made the stalking-horse of negligence and injustice, the favourite objection to every project for rendering the resources of the country more productive; and it is possible, that in replying to those who appeared to me to exaggerate the probable effects of its powers, and to neglect the benefits to be derived from increased pro-

duction, I may sometimes have undervalued the former, and overrated the latter.

But, in fact, no plan for social improvement can be complete, unless it embrace the means both of increasing production, and of preventing population from making a proportionate advance. The former is to be effected chiefly by the higher orders in society; the latter depends entirely on the lower. As a means of improvement, the latter is, on the whole, the more efficient. It may be acted upon, or neglected by every individual. But, in the present state of public opinion, and of our commercial and fiscal policy, perhaps more good is to be done by insisting on the former. The economist who neglects either, considers only a portion of his subject.

Believe me, my dear Sir,

Yours very truly,

N. W. SENIOR.

REV. T. R. MALTHUS.