

LECTURES

ON

POLITICAL ECONOMY,

DELIVERED IN

TRINITY AND MICHAELMAS TERMS, 1833.

BY

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P R E F A C E.

THE Professorship of Political-Economy in the University of Dublin is indebted for its existence to the liberality of a stranger. In 1832, it was founded and endowed by the present Archbishop of Dublin.* In October, 1832, I was appointed the first professor. The laws, therefore, of this professorship being similar to those of the Drummond professorship at Oxford, did not lay me under the necessity of publishing any lectures for the year 1833; and I should gladly have availed myself of that indulgence, and suppressed these lectures, but I found that the subjects which I intend to discuss in the present year could not be understood without some reference to my lectures on profits. The distribution of wealth among the different orders of society appears not

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to have attracted much attention, although it is the most important subject in Political-Economy. Adam Smith's notions on this point were very vague and undefined. He seemed to think that in the first instance the labourer is supported according to his natural or acquired necessities, well or ill, according as the country is in a prosperous or declining state : that what remains in ordinary manufactures, after giving this support to the labourer, goes as profits to his employer : that agriculture yields a still greater produce, and that what remains, deducting the usual wages to the labourer, and the usual profits to the farmer, is naturally demanded and received by the landlord as rent. Thus, the order in which he considers the three great sources of revenue is—1st. Wages. 2d. Profits. 3d. Rent.

In 1815, public attention was first drawn to the correct theory of rent, and there is a dispute as to whom the merit of the discovery should be attributed. Sir Edward West, who, I believe, was one of the inventors of it, founded on it his system of profits. According to it, the productiveness of the worst land under cultivation regulates the rate of profit. The produce of such

land belongs to the farmer, after supporting his labourers according to the rate at which that sort of labour is commonly maintained in the country. Hence as population increases, and recourse is had to inferior soils, the rate of profits must decline, as the farmer must support his labourers at the same rate, or nearly the same rate, out of a smaller fund. As agricultural profits decline, the rate of profit of capital employed in manufactures must of course decline also. This theory alters Smith's order, and considers—1st. Rent. 2d. Wages. 3d. Profits.

In this theory, although it is adopted by most of the English writers on Political-Economy, I found myself unable to acquiesce. I have accordingly endeavoured to place the subject of profits in a juster light, and to shew that the only order in which a correct analysis of the sources of revenue can be carried on is—1st. Rent. 2d. Profits. 3d. Wages. From this analysis I think that some important consequences can be drawn. It can be proved how impossible it is to *regulate wages generally*, either by combinations of workmen, or by legislative enactments. Such regulations are frequently shewn to be impolitic or impracticable,

on account of the numerous evasions to which they would give rise; but the argument can be carried farther, and it can be shewn that such regulations must be ineffectual even if all parties were on all occasions sincerely anxious to comply with them. The case would be found analogous to a law limiting the price of provisions in times of scarcity. The spirit of such a law could not be obeyed, for it would require that all who were willing to give the legal price for provisions should be able to procure them, and the deficient supply would render that impossible.

I do not offer these lectures to the public without much apprehension, for I am well aware how easily a writer can deceive himself; and that the inventor of a system is apt to consider his reasonings and deductions as clear, on account of his familiarity with them, while the unprejudiced public will judge them to be obscure and unintelligible. However that may be, neither neglect nor refutation will cause me any pain; I shall be contented to remain unnoticed: if civilly corrected, I shall feel pleasure at being set right.

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LECTURE I.

GENTLEMEN,—The science of Political-Economy teaches the laws or rules which regulate the creation, accumulation, distribution, and consumption of wealth in different countries. Perhaps this definition may not of itself be sufficient to point out fully and clearly the true end and object of the science, and it may be proper at a future period to give a more detailed explanation of these subjects, when considering the manner in which the truths relating to them can be most successfully and profitably investigated. But before I proceed to such inquiries, it may not be useless to remove some of the objections that are frequently advanced against the methodical study of the science, and also some objections, which though never formally put forth, have not on that account been the less influential in creating a prejudice against Political-Economy, or whatever science assumes that name, and whatever doctrines it professes to inculcate. Those pre-

judices indeed are disappearing fast. Already has Political-Economy obtained several important victories over the errors even of those who are called practical men, and many important doctrines propagated by the political-economists, rather from their regard to truth than from any hope of their ever convincing the minds of legislators, now influence the councils of the country to such an extent, that few well educated men are found to dissent from them. It is a pleasing task, and consolatory to the rational and calm enquirer after knowledge, to peruse such a work as Adam Smith's "Wealth of Nations," and to compare the principles which he inculcates, with the changes in our policy which have taken place since his time, and to observe in how many instances the truths of science, calmly asserted and explained, have prevailed over the interested opposition of those who advocated a less enlightened system. Political-Economy is every day extending its empire, and although it has even now opposition to encounter, still some grounds of hostility have been already given up. Very few I believe could now be found to censure the study of it as impious or irreligious, although perhaps some may be inclined to turn away from the science as useless, or as unworthy of their attention, when they find that it is occupied about a subject so narrow and unimportant to human happiness as wealth may appear to them to be.

Many perhaps will even think it a fair subject of doubt, whether wealth is really useful or prejudicial to society, and therefore will be disposed to consider that a very trifling science which is occupied in discussing the laws relating to the creation and distribution of such a doubtful good. To all these it may be said, that method and order require that subjects really separate should be studied separately, and that as wealth, whether it be a good or an evil, is assuredly distinct from every thing else, it is proper to make it the subject of a distinct science or a distinct branch of some science. In either case Political-Economy must be studied, to teach nations the method of avoiding wealth, if it be an evil, or of creating it and distributing it judiciously, if it be a good.

But a little more consideration will serve to prove that nothing relating to the Wealth of Nations is to be deemed unimportant.

Under the term Wealth is included all that contributes to the subsistence, the comforts, as well as the luxuries of the community, and it cannot be thought a matter of slight importance, in what quantity, or in what manner, these shall be distributed. If it be said, that wealth does not produce happiness, or even content, and that we often see the rich disposed to envy the condition of the labouring poor ; a similar assertion may be made, without any greater degree of exaggeration, of

wisdom and health, and every other worldly advantage. In short, they may be abused, and they do not of themselves constitute happiness. But surely it would be a useless waste of time to prove, that even to an individual, the possession of some riches is rather an advantage than the contrary ; and it was well remarked by a philosopher of antiquity, that he perceived it to be false that wealth was an evil, from the ingenious and elaborate arguments used in support of that position, while no man thought it necessary to say one word on the opposite side. But omitting the question as it relates to an individual ; since wealth, if it be a good, is certainly one which a man may seek too anxiously, or love too much, it is important to refer to the difference between the wealth of an individual and that of a nation. The individual can acquire wealth by unworthy means, or apply it to improper purposes. It may produce in him idleness, arrogance, or vicious luxury : the possession of it by an individual can therefore neither be a proper test of merit, or of happiness ; while the poverty of the poor man may be owing to his scorn for the arts by which he sees riches acquired, or to his amiable though unthinking generosity of disposition. But how different, in all these respects, is national wealth from the riches of an individual. It cannot be acquired by violence or fraud ; it must derive its source from industry, intelligence, and frugality.

Even in trade, a wealthy trader may sometimes owe his success to fraud; but the body of merchants in a nation, if they earn wealth, must, we may rest assured, be distinguished alike for integrity in their dealings, for enterprising skill, and judicious economical industry. Equally different may be the disposition generated by riches in an individual, and in a nation. An individual is said to be rich, because he is much richer than those with whom he is compared; and such a superiority may produce arrogance, though such ought not to be its effect. But this disposition is not apt to be produced, from the wealth of the nation to which he belongs, in an individual, who does not perceive himself to be richer than the other members of the community. He may perhaps, on comparing his own with other countries, feel a kind of national pride, a harmless gratification at knowing that the poorest of his countrymen are comfortably lodged, and fed, and clothed. For it is to be observed, that though the wealth of an individual may be expended in procuring vicious luxuries, yet that of a rich nation, as distinguished from a poor nation, will be found to consist in the great mass of its inhabitants being comfortably and wholesomely fed, lodged, and clothed, and well rewarded for their industry. If otherwise, that wealth must be wrongly distributed; the cause and cure of which wrong distribution come also within the province of the political-economist to investigate.

The subject might easily be followed out to a greater length ; but I have thought it sufficient to make this brief allusion to the difference between the wealth of an individual and that of a community, both because the subject has been much more ably discussed than I can pretend to treat it, by the professor who originally discovered its importance and drew attention to it, and also because the arguments generally used, even by those who are opposed to the study of Political-Economy, do all seem to imply that National Wealth is an object that deserves to be promoted. They may frequently be heard advocating this measure, and decrying that, on account of its supposed consequences, as favourable or inimical to the increase of national wealth. And even much of the prejudices entertained against this science, and much of the difficulty attending the diffusion of what are called its doctrines, that is, of such propositions belonging to the science as can be demonstrated to be true, lies in the very interesting nature of the subjects with which it is conversant. Scarcely any man comes to the contemplation of them with a mind free from prejudice and crude undigested theories. They relate to matters so important, that every one feels a necessity of forming some opinion upon them, and few can calmly wait, and duly deliberate, and reflect upon each doctrine, before they peremptorily decide upon its truth or falsehood. Almost every man's mind is pre-occupied

with the opinions or prejudices of some party or system which he has hastily adopted ; and there is in general scarcely room left for truth to gain admittance.

And if few are found who despise Political-Economy, from not feeling sufficient concern for the matters about which it treats, still fewer are repelled by an opinion of its abstruseness. On the contrary, most men think themselves competent to discuss all its doctrines, and to argue on all questions connected with the wages of labour, and the effect of taxes, rents, national debts, tithes, and poor laws. By those men, Political-Economy is not despised or rejected as an abstruse uninteresting study, difficult of comprehension, and occupied with subjects of no public or general utility. They do not condemn it, as employed about unimportant subjects, or matters beyond the reach of the human mind to investigate, but they hold the study of Political-Economy, as a science, useless, because they think they feel themselves competent to discuss all its branches extempore, as they arise in casual conversation. With proud humility they admit, that they are not political-economists. They even think it a mark of their independent spirit, that they are not guided by the opinions of writers, whom, in fact, they have never read, and that they dare to dissent from doctrines, which in reality they never studied, and which they do not understand.

These people will not study Political-Economy, because they say that without any study, mere common sense is sufficient to show them the absurdity of free trade, the necessity of bounties and restrictions on our commerce, to encourage and protect our manufacturers, and of corn-laws, to promote our agricultural interests, and to enable the nation to support the taxes necessary to pay the interest of the national debt. Other questions connected with our foreign and domestic, our commercial and colonial policy, are disposed of with equal facility; and the different theories thus defended, are generally, by way of recommendation, announced to be opposed to the doctrines of Political-Economy. Of course, this is often done, not from any dislike to the science, but from a wish to conciliate the populace, by promising to point out to them an easy path to wisdom, without the necessity of previous study and learning; sometimes it is done to secure the sympathy of those who are conscious of not possessing the knowledge which the speaker disclaims, and who may therefore be gratified at hearing it decried as useless. For example: I remember reading a speech of an orator much admired for his eloquence, in which he advocated poor laws, partly on the ground that they were opposed to the conclusions of Algebra and Political-Economy. With those, however, who employ such language for such purposes, I have no concern here. Rhetorical arti-

fices of various kinds will always be employed, according to the nature of the audience which the orator wishes to influence. But many are serious in their opposition to the doctrines of Political-Economy, and are themselves deluded by the sophisms they use, and do really think, that because a doctrine is opposed to science, it must be conformable to common sense or to common experience.

I need not now enter upon the defence of any of the particular doctrines that are thus impugned ; for without such discussion, a little reflection will enable us to perceive that those who thus hold opinions acknowledged to be contrary to the admitted principles of the science, must in general be superficial dogmatists of error. It is universally allowed that Political-Economists are not too apt to follow in each other's track. On the contrary, the difference of opinion which exists among them on some important points is frequently brought forward unjustly as an argument against the science. When they agree therefore on any point, the decrrier of Political-Economy, who holds opinions contrary to theirs, may reasonably imagine that his opinions, and the arguments by which he maintains them, have occurred to others as well as to himself : at least he ought not boldly to presume that what his careless consideration of the subject suggested to him has escaped the notice of those who have

studied it as a distinct science. A small share of sense or modesty might therefore teach him that he ought to inquire whether those opinions and arguments have been observed and answered.— The knowledge or study of Political-Economy is not confined to men of any class or creed ; and it would be very strange indeed if there was any false proposition whose falsehood could be at once detected and exposed by men of common sense unacquainted with the subject, at the same time that it always made converts of those who had given the matter a more attentive consideration.

But I am sure it is unnecessary to say any thing by way of argument, for the purpose of convincing you, gentlemen, that on this subject, as well as on every other within the scope of human reason, a diligent investigation will be more likely to lead to truth than to falsehood ; and therefore that in general the political-economists, that is, those men who have studied the subject with care and attention, will be more likely to hold correct opinions than those who condemn Political-Economy, and are content to discuss each point unmethodically as it rises. Perhaps there is even no subject in which method and order are of more importance than in this, as there is none in which the questions are so interwoven with each other, and in which it is so often a matter of difficulty, in cases of two observed coincident phenomena, to determine which

is the cause and which is the effect. On this point, careful deliberate reasoning is the more necessary, as it is the only means of obtaining truth or knowledge. Experiment is impracticable, from the mighty interests which are involved in every case; and owing to some peculiar circumstances attending this science, experience, without theory and reasoning, must ever prove a blind and inefficient guide. So numerous are the circumstances which influence every event, that it is impossible by mere observation to determine how much each has contributed to the result, or how far the effects of some may have been counteracted by the more powerful efficacy of others. The length of time also which must elapse in many instances before the effects of political changes can completely develope themselves, adds an additional uncertainty to experience, by limiting its range, preventing cause and effect from coming within the view of the same persons, and giving time and opportunity for intervening circumstances to modify the effects of our institutions, and prevent their natural tendency from coming into full operation. But indeed I believe that the very vagueness and uncertainty of experience is one of the principal reasons why it is so often referred to in opposition to theory. It is an easy matter for an indolent person, when pressed by reasons which he cannot answer and yet is unwilling to admit, to say that they are contrary to experience. It is

an assertion easily made and easily understood, and of great apparent weight, and yet the persons resorting to it would in general be very much embarrassed if they were called upon to prove how the doctrines they oppose are contrary to experience, or how, where, and when, that experience was obtained. Such assertions frequently mean no more than that those principles are unsupported by experience, because in fact they have never been tried, although the general principles from which they have been deduced as necessary conclusions, by unimpeachably correct reasoning, are conformable to the experience of all mankind. The mere witnessing of coincident phenomena, unaccompanied by any reflection on the cause of such coincidence, is a far different thing from the experience of a rational being.

Were the shepherd who spends his days and nights in the fields, and who daily looks into the skies, and sees or thinks he sees the sun and stars revolving in a diurnal course around the earth, to deride the speculations of the scientific astronomer, and contrast his own experience with the theories of the other, he would be told that experience without theory was blind, and that even in experience and accurate observation he was as much inferior to the astronomer as in science; that the difference was, that his observations were casual, inaccurate, and unmethodical, while those of the

other were accurate and scientific. In like manner the political-economist omits no opportunity of acquiring the knowledge of facts, though he uses reason and cautious theory to distinguish the relation of cause and effect from accidental or unnatural coincidences.

Experience is indeed only a negative guide, except in cases where we have attained the highest degree of perfection, or accomplished the end we have in view : in such cases we may remain satisfied with the degree of knowledge and power we already possess ; but in all other cases, as experience, from its very nature, cannot invent, however it may suggest improvements, we must have recourse to theory as our guide : if we resolve on no instance to depart from the beaten track, we establish a principle which precludes all improvement, and which, if our ancestors had acquiesced in it, would have kept them almost in a savage state.

It may seem strange, and almost inconsistent with the evident utility of Political-Economy, that it should be a science of comparatively modern origin ; but on consideration it will appear that the circumstances which occasion its principal utility are peculiar to modern times. To shew this fully and at length would be inconsistent with my present purpose, and can best be done after we shall have considered some of the principal branches of this science ; but it may not be amiss, even now, and it

will not consume much of your time, to call your attention briefly to some of those peculiarities of modern times to which I have alluded ; one of these, and perhaps the most important in its remote effects upon Political-Economy, is the difference of the manners of carrying on wars used now and in former times, and the different results that are produced by them. In some of the most celebrated wars of ancient times the result was that the vanquished party was destroyed and the victorious one enriched ; now the result of war is that all parties continue to exist, and all are impoverished, debts are contracted, and taxes must be imposed, and a particular importance is given to that branch of Political-Economy which teaches how to impose those burthens so as least to impair the wealth of the country or to interfere with the subsistence or comforts of the population.

Other causes also which have led Political-Economy to assume so much importance in modern times may be found in the comparative length and steadiness of their domestic tranquillity, in the great care with which all reasonable contracts are enforced, and in the effective regulations of modern police. Also the quickness with which intelligence of all kinds is diffused, and the superior degree of information now spread among all classes of society, make the conduct of individuals more uniform than before, and render their consequences less a

matter of chance, and more subject to calculation. It is undoubtedly true, that it is easier to calculate what shall be the general and ordinary conduct of all persons placed under certain circumstances than how any individual shall behave in the same situation ; and the more generally the knowledge of their interests is diffused among any class of people, the more certain we may be that the great majority of them will pursue the path which their interest points out.

The state of slavery in which the majority of the population of ancient countries was kept was of itself a sufficient hindrance to the investigation of all questions relating to population, and the circumstances which determine the wages of labour. These questions, which are of the highest importance in modern Political-Economy, could never have arisen if the mass of the poorer inhabitants were not free. Slaves, like domestic animals, where every individual has an owner, who has the profits of his work, and is at the expense of his subsistence, can never exist in greater numbers than are required. Their labour must always be worth more than the price of their support. Thus, when we discuss the different questions of Political-Economy, we shall find that most of them are of such a nature that they could not have arisen in ancient times ; and we shall see at the same time the advantages that must

arise from a complete and general comprehension of them.

And if the science demands some time and labour from those who desire to form correct and rational opinions on the subjects which come within it, yet there is scarcely any learning so well worth the pains required to become master of it. In free countries especially, such as this is, where every man is permitted freely to pronounce his opinions on the utility or impolicy of every law, it is the duty of every man who has a few moments of spare time for studies not professional, to dedicate to it that small portion which this science demands. No person can tell how much influence his declared opinions may have on the opinions and conduct of others; and he must plead guilty to the charge of overweening confidence or culpable carelessness, who proclaims his opinions boldly on points of practical importance, without attempting to learn the principles of a science which professes to teach him on such subjects how to discern the truth from the specious falsehood.

Opinions are every day assuming greater weight in society. It is daily becoming more important, that the notions which are generally entertained should be correct, since they now lead so directly to action. In every day's conversation there is a discussion and propagation of opinions on these

subjects, and in general they excite the greatest interest. No person can now remain altogether neutral, and avoid such topics. He must, according to the degree of pains he has taken with the subject, be a teacher of useful truth, or a disseminator of mischievous falsehood. Opinions, whether true or false, will no longer remain inactive; they both immediately affect legislation, and exercise immense influence on a class of people formerly removed beyond the reach of such discussions, but whose notions and consequent conduct are now of the greatest importance as well to their own comforts as to the peace and prosperity of their country. I allude to the labouring orders, both agricultural and manufactural. It is no longer a question, whether these men shall think or not, or what degree of influence their opinions ought to exert over their conduct; they will follow the path where they conceive their interests to point, and it only remains to be considered, in what manner a true sense of their real interests may be most effectually brought home to them. The change has taken place, whether for the better or the worse it is useless now to enquire, since the steps which have led to it can never be retraced. The people will no longer be guided by the authority of others. The appeal must be made to their own reason, which will hardly fail to lead to error and its consequent crimes, if ingenious sophistry and unwearied dili-

gence are employed to lead their minds astray, while no pains are taken to present truth to their understanding, and to make them acquainted with both sides, since they cannot be prevented from learning the wrong side of every question. All reflecting people now concur in this, that the comforts and happiness of the labouring classes depend almost entirely upon their own conduct; and this opinion is equally consistent with either doctrine respecting the policy or impolicy of poor-laws.

On this point legislation can do little more than provide that the laws shall not hold out any motive or encouragement to imprudence, and that the consequences of misconduct and improvidence shall as much as possible fall upon the individual rather than upon the community: here Political-Economy is merely a defensive science, which attempts to prevent the injudicious interference of speculative legislation. It depends in some degree upon every person present, whether the labourer is taught that his interest will be best promoted by prudence and industry, or by a violent demolition of the capital destined to his support. Unhappily the moral sense of right and wrong is very feeble among those classes at the present period, and the conduct of the labourer will be principally decided by what he conceives to be the cause of his distress, and that again will be very much influenced by the pains which each of you, gentlemen, take to learn and

disseminate the true doctrines of Political-Economy, and the arguments by which they can be supported. Let the labourer be taught to know, and the proof is simple and easy to be understood by all, that the wages of his labour cannot be determined by the wishes of his employer, that they are even as independent of the decrees of the legislature as they are of his own will, and that they are ultimately entirely dependant upon the prudence or improvidence, the industry or idleness, of the labouring classes themselves. Let them be taught to trace out accurately the entire set of consequences that would result from each law that they might feel most inclined to call for, and they will at the same time see how inevitably their wild legislation would ensure their own destruction, and how small a part of their present weal or woe is "that part which laws or kings can cause or cure."

In addition to the important questions which relate more immediately to the condition and comfort of those classes, which it is the first duty of the legislature to provide for, and which call more immediately for the attention of the political-economist, there are many other questions connected with our commerce and manufactures, our shipping and colonial interests, and the degree of protection which each demands, and above any, because vitally affecting all, with the different modes of raising the immense revenue required to pay the annual interest of the

national debt, and to defray the current expenses of the year. All these are subjects of the first importance; and it may be considered in some measure the duty of every man to act his part towards making general a right understanding of them : at least upon political subjects involving such important consequences, no man should without due caution propagate opinions which he believes to be at variance with the doctrines laid down by all who have given the matter an attentive and methodical consideration ; and Political-Economy requires no more. It cannot require much labour to perceive how advantageous to the public a general knowledge of these subjects must prove.

If every man can be taught that the laws are framed for the common good of all, and not for the benefit of any single order or individual, and that every man is alike concerned that they should meet with respect and obedience, we may then hope to see no more open violations of the law committed by large bodies of men, under the notion that in doing so they are best consulting their own interests. I am not so sanguine as to hope that the diffusion of useful knowledge will completely banish crime ; but if crimes shall then sometimes occur, they will be committed only by a few depraved individuals, who will look to concealment, not to defiance, for their protection ; in this concealment the body of the people will give them

no assistance ; they will be looked upon as common enemies, and when detected, will meet with little sympathy ; and the laws will be more satisfactorily and effectually enforced by a few constables with staffs, the emblems of their office, than they are now by such a military force as might be found sufficient to repel an army of invaders.

I propose, when next I have the pleasure of addressing you, to offer some observations upon the measure of value and utility, and the principal causes which connect or sometimes apparently separate them. I shall afterwards explain the manner in which I conceive the study of this science may be most successfully prosecuted, and point out the course which I shall pursue in attempting to explain and prove those principles, of the truth and importance of which I am most firmly convinced.

M. L.

LECTURE II.

GENTLEMEN,—As Political-Economy is the science which teaches the laws that regulate the production, accumulation, consumption, and distribution of wealth, it is plainly necessary, in order that we may confine its investigations accurately within their proper limits, that we should define what we understand by the term “WEALTH.” By wealth, then, writers generally understand any of those things which satisfy the wants or gratify the wishes of mankind, and which possess an exchangeable value. This last condition is inserted to exclude such objects as the common light of heaven, the atmospheric air, and other gifts of nature, which, however useful or necessary they may be, yet possess no exchangeable value, and therefore are not usually comprised under the term wealth. However, whether they are included within the definition, as they are by some writers, or are directly

excluded by such a qualifying phrase as I have added, is a matter of no importance. For since all men possess as much as they desire of those natural elements, without care or toil, Political-Economy has no concern with them, as human conduct can exercise no influence over their production, accumulation, consumption, or distribution. They are produced by nature, and cannot be accumulated by any art; every man consumes as much as he desires, and each man's share is what he is disposed to consume. What wealth is, no one is completely ignorant of; and therefore perhaps to give any definition of it may be thought unnecessary and useless; and it would be so if there were no propositions to be discussed, which may or may not be true, according to the sense in which the word is understood. In this science in particular, as most of the terms employed in it are of daily use, it will frequently be in the highest degree necessary to give accurate definitions in order to fix the meaning of the most abstract words. It seldom happens that any word of daily occurrence in common conversation is content with a single meaning; it generally either obtains some metaphorical extension of its signification, or suffers a diminution by being considered applicable only to those particular subjects to which it happens to be most frequently applied. Hence the necessity of definitions, to fix precisely the meaning of the pro-

positions we discuss. In the mathematical sciences they serve a double purpose: they both fix the meaning of the word, and serve as a basis on which our reasonings may be founded. In mathematics therefore it is necessary to commence with the definitions, as all our reasonings are to be built on them. But in the moral sciences definitions will serve only the former purpose, and none but trifling propositions can be deduced from them. If we meet with any novel or striking proposition, deduced from the mere definitions by fair and conclusive reasoning, we may feel confident that some of the words employed in the statement of the proposition have been defined in some unusual sense, and that the proposition itself will not be true when its terms are understood in their ordinary signification. Hence in Political-Economy we cannot reason from definitions; and it will be sufficient to define the words when we have occasion to use them in a stricter sense. And there may be some advantage in pursuing this course, in preference to grouping the definitions all together at the commencement. The study of definitions is a dry uninteresting task in every science, and in none more so than in Political-Economy. Its terms are those employed in common life, and he who learns them appears at first to have acquired no reward for his labour. He does not carry away any of those new and sonorous words which in

other sciences serve to display the lately acquired information. I shall not willingly therefore occupy much of your time with definitions and explanations of words; and if I am sometimes guilty of a deviation from this rule, I trust that you will feel assured that I do so from an opinion of its necessity.

Before we can enter fully into the questions connected with wealth and value, it will be necessary to premise a few observations, to show what is understood by value, and how it is measured. Adam Smith divided value into two kinds; "value in use, and value in exchange;" and there was no impropriety in the division, as the two things were really different, and were frequently called by the same name. More modern writers however have termed the former kind "utility," and have appropriated the term value to the latter kind alone, or to value in exchange. By the utility of an article is meant the power which it has of satisfying one or more of the various wants or desires of mankind. It is to be observed that by this definition of the word utility it acquires a somewhat more extended signification than is generally given to it in common use, since we do not ordinarily attribute utility to any article merely because it has the capacity of satisfying some want or wish, unless that want or wish be one of those of which the gratification is most imperiously de-

manded by nature. The value is its power of being exchanged for other articles. It is plain that without some utility a thing can have no value, since nobody would give any thing or bestow any labour for that which would not satisfy any want or wish. But once possessed of any utility, its value will not depend so much upon the extent of that utility as upon other circumstances, the investigation of which constitutes a very important branch of the science of Political-Economy. By the extent of utility I of course mean the number of persons whose wants and wishes can be satisfied by the object, and the imperiousness of those desires in demanding their proper gratification. All the materials of wealth must be both useful and valuable; but it is with their value, not their utility, that the elements of Political-Economy are principally conversant, in so much that it has been called the science of values, or the science of exchanges. This may at first cause some to think the study of it still more trifling than if wealth in all its bearings were its subject, since it is more with the utility than with the exchangeable value of commodities that the happiness of mankind is concerned; and it may appear strange therefore that in our early investigations we should occupy ourselves so much about value, and seem to pay so little attention to utility. But some advantages are obtained by discussing the different questions res-

pecting the value of objects before we involve ourselves in controversies about their utility. Several theories about value may be proved by arguments as strong as can exist in morals and metaphysics, and which may therefore be called moral or metaphysical demonstration. Besides the certainty which these questions admit of, they have the advantage of not relating to subjects of immediate practical importance; and in them therefore we are free from the danger of being misled by the sophistry of passion or prejudice. The science may be divided into the two branches of theoretical and practical Political-Economy. The former is conversant about value, the latter about utility. The former ought to be first considered; it is more elementary, it admits of greater certainty, and is subservient to the latter, but not in any respect dependent upon it. Antithetical contrasts between value and utility are in general fallacious; and as we advance we shall see that perhaps for all practical purposes the best measure of utility is value, and that there is a sophism employed in the arguments used to prove that things of equal utility may have different values, and that things of equal value may have different degrees of utility. The proposition, to be considered of any importance, must be understood in a sense different from that in which it is proved. In fact the utility of any particular article to the possessors must vary ac-

according to their circumstances and situation, and exchanges serve the purpose of providing that the goods possessed by each individual shall in proportion to their value be of the greatest utility to him ; that is, that they shall contribute more to his happiness, and to the satisfaction of his wants and the gratification of his desires, than any other possessions of equal value. The same cause that prevents a person from giving any thing for that which has not some power of satisfying his wants or gratifying his wishes—that is, which has not *some* utility—will also prevent him from making any exchange, unless what he receives will conduce at least as much to his happiness as what he gives. When an exchange is made therefore it may be fairly presumed that each party to it has gained something, by receiving for the article he disposed of something which is, *relative to him*, of more utility, according to the extended signification which I have given to the word. How value shall be measured is a thing that at first does not appear very important. It is indeed said that labour is the real measure of the value of all commodities. But it is I think sufficiently plain that value can only be measured by value, that its quantity depends altogether upon proportion, and that one measure cannot be called a more real measure than another. If one article can be purchased with two yards of cloth, or two pounds of tea, or two day's labour, and

another with one yard of cloth, or one pound of tea, or one day's labour, the value of the former will be exactly twice the value of the latter; and the proportion of their values will remain the same, whatever commodities they are compared with.

The most unsatisfactory reasons have been given to shew not only that labour is (as it undoubtedly is) the best, but also that it is the only real measure of value, which undoubtedly it is not. Adam Smith says that the real price of every thing, what every thing really costs to the man who wants to acquire it, is the toil and trouble of acquiring it. Hence he infers that this toil or trouble is the best measure of its value. He attempts to prove the same thing, in a more formal manner, in the following passage, where he first introduces that doctrine: "Every man is rich or poor according to the degree in which he can afford to enjoy the necessities, conveniences, and amusements of human life. But after the division of labour has once thoroughly taken place, it is but a very small part of these with which a man's own labour can supply him; the far greater part of them he must derive from the labour of other people; and he must be rich or poor according to the quantity of that labour which he can command, or which he can afford to purchase. The value of any commodity therefore to the person who possesses it, and who means not to use it or to consume it himself, but to exchange it for other commodities, is

equal to the quantity of labour which it will enable him to purchase or command. Labour therefore is the real measure of the exchangeable value of all commodities."

Now in the passage just cited, although evidently intended to be a formal proof of the concluding passage, that "labour therefore is the real measure of the exchangeable value of all commodities," I am unable to discern wherein the validity of the argument consists; and if it were important, I might observe that those arguments, if valid, would establish, and in the quotations I have made are actually employed to establish, the right of two perfectly distinct things to be called each the only real measure of value, viz. the quantity of labour required to produce any article, and the quantity of labour which it can purchase or command. The value of any article to the person who possesses it, and means not to consume it himself, is equal to the quantity of any commodity which it will enable him to purchase; but such an assertion, though certainly true, does not prove one thing to be a more fit or real measure than another. The same sophism is to be found in all the arguments used to prove that labour is the real measure of value; namely, the implied supposition that because labour is a fit measure it is therefore the only real measure of value; and we shall afterwards find that the doctrine is frequently supported and defended against certain objections,

by arguments inconsistent with those by which in the first instance, it is supposed to be proved. Perhaps it may be thought a matter of small importance by what arguments a true proposition is maintained, provided it is in fact a true one; but this is not the case at least in the moral sciences; for here the sense in which a proposition is understood, and the manner in which it is applied, and the deductions that are drawn from it, will be found to depend mainly on the manner in which it has been proved. I do not know of any mental exercise more useful in such studies than the practice of recalling all the arguments by which, and the hypothesis on which, any proposition is proved, whenever any occasion comes of drawing any inference from it. It seems probable that the erroneous opinions held by Smith on the subject of rent and a few analogous subjects arose principally, if not entirely, from his misunderstanding the cause why labour is so peculiarly fitted to be a measure of value.

From what has been said it may sufficiently appear that any commodity will serve as a measure of value, provided its value admits of being compared directly with that of the article whose value is to be measured; and further investigation will show us that the peculiar fitness of labour for that purpose arises from this, that in many articles such as manufactures, the entire value above that of the raw materials of which it is composed is derived from and

can be measured by the labour employed about them, and even of the raw material there is always some portion which is of equal value with any other equal quantity of the same commodity whose value is either derived from or can be measured by the quantity of labour necessary to produce it. That portion which is produced entirely by labour can have its value measured by the quantity of labour which produced it, and will itself in return serve as a measure of the value of the remainder. If this be, as on further investigation we shall find it to be, the case, labour is the best measure of value, because it admits of being directly applied to or compared with every other important commodity whose value we desire to learn. And it may be asserted as a general truth, subject to few exceptions, that no permanent change can take place in the relative values of any two commodities without its being occasioned by some alterations in the quantity, or nature, or value, of the labour required to produce one or both of those commodities; and hence the utility of frequently referring to labour as a measure of value. It is often even more important to investigate the causes of the variations in price of an article than to ascertain the comparative values of two different commodities. It is from labour that almost every thing useful or agreeable to man derives its existence. Mr. Locke I believe first observed that it was labour that put the difference

of value on every thing, and he drew attention to the difference in the value of the produce of a well cultivated farm, and the produce of the same when allowed to run waste. All this value, he said, must be charged on the account of labour and received as its effect; nature and the earth having furnished only materials almost worthless in themselves. It may indeed be said that such a waste farm, although worthless in itself, and useless if left alone and not wrought upon, may yet be valuable, as furnishing a material upon which labour may be advantageously employed, just as a fleece of wool is valuable, although it might be very little use until further labour was exercised upon it. This is undoubtedly true, and may be thought a sufficient objection to Mr. Locke's system, that labour is the foundation of property, since all value is derived from it. His argument is replied to by shewing that a waste farm may possess a value even before any labour has been expended upon its cultivation. This value must become the property of individuals upon some claim or right, different from that of their having produced it by their own labour. The same objection might apparently be urged to the doctrine that labour may be used as a fit measure of value. It may be said that if a field possesses any value antecedent to its cultivation, the value of its produce ought to exceed that of the labour employed in raising it by at least the value or rent

of the field during the time. This is certainly true : but in order that labour should be a proper, that is, a useful measure of the value of any commodity, it is not necessary that the whole supply of that commodity should have its value entirely derived from the labour expended in its production. It is sufficient if some part, of equal value with the rest can thus be as it were resolved into the labour which created it. The value of that part will serve as a measure for the rest, and be measured itself by the value of the labour from which it derives its existence ; and even if there were some goods which could not be compared with labour, it would not prevent labour from being a fit measure of the value of those articles with which it can be directly compared. I shall not now occupy your time with the discussions necessary to prove that even of raw materials, the rude unmanufactured produce of the earth, there exists always some portion whose value admits of thus being directly compared with and measured by labour. It is enough to state the proposition now, and it is not necessary that it should be proved until we are about to enter upon the consequences that may be drawn from it. That portion of every commodity whose value admits of being thus measured is that part which is produced under what I shall call the most disadvantageous circumstances ; that is, under those circumstances which require the greatest ex-

penditure of labour in order to produce any certain quantity of the commodity. The production price or natural value of almost every commodity admits of being measured in this manner. The exceptions are very few indeed, and are of very little importance in the science of Political-Economy. These exceptions consist principally of such articles as derive their entire value from their scarcity, and not from the labour attending their production, or, more properly speaking, of those articles which are limited in supply, from some other cause than the necessity of expending a certain quantity of labour in producing them. In those cases the supply in general depends upon something beyond human power to controul, and will not be increased or diminished by any increase or diminution in the demand. Instances of such articles are antique gems or remains, irregular or very scarce productions of nature, &c. The value of these, according to their rarity and the competition among the purchasers, may rise or sink to any price, and Political-Economy does not much concern itself with them. We have not many data to ascertain the price that would be given, if any one should find or possess a horse with eight legs, a monkey with seven heads, or a Queen Anne's farthing, or any of those rarities which serve to amuse the antiquary or puzzle the philosopher. In what manner such things shall be distributed is

evidently a matter of trivial importance. Their price depends very much upon caprice and *ceteris paribus*, they will be dearest in those countries where the greatest inequality of wealth exists, or where the greatest amount of riches is in the hands of a few individuals. I shall henceforth in general therefore confine myself to those articles whose value admits of being measured by the quantity and kind of labour necessary to produce them, and it will be necessary to investigate more minutely the circumstances which regulate or affect their value. On this point a distinction is generally and properly made between what is called the natural value or the production price, and the exchangeable value or the market price of any commodity. To the latter the name of value more properly belongs, and the former is only entitled to the name on account of the influence which the cost of producing any article exercises upon its value in exchange. The natural value is measured by what is called the cost of production, or the quantity of labour necessary to produce any article for the market. It is called the natural value, because it is the price at which, with the usual profit of trade, the article could be permanently and constantly sold for. It is the price at which *nature* furnishes the article to mankind. It is the price which the manufacturer has in view when producing the commodity, and to it the exchangeable value or mar-

ket price has a constant tendency to conform. By the exchangeable value or market price of any thing is meant that sum which any person is willing to give or able to procure for it in exchange. This price is said to depend upon the proportion between the supply and demand. This proposition however without much explanation, would not enable any person to make a guess at what the price of an article is likely to be. The subject however is by no means a difficult one, and an analysis of the manner in which variations in the supply and demand affect the exchangeable value of commodities will lead us to the conclusion that the exchangeable value is that price which will produce an equality between the supply and the effective demand—meaning by effective demand the demand of those who are able and willing to give the price in question for the article. It is also true that the market price of any commodity depends upon its natural value, but is liable to temporary deviations from it in consequence of variations in the supply and demand. Occasional vicissitudes may for a time depress the market price below, or elevate it above the cost of production; but the former has always a strong tendency to conform to the latter, and in some articles can never very far recede from it.

Before I attempt to give a more complete proof and explanation of those propositions, it may not

be inconvenient to state something more precisely concerning value and its measures, and the manner in which the cost of production is measured by labour. Value is a word that always refers to an exchange either made or contemplated. The value of any commodity is its power of exchanging for other commodities, and is to be measured by the extent of that power, that is, by the amount of other commodities which can be procured in exchange for it ; and any thing for which it can be procured or given in exchange will serve as a measure of its value. But there is no such quality in an article as abstract value without reference to exchange. It is a relation, not a mode, to use the language with which I presume most of you are familiar, from your acquaintance with "Locke's Essay on the Understanding." The value of any commodity is to be measured by the quantity of other articles which can be procured in exchange for it, and all measures are therefore equally real. But one measure may be more useful or convenient than another, by serving more readily as a medium for comparing the values of any two commodities which are not usually given or procured for each other in exchange. Thus in common life, money, as it is the most usual medium of exchange, is also the most useful and convenient measure of value. And in the same manner, in many of the reasonings of Political Economy, labour, from its concern

in the cost of production, has an indirect influence over the exchangeable value that often makes it a convenient measure, especially as it is by reference to the labour employed in production that the source of any permanent variation in the relative exchangeable value of commodities can be found. The analysis by which the production cost of raw materials is separated from rent and reduced to labour is a little abstruse; and it would therefore be out of order to introduce it now at the entrance into the science. But it is almost evident that the only difference between the manufactured article and the raw material is caused by the labour which wrought the change; and the difference of value therefore will be equal to the pay of the labourers and the profits of those who employed and paid them in the first instance. Here, it may be said, is a new element—namely, profit introduced into the cost of production, which therefore may be said to consist of labour and profit. But hereafter, when we proceed to consider and compare the different kinds of labour and profit, we shall find that the two propositions, “that the cost of production consists of labour,” or that it consists of labour and profits, are equivalent, or must be understood in the same sense; and perhaps it is sometimes more convenient to consider it as reduced to labour alone, and to consider profit as an equivalent for the increased wages which the la-

bourer would require, were his payment deferred until the sale of the article he contributed to produce. It is evident that as labour is used not as a more real measure, but as a convenient one, that when in analysing the cost of production of any article, we come to expenses of known amount, we need not go farther, and reduce them to their value in labour; and also that the result may be expressed in any other measure as well as labour, in the same manner as although a perch or a yard may be used to measure a distance, the result may be given conveniently in miles or furlongs. Thus if five shillings worth of flax is turned into linen, at the expense of 10s., employed in paying for labour at the usual rate, we should speak of its cost of production as being 15s. I shall next proceed to shew how the cost of production, and the variations in the demand and supply, influence the price of commodities, or their value estimated in money; and then, for the purpose of more accurately measuring the cost of production, I shall point out the circumstances which in different employments produce different rates of wages and profits. These discussions, which will occupy me for two lectures more, will complete the subject of value. We shall then have come to the conclusion of the most dry and uninteresting parts of the science of Political-Economy; which however, on the other hand,

are more certain, and less liable than more agreeable topics to be made the subject of controversy. In the course of them, I hope to be able to show some useful deductions that may be drawn from those principles, and some of them will be found perfectly conformable to experience, and yet of such a nature that experience alone would never have been able to detect them.

LECTURE III.

GENTLEMEN,—Having attempted to explain what value is, and how it may be measured, I shall proceed to call your attention to the circumstances which gave rise to its existence, and by their variations influence and regulate its amount. I felt it necessary to occupy some of your time in endeavouring to prove that labour, although frequently a useful and convenient measure of value, is not on that account to be considered the only real one. It is a convenient measure because it admits of being directly compared with all important commodities, but the arguments employed to prove it the only real measure are I think entirely inconsistent with every notion that we are accustomed to entertain of the meaning of the term value. The common argument is thus briefly stated by Mr

M'Culloch, in his *Principles of Political-Economy*, page 297: "But however the same quantity of labour may be laid out, and whatever may be its produce, it unavoidably occasions the *same sacrifice* to those by whom it is performed; and hence it is plain that the products of equal quantities of labour or of toil and trouble must, how much soever they may differ in magnitude, always be of precisely the same real value." Now real value in this proposition can have no reference to its utility or exchangeable powers. The proposition, if true, is a trifling one, obtained by a mere comparison of the definition with the thing defined.

Labour is sometimes defended as the best measure of value, as being thought the most invariable one in different ages or countries; but even this is a proposition assumed upon very slender foundations. A man whose annual income 400 years ago amounted to a certain quantity of gold or silver bullion, would indeed possess a different share of the luxuries, conveniences, and necessities of life from that of the man who enjoyed the same income, measured in the same manner, in the present day. But equally different would be the shares possessed by two men, one of the present age and one who lived 400 years ago, if their incomes were equal, when measured by the quantities of labour they could command or purchase. The same quantity of labour will not, in different

ages or countries, produce or purchase the same amount of the luxuries, comforts, or necessities of life. Labour therefore is not a "real," in the sense of being an invariable, measure of value. Indeed it is utterly impossible that there can exist any invariable measure of value as long as the prices of different commodities vary in relation to each other.

To investigate with success the circumstances which regulate value, we must consider what it is that gives rise to exchanges. However useful, or even necessary to the subsistence of man, any commodity may be, there is a limit to the quantity of it which any individual can consume, and the love or necessity of variety will induce him to part with all that he possesses beyond a certain share, if by parting with it he can procure any thing which can contribute more to his enjoyments. And by a wise provision of nature, the more indispensable any commodity is to human subsistence or happiness, the more strict and absolute is the limit within which our consumption of it is confined. The most natural and most urgent of our appetites are those which can be the soonest and most certainly satisfied. Those which in their extent are the most insatiable, can be repressed or denied without any diminution to our happiness. By this provision the riches of the wealthy are prevented from interfering with the maintenance of the poor. The richest individual, whatever quan-

tity of corn or other food he may possess or be able to purchase, is not able to consume more than the poor man. His wealth may enable him to command the labour of the poor, but he cannot himself consume the provisions intended by Providence for their subsistence, since the energy with which nature rejects all beyond a certain quantity is always proportional to the importunity with which she demands that portion. And the nature and reason of man leading him to exchanges, he will dispose of that surplus which he cannot use himself to some one who in exchange for it can give him something that may contribute to his enjoyment. Its power of serving others will not induce him to keep it, although it may enable him to procure a higher price for it from some one who can use it.

Thus in an exchange there must be two persons and at least two things concerned; that portion of any commodity which any one possesses and does not intend to consume is called the supply; the disposition to give something in exchange for it may be called the demand. An exchange of equivalents is advantageous to both parties, since each procures by means of it something which he considers to be of more use to himself, under his circumstances, than the article which he parts with.

The rules which regulate the relative values of commodities are simple, and may be considered as the consequence of this general law,

which is not subject to many exceptions—namely, that every person is desirous to get as much as he can for the goods of which he disposes. This leads every man to buy as cheap, and to sell as dear as he can. The law of mutual competition does the rest.

In all civilized societies, goods are exchanged for money or sold, by those who dispose of the supply to the consumer, and are procured in exchange for money, by those who require them. It is with money that all commodities are compared by those who deal in them, as it is on their money prices that their profit or loss depends; if the seller demands more than a certain sum for his goods, others will undersell him, finding it more to their advantage to dispose of their goods, though at a lower price, than to retain them in their possession unsold; and in this manner, mutual competition will compel the former to sell his goods at a more reasonable price. But this reduction evidently has its limits; if the cheapness is such as to increase the number of buyers to an amount more than sufficient to take off the whole supply, the mutual competition of buyers, each anxious to procure an article, of which, on the supposition there is not enough for all, will increase the price to the highest sum that is consistent with the entire supply being disposed of. Thus there is a certain sum to which the market price of any article has a constant tendency to conform itself; namely,

that price which will exactly adjust the supply to the effective demand. The entire supply could not be disposed of at a higher price, some share should remain unsold, to the injury of the person in whose hands it is left. Every seller is anxious that this loss should not fall upon himself, and thus mutual competition will lower the price of the commodity. In the same manner, the competition among the buyers will prevent the price from sinking too low; and the seller will have no inducement to reduce the price of his goods below the highest price which is consistent with his disposing of his entire stock.

Besides this adjustment between the supply and the demand, the cost of production or natural value of any commodity always exercises a very considerable influence upon its price. The cost of production regulates the supply, and keeps it pretty nearly in that proportion to the demand which may produce a conformity between the exchangeable and the natural value. In some articles this tendency of the market price to conform to the cost of production is so strong, that a difference between them can only be produced by a very considerable and accidental disproportion between the demand and the supply. If the cost of production or natural value of an article is ten shillings, that may be considered the price at which the article is offered by the manufacturer to the public; but if more

persons are willing to purchase the article at that price than the quantity on sale can supply, some of them, rather than want the article, will offer a little more, and the competition among the buyers will raise the article to such a price that the supply will become equal to the effective demand—that is, to the demand of those who are willing to give for it the increased price to which it is raised. This equality between the effective demand and the supply is in such case produced, not by an increase of the supply, but by a diminution of the effective demand consequent upon an increase of price, which will prevent some from consuming such quantities of it as they would otherwise have been able to procure. This increase of price will be in proportion to the deficiency of the supply as compared with the demand, and to the inconvenience or difficulty of remaining without the article for any period, or of procuring a substitute for it, and to the length of time required to produce an additional supply. The producer gains an advantage by this increase of price, and the public sustains an inconvenience, some by being compelled to dispense with the use of an article of comfort or convenience, and others by being obliged to pay a higher price for it. But this advantage gained by the producer will never lead him to keep the market inadequately supplied. For when such a deficiency occurs, the profit derived from it by each individual

producer is in proportion to the quantity he has to dispose of. In other words, the profit which he derives from this public inconvenience is exactly proportional to the exertions he has made to prevent it from taking place. On the other hand, if the quantity of the article to be sold is more than sufficient to supply all those who are willing to pay the natural price for it, the competition among the sellers, each being unwilling that the portion belonging to himself should remain unsold, will sink the price until the supply becomes equal to the effective demand, that is, to the demand of those who are willing to pay the reduced price for it. In this case the equality between the demand and the supply is produced not by diminishing the supply, but by the increased demand consequent upon a diminution of price. This diminution of price will be in proportion to the excess of supply as compared with the demand, to the strictness of the limits within which man's consumption of the article is confined, to the necessity under which the producers are of disposing of it within a limited period, to the expense or difficulty of keeping and storing it without injury, and to the length of time required to produce the next supply. In this manner, by a rise or fall in price the supply is always kept in a due proportion to the demand.

In manufactured goods the tendency of the exchangeable value or price to conform to the natural

value is very strong, and a considerable disproportion between the demand and supply will frequently exercise little if any influence over the price. If the supply is for a short time in excess, the retailers may abate a little of their usual profits, but they will not readily sell their goods at an absolute loss. If the article is one the demand for which arises rather from necessity than from fluctuating fashion, they will find it more to their advantage to retain a part of their stock unsold, than to sell it at a lower price than that which they will have to pay to the manufacturer for the succeeding stock. In the same manner the manufacturer, when he finds a difficulty in disposing of his goods, will keep some of them rather than sell them at a lower price than it will cost him to replace them by manufacturing. In this manner a temporary derangement of the usual proportion between the demand and the supply is prevented from exercising any considerable influence over the price of manufactured articles, and any such derangement can be only temporary, as manufacturers will not continue to produce goods which they are unable to dispose of, or can only dispose of at a loss. This prevents any considerable fall of price ; and a great increase of price cannot take place, since the consumer can in general wait until a new supply comes in. Thus in manufactures the cost of production exercises a double influence over

the market price, both by producing an equality between the *average* supply and demand, and by preventing any temporary derangement of this equality from producing any considerable increase or diminution of price. It is in raw materials, and especially in food, that the greatest variations of price are found to occur. Here, in particular, all those circumstances concur which will cause a deficiency in the supply to produce the greatest effect upon the price. The use of the article cannot be dispensed with, and any considerable reduction in the consumption of it cannot take place without much inconvenience and distress; and from the nature of the seasons a new supply cannot be raised within the country until the expiration of nearly a year; and all are willing to undergo some privations in order to obtain as nearly as possible their usual supply of food. The farmers, by selling the usual proportion of their total produce, are unable to keep the markets fully supplied. The competition among the buyers has its usual effects in raising prices, the existence of the scarcity becomes generally known, and as the farmers and dealers are aware that a new supply will not be obtained until the succeeding harvest, even the high prices do not tempt them to dispose of all their stock immediately. Many of them keep it back, waiting for still higher prices. These high prices have the effect of preventing waste or improvident con-

sumption, and compelling many persons who cannot afford to pay them, to diminish something from their ordinary consumption of food, at the expense of some inconvenience and distress. Much suffering is endured through the country, and appeals are naturally made to the charity of the benevolent, and in some instances the interposition of the legislature is demanded in aid of the suffering poor. I shall here call your attention to some obvious and certain principles, that may be of no slight practical importance in directing either public or private charity upon such occasions. I hope, however, that the necessity for their exercise may be very far distant from the present time ; and the present price of corn does not seem to indicate a scarcity. When an increase of price is produced by a scarcity of provisions, the markets are not upon that account altogether empty, nor does any very considerable deficiency appear in their daily supply. An ordinary observer would not remark a deficiency amounting to as much even as one fifth of the ordinary quantity in the market, although such a deficiency would occasion a very considerable increase of price. Every person sees that there is enough there for himself, though he does not reflect that there may not be enough for the wants of all. But as he sees more than he wants himself, and is prevented from obtaining it only by the high prices, he is not unnaturally led

to complain more of the price than of the scarcity. In reality, however, high prices in such cases have the most beneficial effect in mitigating the evil consequences of a scarcity, and preventing an absolute famine from resulting towards the end of the season. They provide effectually that the reduction in the usual consumption shall be spread equally over the entire year. They do not much diminish the entire portion to be consumed by any one person or family, they only cause that portion to be given in the manner and at the times most beneficial to the consumer. To take an instance, suppose the crop of the ordinary food used in any country, as potatoes in Ireland, was to fall short in some year one-sixth of the usual consumption. If this scarcity did not indicate and in some measure correct itself by an increase of price, the whole stock of provisions destined for the supply of the year would be exhausted in ten months, and for the remaining two months a scene of misery and famine beyond description would ensue. But this in fact does not take place, for prices do rise and cause an immediate diminution in the ordinary daily consumption, so that the existing stores hold out until the season for an arrival of a new supply. Undoubtedly some distress is endured during this interval, from the want felt by many of the poor of a proper quantity of food; but this distress is necessarily incident to a diminished supply, and would be incalculably

increased instead of being diminished, if human legislation should attempt to regulate the prices. High prices effect the two great objects to be desired in such a case. First, they secure a provident and equable consumption of provisions during the year, instead of allowing the whole to be wasted or consumed before the year is over ; and next they secure that the entire store shall be brought to market, and thus distributed for consumption within the year, and that no part of the stores in existence shall be held over from the present year when they are wanted, to the next year, when plenty may make them comparatively useless ; since no one will keep his goods from the market when prices are high, to preserve them for a period of comparative plenty and cheapness. In such a year poverty is not the cause of famine or scarcity, which is in no respect to be attributed to the inequality of possessions. If all the provisions in the country were placed in a common stock, and every man allowed to take thereof freely as much as he desired to consume, they would shortly be exhausted. The same effect would take place, although not quite so speedily, if every person had money to purchase as much as he wanted ; and if all the farmers and possessors of food were through benevolence to sell provisions at the accustomed prices, the poor would not be thereby relieved. The root of the distress would be left untouched.

At such moderate prices the stock in the country would be insufficient to meet the demand of all who were willing to pay for it ; and one of two things should happen, either that the supply of the day would be exhausted before some were able to procure any food ; or if the daily supply was kept up to its usual fulness, the supply of the year would be exhausted before the next harvest came in. Dearthness is therefore a salutary effect of scarcity. It mitigates the calamity by making it be felt early as an inconvenience, instead of allowing the scarcity to be concealed until a total irremediable famine should ensue. But when prices reach a certain height, an opinion frequently arises among the sufferers that it is not caused by a scarcity, and they forget that this increase of price was early apprehended and predicted. They suppose that there are provisions enough, but that the distress is caused by the insatiable rapacity of the possessors. Unwilling to admit the existence of any distress for which they cannot find somebody to blame, they flatter themselves with hopes that an appeal to the wisdom or humanity of those who govern them may be successful in rescuing them from the horror of famine. As it is difficult to argue with a starving population, they have generally succeeded in obtaining laws against engrossing, amassing, or forestalling provisions, and thus they remove the imaginary, and aggravate the real cause of their

distress. This leads me to mention a very injudicious and injurious species of charity which is frequently practised upon such occasions. Persons of more benevolence than judgment purchase quantities of the ordinary food of the country, and sell them again to the poor at half price. The few observations I have made will shew that of all kinds of engrossing, this is the most mischievous, and that no regrating or forestalling is so injurious as this species, invented by mistaken benevolence, of buying dear and selling cheap in times of scarcity. It induces the farmers and dealers to send their stock more speedily to market, and it enables the poorer people to dispense with that harsh but necessary abstinence which alone can prevent the provisions from being entirely consumed long before a new supply can be obtained. Whenever this mode of charity is adopted, prices will necessarily rise on account of the increasing scarcity caused by such a premature and improvident consumption, and will generally arrive to such a height that even the reduced rates at which provisions are distributed by the charitable will be equal to the prices at which they would have been sold if charity had not led to any interference. This evil, caused by injudicious benevolence, could never be detected by experience. The increased prices would naturally be attributed to the scarcity which confessedly prevailed at the beginning of the

season, and originally led to this interference. And the authors of this charitable scheme would even applaud its success, since on each particular day they would see the poor getting provisions at half the market price of that day, and would not consider that those very high market prices were principally caused by that charity which diminished the supply by causing an early consumption of it. This then is one of those numerous cases where what is called experience is in fact rash although disguised hypothesis, and where "theory" is extensive experience, enlightened and directed by common sense and reasoning.

Ought nothing then be done in times of scarcity to relieve the poor and mitigate their sufferings. Undoubtedly much may be done if it is judiciously attempted, if we direct our efforts to increasing the supply instead of accelerating the consumption of provisions. In this country especially, such assistance can be most easily afforded without importation. Potatoes, it is well known, form the ordinary food of the labouring population. If there is a deficient supply of these, some distress and inconvenience must be felt. This evil will fall lightest if the supply is entirely consumed within the year, instead of part being held over until the next year, when it may not be so much wanted; and if the supply is equally distributed during that period, instead of too great a portion being consumed at the commencement of

the season. Both these advantages we have seen are secured by the natural rise of prices, and nothing can be done by private charity or public legislation towards securing a better distribution of the existing supply. But much may be effected in the way of increasing the supply, or at least of diminishing the competition for it. Let those who can afford it abstain in such times from the use of potatoes, or of animals fed on such food, and let them, if practicable, give a supply of bread at cheap prices to the poor. If this is done, the price of the staple food of the country will diminish instead of increasing as the season advances, and the scarcity will gradually diminish.

I fear I may be considered as having dwelt too long upon this subject, and I shall therefore leave it for the present, and conclude with some remarks upon the effects which regrating, forestalling, and other forms of speculation have upon price. Among the triumphs of Political-Economy, the victory it has obtained over the prejudices which so long existed against regrating and forestalling ought to be enumerated. Indeed so complete has been the victory that many of my auditors may perhaps not understand the meaning of those words, expressive of practices of which our ancestors entertained so great a terror. They signified by those words the buying up of goods to sell again in the same market. E. Spenser thus speaks in a passage you may see cited in Johnson's

of that being necessary to his profit, but he buys when he foresees that the market is likely to rise, and he gains a profit according to the prudence and correctness of his speculation. If he sells at a profit, that very circumstance shews that the markets were better supplied at the time he bought than at the time he sold ; and as he is not exempted from the general rule of being obliged to buy and sell at the current price, his dealings do not add any thing to the price of the commodity. They merely alter the time in which it is offered to the consumer, and transfer it from a period at which the comparatively low prices shew that provisions are comparatively plentiful, to a period when the comparatively high prices indicate a comparative scarcity. Neither can their proceedings occasion a dearth, since they do not diminish the entire stock of provisions within the kingdom, and are so far from causing waste that they prevent waste and premature consumption of the food. The more judicious are their speculations, the more benefit the public derives from them. And there is very little danger that any excess in speculation, such as their keeping their goods too long on hands, can be of any serious injury to the country. The care which the dealers will take of their own interests will be a sufficient protection to the public. Their information on the subject is generally pretty correct, as their success depends upon it, and their

interests are identical with that of the community. The common interest of both is that the store of provisions within the country should be uniformly or equably consumed during the period which it is destined to supply. That this is the interest of the public is sufficiently evident. And it can be easily proved that the dealer best effects his object by acting as if he had this result in view. If more is brought to market during any time than the proportion due to that period, it follows evidently that less must be brought at some other time. Prices must therefore be higher in the latter than the former period, and therefore the speculator, by purchasing at the former and selling at the latter period, will consult his own interest in buying cheap and selling dear, and that of the public by withdrawing provisions from the market when they are comparatively plentiful, and offering them again to the public when times of greater scarcity come on; and if by excess in speculation he kept the markets for a short time inadequately supplied, that is, with less than that period's fair proportion of the provisions destined to supply the year, the remainder of the year would on that account be better supplied, and the dealer would suffer by not having sold his goods when he could have obtained for them a higher price than will be given for the rest of the year. Such excess of speculation cannot continue so long as to do any serious injury to the

Dictionary, under the title 'REGRATING.' "Neither should they buy corn unless it were to make malt thereof. For by such engrossing and regrating, the dearth that commonly reigneth in England hath been caused." Our common law punished this offence of regrating or forestalling with the heaviest penalties, in the form of fines, imprisonment, and forfeiture. And our law books thus speak of it as "a kind of huckstry by which victuals are made dearer, for every seller will gain something, which must of necessity enhance the price." These prejudices against regrating, though supported by such a plausible argument, have disappeared before the voice of sense and reason. Part of the fallacy of this reasoning of our common law arises from a misapprehension of the source of the profits of retailers, which have often been supposed to be an injury to the consumer, whereas it is the price which he voluntarily pays for the advantage, which but for the existence of such a class he should give up, viz. the power of buying commodities, when, and in such quantities as he wants them. Indeed the few remarks which I have made on the manner in which the cost of production influences the market price of articles, may shew that the price never can be increased in order to pay wages or profits to men who unnecessarily and uselessly concern themselves in the sale or production of the article. The dealer does not sell higher than he buys, on account

public, since the dealer would soon be warned of his miscalculation by the gradually decreasing prices. A dealer soon learns to know what effects his speculations and purchases have upon the market price, and if the dearness is in part caused by his purchases, he knows that it will not continue, and he will cease to buy or to hoard what he foresees he must at a future period sell at a loss. Even a trifling rise of price would not be sufficient to secure him a fair profit on his capital, and an indemnity against the casualties of trade. The risk to the public is rather that he will not speculate enough. Even if he is guilty of an excess of speculation by keeping his provisions a little too long from the market, the injury thence resulting would not be so great as it would certainly be deemed in such a case. As long as those stores remained undisposed of in his possession, the public would think that the prices on each day were enhanced by his misconduct, by the excess of the market price above the price which provisions would sell at if all his stores, or at least a proper proportion of them, were on that day sent to market. But this is not the case. If his stores were sent to market they would cause a reduction of prices until they were disposed of, but after that period, whether they were sold and consumed or hoarded for future sale, can have no effect upon the market prices, unless so far as the knowledge that they are hoarded may have an effect in reducing

the market price by dispelling the fears of famine.

This is not the only instance nor the only trade in which we shall find this close connexion between the interest of the individual and that of the community ; and in general it may be remarked that the interest of the individual will lead him to adopt a course of conduct more consonant to the public good than even to that of the particular class or order to which he belongs. Having premised these few observations on the circumstances by which price is regulated, I shall call your attention to the circumstances which occasion some classes of labourers to obtain a higher rate of wages than other classes ; but as the subject is of some importance, I must defer it until the next time I have the honor of addressing you here.

LECTURE IV.

GENTLEMEN,—In comparing the costs of production of different commodities by reference to the labour employed in producing them, it is necessary to attend to the kind as well as the quantity of that labour. Different kinds of labour are of different values. Some kinds occasion a much greater sacrifice of ease than others do from the labourer. But besides this, which according to the common theory of labour being the only real measure of value, would be the only manner of accounting for the fact that one kind of labour constantly receives a higher remuneration than another kind, there are several other reasons why one sort of labour is naturally more valuable than other sorts, and therefore naturally requires and obtains better wages. And other things being equal, the natural prices of those commodities on which the more valuable species of labour has been expended will

be higher than that of the commodity which is produced by an equal quantity of the cheaper and less valuable labour. This subject has been so well and perspicuously explained and illustrated by Adam Smith, that subsequent writers are in general content to copy from him. But although he has completely succeeded in all that he attempted, which was to lay down and illustrate the principles which cause an apparent inequality in the wages and advantages of labourers in different employments, yet he has been guilty of a few inadvertencies, which succeeding writers have remarked in his explications of the mode and reason of the operation of those principles ; and he has altogether omitted to point out the circumstances which modify those principles, and which according to the condition of the country, will render some of them more or less effectual in producing a difference in the rate of wages in different employments. This latter investigation is the more important as it relates to circumstances which exercise an influence upon trade and commerce almost equal to the effects produced by the difference of soil and climate existing in the different regions of the globe.

It is abundantly evident that there are some causes in consequence of which a labourer of one description obtains a higher rate of wages than one who is engaged in a different employment, and it is a subject of some interest to investigate what those causes are,

and in what manner they operate. But a mistake or an omission in the enumeration of them will not be attended with any serious consequences. No important propositions in this science are founded upon any particular explanation of the causes of this phenomenon. It will be enough to bear steadily in mind that there are such causes, and that some kinds of labour are in fact paid more highly than other kinds, notwithstanding that the laws permit every man to choose his own employment, and that in consequence some articles are naturally dearer than others, in the fabrication of which an equal quantity of labour may have been expended.

The first principle laid down by Smith is that “the whole of the advantages or disadvantages of the different employments of labour and stock must in the same neighbourhood be either perfectly equal or continually tending to equality. For if in the same neighbourhood there was any employment evidently either more or less advantageous than the rest, so many would crowd into it in the one case, and so many would desert it in the other, that its advantages would soon return to the level of other employments. This at least would be the case in a society where things were left to follow their natural course, where there was perfect liberty, and where every man was perfectly free both to choose what occupation he thought proper, and to change it as often as he thought proper. Every

man's interest would prompt him to seek the advantageous and shun the disadvantageous employment." As this state of freedom nearly exists in all civilized countries, the principle just mentioned is not to be considered as a hypothetical axiom, but both it and the consequences drawn from it are truths of considerable practical importance ; and the effect of the circumstances which in some cases partially modify its truth can be fully appreciated.

Smith classes under five heads the circumstances which create the difference that exist in the relative wages of different employments ; and his classification is a convenient one, although minute criticism might discover imperfections in it. Those five circumstances are—1st. The agreeableness or disagreeableness of the employments themselves. 2ndly. The easiness and cheapness, or the difficulty and expense of learning them. 3dly. The constancy or inconstancy of employment in them. 4thly. The small or great trust which must be reposed in those who exercise them. 5thly. The probability or improbability of success in them. As to the first cause, viz.: The agreeableness of the employment or the contrary—this produces a difference in wages on the common principles of demand and supply which regulate the prices of all things. It is not to be supposed that any man will engage in an unhealthy, disagreeable, or dishonorable employment, if he can obtain the same wages in some occupation

more favorable to his health, his comforts, and his respectability. All men will desert the former and crowd into the latter employment, until a difference of wages is produced sufficient to induce some to put up with the inconveniences of the disagreeable employment, and thus to produce an equality between the demand and the supply of labourers of each kind. The effect of this cause upon the relative wages of labourers will be less, in proportion to the poverty of the country and the general depression of the labour. The man who wishes to choose or change his occupation must in general have the means of subsisting for a short time without employment, and this power is less likely to be possessed where the situation of the labourer is one of poverty and depression. Besides, when the wages of the labourer are barely sufficient to supply himself and his family with the necessaries of life, a slight addition will have a greater effect in persuading him to submit to an employment attended with hardships and inconveniences, than a corresponding addition to his salary will have on a man already supplied with a due share of necessaries and comforts. In each case, the hardship of doing without the articles purchased with the additional wages must be equal to the additional hardship imposed by the higher paid employment. The difference created by this cause will therefore increase with the advance of

the country in civilization and prosperity, and in consequence there will at the same time be an increase in the relative prices of the articles produced by the less agreeable, healthy, and creditable kinds of labour. Smith instances actors as a class of labourers deriving high rewards from the discredit attached to the profession. He supposes that a talent for acting is not so rare as is commonly imagined, but that many are capable of acquiring it, and would exhibit it if any thing could be honorably made by it. If his statement of facts on this point be correct, his reasoning is quite conclusive, and the instance is as good an example as can be produced of the manner in which discredit, by preventing people from entering a profession, increases the recompence that may be obtained in it. The army is an instance of the converse case. It is a profession into which members of the higher class enter, although the pay is scarcely an equivalent for the expense of obtaining a commission, even counting nothing for the loss of time and trouble. I imagine that the credit and respectability supposed to belong to this profession have a greater effect in inducing people to engage in it than the few splendid prizes to which success in it may lead.

The second cause of variation in the relative wages of labour is the easiness and cheapness, or the difficulty or expense of learning the business. The principle that operates here on the wages of labour

is analogous to the effect which the cost of production has upon the price of commodities. It limits the supply to such a number as can obtain employment at a rate of wages sufficiently high not only to pay them for their toil in working like other labourers, but also, within the ordinary duration of human life, to repay to them the whole expense of their education, together with the ordinary profits on the capital originally expended in that education. "The difference between the wages of skilled labour and those of common labour is founded upon this principle." Wages, as far as they are affected by this principle, will be lowest in those trades in which, as in agriculture, the labour of the person learning his business can be turned to some advantage by his employer. This principle will become less effective as the society advances in civilization and prosperity. The difference thus caused is in fact very analogous to profits, and will diminish with every diminution which, in the progress of society, takes place in the rate of profits; and at a future period we shall see that as society advances, the rate of profits has a tendency to diminish.

As an illustration of the effect which the two principles I have just mentioned may have upon the state of commerce, suppose two countries between which existed a perfect freedom of intercourse, let them be similarly circumstanced as to soil and

climate, but in one the inhabitants are all free, while in the other the labouring part of the population is in a state of slavery. The commerce between those countries will necessarily consist of exchange of the products of harsh disagreeable labour from the country of slaves, for the results of skilled and educated labour from the land of freemen. The master will not employ his slave in a more agreeable kind of labour, when he can gain a little more by a different sort, whatever be the hardship and disagreeableness. But the freeman will not sell so cheap this additional sacrifice of ease and comfort; but as his own interests, not those of a master, are concerned, he will learn every kind of skilled labour with greater facility and less expense than the slave. I am not about to pronounce an opinion now on the advantages or disadvantages, the justice or injustice, of an immediate emancipation of the West India slaves. The question is too complicated with a variety of facts and circumstances, and is too angrily agitated, to be a fit subject for a Professor's chair. I shall confine myself to general principles, and call your attention to a remark which appears to me of some importance. When it is said that free labour is cheaper than that of slaves, or the contrary, the proposition must be considered false if taken universally, since it will depend on the kind of labour whether such a position is true or false. If the slaves in half our West India islands were emancipated,

that half might or might not grow in prosperity and exceed in wealth and comfort the remaining islands. But it is highly probable that their exports would no longer consist principally of sugar, and any falling off in their exports of such a commodity could not reasonably be adduced as a proof of their declining state.

3rdly. The wages of labour in different occupations vary with the constancy or inconstancy of employment. The labourer must depend for subsistence for himself and his family upon the wages he receives during the time he is employed. While he is out of work he is also out of pay, and although he then has his time to himself, yet it is occupied by anxious and uneasy reflections, arising from the loss of his employment, and the uncertainty of its return.

Hence no man would engage in a business which only furnished occasional employment, if he could procure equal wages in one wherein the demand was constant. Higher wages must therefore be given in the former business, not only to maintain him while he is idle, but to make some compensation for the greater uncertainty of his situation. He must be repaid for the vicissitudes to which he is subject, that out of his higher wages he may save a sum sufficient in general to support him during the seasons when he is unable to earn any thing. This increase of wages may on an average form an amply sufficient fund, but from the

very nature of an average, this fund may sometimes be more than required, and sometimes, on the other hand, may be insufficient for his support, and for this uncertainty he will require some compensation. Owing to this cause partly it is that where the division of labour is carried to a great extent, the wages of the labourer must be higher, as he is more likely to be thrown out of employment by the vicissitudes of trade. This must be more especially the case when the occupation is of such a nature that the labourer, when deprived of it, cannot readily turn to any other employment. On the other hand, when there are several branches of business of such a nature that the labourer can readily turn from one to another, his wages, as far as they are regulated by this principle, will depend upon the certainty of his being able to procure employment in one or other of them. The effect of this principle will be most apparent where the condition of the labourer is least depressed, and where therefore in making the contract for his wages, he can provide for something beyond his present maintenance.

4thly. The wages of labour vary according to the small or great trusts that must be reposed in the workman. "Great confidence it is supposed cannot be safely reposed in persons of very mean or low condition. Their reward therefore must be such as to give them that rank in society which an

important trust requires." It might be thought that the high wages received by those in whom a great degree of confidence is necessarily placed cannot be so readily accounted for on the general principle of demand and supply, for that the confidence to be reposed will not prevent any person from coming forward to accept the employment, and that then competition will reduce their wages to the level of other employments, and that the employer will not often, for the mere purpose of increasing the respectability of his agent or servant, allow him greater wages than the least he would be willing to accept. Something of this kind however does happen, and persons are willing often to give somewhat higher wages than would be demanded by persons in whom a great trust is to be reposed, in order that they may be relieved from the temptation of want to violate their trust, and that the possible loss of their situation may be more than an equivalent to any advantage they could derive from misconduct. But this operation of the principle is less effective than its influence in limiting the supply, by making the employer unwilling to engage with any who do not already possess such advantages as respectability of rank and character, good recommendations, or the power of giving adequate security against the consequences of a breach of trust. Thus this principle, by diminishing the source from which the supply must be derived,

increases the emoluments of those who discharge offices of trust and confidence. And perhaps Adam Smith would have been more accurate, if instead of saying that their reward must be such as to give them that rank in society which an important trust requires, he had said their reward must be such as to procure persons of that rank in society which an important trust demands, to accept the office. This difference varies in different stages of society, and will evidently be the least where religion, morality, and education most prevail.

The 5th principle stated by Smith is that the wages of labour in different employments vary according to the probability or improbability of success in them. In occupations where there is a chance of failure, the rewards of success must be sufficient to cover the loss by failures in the estimation of such as engage in them. "Like a lottery, in a profession where twenty fail for one that succeeds, that one ought to gain all that should have been gained by the unsuccessful twenty." The advantages of any employment of money or time in this respect may be said to vary according to the rewards of success and the chances of succeeding. If the chance diminishes, the reward ought to increase, or the diminished advantages of the profession would prevent many from engaging in it, and thus by diminishing the competition, increase either the chance or the reward of success, and bring up the

profession to a level with other employments. The contrary effect would be produced if the reward of success was more than sufficient to compensate for the chances of failure. It is to this that the high rewards received by the most successful members of the liberal professions are to be attributed. In the profession of law, for instance, how many fail in procuring any reasonable compensation for their laborious and expensive preparation. It is evident that all things considered, the average profits of the members of any profession cannot be too great. Any man, for example, who thinks that labour in the profession of law is over paid, may embrace it himself or send all his family into it. If asked why he did not do so, notwithstanding the prospects of such extravagant rewards, he would probably reply by adverting to the toil and expense of education, the long delay that must intervene before success can be obtained, and the danger of a total failure; in short to all those circumstances which naturally do, and ever must, increase the fair rewards of successful industry. There are two circumstances remarked by Smith, which render it probable that industry in this profession receives upon the whole a less pecuniary reward than an accurate calculation would prove it entitled to, as an equivalent for the expensive education and chance of failure. These are—1st. The credit and rank which may be acquired by success, which increase naturally the

numbers of those who enter the profession ; and 2ndly. The natural disposition which every man has, particularly in his youth, the time for choosing a profession, to form too high an estimate of his abilities, and even to over estimate his chance of success as far as it depends on fortune or something equally beyond his own control. In some cases the rarity of that species of talents which is required for eminence or success has an effect in increasing the value of labour, although other circumstances may diminish much the chances of failure. In such cases the scarcity of the necessary talents has the effect of increasing the price, by diminishing the supply of works produced by such artists. This increase of price in his works naturally increases the reward of the artist gifted with these rare talents. His high wages are however not necessary to induce him to exercise his employment. It is the scarcity of persons thus qualified, and the competition among employers, that raises his wages to a sum beyond what he would have otherwise considered a fair remuneration for his labour. There is this difference between such arts as painting and music, and such as those of law or medicine. In the latter professions it is not easy to discover, previous to trial made, to what extent any person is likely to succeed or fail, and also in general, talents that render it likely that a person will succeed in one profession

will give him an equal chance of success in any other pursuit. In the former arts, on the contrary, a prospect of success is generally held out very early in life, by the display of suitable natural talents and taste. These both promise success and indicate to the young artist the pursuit which he ought to adopt. Hence the artist, to induce him to chuse his profession, need not obtain for his success such wages as would be an equivalent for the number of those who fail, since he was never exposed to any risk of failure, and besides, a natural ability for such an art as music or painting does not give a man the power of selecting one out of several pursuits. This may account for the fact that such talents are not so highly rewarded as in other professions, notwithstanding their rarity and the want of that rank and honor which in other liberal professions attend success and diminish its pecuniary reward.

When investigating the relative values of different kinds of labour, as forming the component parts of the cost of production of any commodity, it is necessary to take into consideration the length of time which must generally elapse before the pay of the labourer can be obtained by the sale of that commodity. It is true that in most cases, I may almost say in every case, the labourer does not and cannot wait for his wages until the sale of the commodity which he has assisted to produce. The person who employs him and directs his labour, in

general pays him in the first instance, and repays himself by the sale of the articles thus produced. But he does so for his own benefit and not for the purpose of serving the labourer or the consumer, although he is in reality at the same time serving both. But he would have no motive to advance his capital if the additional value of the article were to be only equal to the sums advanced by him to the labourer. He will not give his money to the labourer in the expectation of getting back precisely the same sum at a future period ; he expects to sell it at a greater price, and that difference constitutes his profits. These profits may be said to form part of the price of the article, but their existence does not injure the consumer, for the profit required by the employer is always much less than the increase of wages which the labourer would demand if he were to wait for them until the sale of the commodity, subject also to the inconvenience of a distribution, not easy to be made, among all the labourers who have directly or indirectly contributed to its production. The manufacturer can remain without his money with less inconvenience than the labourer can ; he can therefore afford to accept less as a compensation for what he advances, and the effects of competition will be that he will accept as little for profits as any one can afford, having reference to the usual rate of interest and profits. If he will not be

contented with the same profits as others, he must either charge more for his goods or pay lower wages to his labourers, or by superior skill furnish articles with a less expenditure of labour. In the first case, if he demands a higher price for his goods, the consumers will desert him and go to those who will supply them with cheaper goods. In the second case, if he pays lower wages to his labourers, his labourers will desert him and resort to those employers who pay higher wages. And in the last case, if he obtains higher profits in consequence of his own superior skill, his high profits are no injury to any person, since the consumer gets as cheap goods and the labourer as high wages as any one else can give. But such high profits are generally only temporary, for as soon as his secret is known, or his skill becomes more general, the effect of competition will either reduce his profits or drive him from the trade. The amount of profits will of course increase with the length of time that must elapse before a return can be expected for the advances that are necessary to be made. Of two articles, therefore, produced by equal quantities of labour, one will be more valuable than the other, if in its fabrication the labour must have been employed at a greater interval from the time at which it can be readily sold.

From what I have said it may appear not only

that one sort of labour may be more valuable than another, but that the labour of one person may be worth more than the labour of another person engaged in the same employment, and in like manner that the average value of labour in one country or one age may be greater than its average value in a different age or country, and therefore that labour is not peculiarly well fitted as a measure to compare the values of commodities in different ages or countries. To hold that things are necessarily of equal value, in all times and places, which are produced by means of equal sacrifices of toil and trouble, is to attach to the word value a signification so abstract as to divest it of every circumstance that can render the consideration and investigation of values useful or interesting. It may even happen that the relative values of two articles may vary without any change taking place in the quantity or nature of the labour required to produce them. This may happen by the progress or regress of the country in wealth and happiness, making an alteration in the relative values of different kinds of labour. This variation in the relative values of different kinds of labour, and of the rates of profits, combined with the difference of soil and climate in different countries, gives occasion to commerce, and determines naturally in what channels it shall flow ; and of those causes the one relating to the state of labour is frequently the

most effective. Some of those causes which affect the relative wages of labour, exert a similar influence upon the rate of profits, as for instance, other circumstances being the same, the rate of profits will be higher in a disagreeable, unwholesome, or disreputable trade, than in one which is pleasant, wholesome, and respectable. In the same manner, profits must be higher in a trade where there is a greater risk of failure, or where a tedious and expensive preparation is necessary to learn it, than where success is comparatively certain, and where the necessary previous preparation is comparatively cheap and expeditious.

Henceforward, in order to avoid unnecessary circumlocution, I shall speak of wages and profits as being the same in all employments; meaning thereby that in any state of society there is a constant proportion between them, and that all employments of labour and capital are equally advantageous to the labourer and capitalist, as they must be, since no man will employ his labour or capital in one employment, if by turning to another he can obtain what, taking every thing into consideration, would be a better remuneration. If it is said that a working mason must get the same wages as a working carpenter, it is meant that no difference can exist in their wages, except what may be caused by the preceding circumstances; and the conclusion equally follows, that a permanent

rise in the wages of one class cannot take place while the wages of the other classes remain constant. This rise of wages peculiar to one class would be said to disturb the equality, while in reality it would alter the proportion that must exist between wages in different employments. People will crowd into the one which is thus made more advantageous than the rest, and the effects of competition will quickly reduce wages there to their proper proportion, generally called their equality with the wages of other employments.

An objection may here arise in the minds of some of my hearers, that this level or proportion between the profits or wages of different employments will take place only where they are of such a nature that persons may change one for the other, or at least may at the time for adopting an employment, choose between them, if one appears more advantageous than the other. It may be admitted, that taking all things into consideration, the trade of a bricklayer cannot be more or less advantageous than that of a shoemaker. Here the principle mentioned by Smith has room for operation. If one trade is more advantageous than another, so many will crowd into the former in preference to the latter, that the effects of increased competition will soon reduce the advantages of these trades to their proper level. But perhaps it might be hastily thought that such a principle

cannot operate where the professions thus compared are filled by persons taken from a different rank or situation in life. Increased profits of bricklayers, or the diminished gains of barristers, will not induce any person to become a bricklayer who would otherwise become a barrister. Neither will the diminished profits of bricklayers, or the increased gains of barristers, enable a man who would otherwise become a bricklayer, to pursue the profession of the bar, and by his competition reduce the gains of the profession to their proper level. This may be the case, and yet the due proportion between the gains of those two professions, so remote from each other, may be preserved by means of the intermediate professions. These act as media of communication. The effects of competition will reduce or raise the advantages of the trade of the bricklayer to the level of other employments which are filled by the same class of persons. It will moreover exert an immediate influence over the trades of a rank one degree higher, that is, in those trades which require a somewhat more tedious or expensive education, and therefore on an average receive higher emoluments, and are filled by a wealthier class of persons. For there are always some who would be influenced in the choice of trades approaching each other in expenses and emoluments, by slight additional circumstances of relative advantages or disadvantages in either.

Thus trades one degree higher are brought to their level of advantages ; and mounting step by step, even the most distant professions will preserve the natural proportion between their emoluments, as the emoluments of each profession will preserve their fair proportion to those of the profession of equal rank, and to those of all professions of a rank one degree immediately above or below it, and thus a series of communication is established between the lowest and the highest.

It is to be observed that I have confined myself to-day to the relative wages, and have said nothing as to the circumstances which determine the absolute remuneration which the labourer shall receive. The solution of the latter question is more difficult, and also depends in some respects upon the former, and it could not be discussed until the former is well understood. This subject however would, were I to attempt it now, take up more of your time than I can venture to call upon you to give. I must therefore defer it to some more convenient season. On Friday I shall call your attention to the advantages of a division of labour, and the circumstances which lead to its institution.

LECTURE V.

GENTLEMEN,—Among the different expedients to which man has resorted for increasing the productive powers of labour, there is none so striking for its simplicity as the division of labour. Without some division of labour, every man, woman, and child should, by their own immediate exertions, produce every thing they wanted, without the intervention of any exchange, or the advantage of any assistance. But such a state of things could continue only in a perfectly savage state; it never existed, and never can exist in any society. The nature of man leads him directly to have recourse to exchanges and mutual assistance. The different powers, dispositions, and capabilities of the different sexes, (a difference so far exceeding any that exists in the case of other animals,) and the difference in

the same respects that exists between youth and age, and even between individuals of the same age and sex, point out the convenience and necessity of different persons undertaking separate employments, and by sharing and exchanging mutual assistance, of promoting the common benefit of all. When once security of life and property is established in any country, the slightest portion of reason is sufficient to point out the advantage of some division of labour, by every person's undertaking the employment for which, by age, disposition, or natural talents, he happens to be best adapted. The limited powers of many persons would lead to the same result, as a matter of necessity. They who could not do every thing necessary towards procuring their subsistence, could yet do something that would save the labour of their stronger brethren, and allow these latter to devote their entire time to purposes to which they alone were competent. Such arrangements would be very much facilitated and even prompted by the institution of marriage, the relation of members of the same family, and the length of time during which the young are either entirely or partly dependent upon others.

A division of labour commenced from necessity, would be continued from convenience. The notion of exchange is natural to man, and results immediately from the institution of property. It is at once

seen that with some kinds of labour a multitude can be adequately supplied, almost as easily as a single person. For instance, the fire lit to warm one will supply heat enough for several ; but although all would derive equal advantage from the fire, they will not therefore occupy themselves exactly in the same manner in its production. If one basket-full of fuel is enough for the fire which warms ten men, it would still be absurd for each man to go and fetch the tenth of a basket-full, and take a tenth part of the trouble of arranging the fire. They would at once see the advantage of one fetching the fuel, one arranging the fire, and the rest in like manner employing themselves in some manner for the common benefit. In selecting different employments, each would naturally be directed to the one most suited to his disposition and abilities, and if any person was fit for only one employment, that would naturally be thrown upon him, as being the only means of making his labour available.

These advantages of enabling the wants of several to be supplied with the same expense of time and labour as the wants of a single individual, and of giving every person the employment for which he was qualified, having led to the division of labour, some further advantages would be observed, which before its establishment could not so readily have been anticipated.

The first of these, perhaps, in the order of its being remarked, would be the increased skill which a man acquires who confines himself to a particular employment. The man whose strength or constitution will not allow him to hunt the deer, may procure venison by staying at home and making arrows for the stronger brethren of his tribe, who will readily give him a portion of their spoils in return for the advantage which they derive from being enabled to devote that time to hunting which they should otherwise have employed in the fabrication of their weapons. He will soon acquire a skill in this employment which will render it expedient for him to pursue it, exclusively of other occupations, for which, perhaps, he was originally equally qualified by nature. He will perceive that through the medium of exchanges, in consequence of his acquired skill, he can obtain more by devoting himself to this one occupation, now become his trade, than if he were in turn to engage in every employment in which he was capable of engaging.

The man thus engaged in a trade, as for instance, making arrows, will soon find that in any certain space of time he can make a greater number, and with greater skill, not by first making one and then another, which is the course that nature would suggest until the trade was established, but by commencing with a great many together.

Wood enough to make a dozen could be cut into the proper length almost as readily as the materials for a single one. However simple his tools are, he will find some time lost, some delay incurred, in turning from one part of the work to another, and this delay is escaped by completing one operation upon several, before he turns to a new branch of his work. By this means, at the end of a certain space of time, he will have a larger quantity finished; but until that time is over, he will not have any of them fit for use or exchange. He must therefore have had the means of living during the progress of the work, either by his own resources or by goods advanced to him by some other person, who hopes, when the work is completed, to be repaid those advances with a profit. The last is the most usual. The labourer in general, when a division of labour has advanced so far, cannot support himself until the time when the proper number of goods that ought to be made together are completed, and if he attempts to forego the advantage of this division of labour, and to make one at a time, he will be undersold by those who avail themselves of it. As a journeyman, the part of the produce of his labour which he receives as wages will be more than the entire value of what he could make upon his own account.

When the idea is once conceived and practised, of a man's working first at one part of a number

of goods and then at another, for an employer who pays him wages and keeps what he has wrought, the progress of the work to maturity is in imagination divided into a certain number of stages, and it becomes obvious that there is no necessity that the same man who has proceeded with the work to one stage should afterwards take it up and carry it on to another stage. Two operations, one succeeding the other, may be of very different kinds, and require very different powers, and may therefore be advantageously executed by different individuals. This could not conveniently be done where each workman was working with the intention of repaying himself for his labour by the sale of the manufactured article. But when he comes to work for wages, his employer will naturally make such an arrangement, both for the reason I have mentioned, of assigning to each the work which he does quickest and best, and of preventing the delay and loss of time incurred by his labourers changing from one employment to another. Some division of labour is so natural and even necessary in a society, that it generally escapes observation until it has reached this point, that is, the point when the several operations necessary to the completion of an article are performed by different persons; and the phrase, division of labour, is frequently, by inaccurate thinkers, applied to this latter species alone.

From the division of labour, when carried to this extent, besides the increased operation of the principles already mentioned, another advantage is frequently derived. The manufacture being now divided into a series of simple operations, each one executed by a separate workman, numerous contrivances and modes of machinery will be invented for shortening labour in some of those operations. The person who has but one or two simple objects and operations constantly before his eyes, will become perfectly acquainted with them, his thoughts and reasonings will be more constantly directed towards them, the clear distinct ideas which he will possess will enable him to understand and anticipate the effects of any alteration in the mode of executing them, and in many cases observation and experience, or even chance, has led to important discoveries, which would never have been made if the mind of the person making them had been distracted by the necessity of attending to a great variety of different objects. The discoveries thus made are in many respects analogous to the increase of skill which a workman acquires in the single vocation to which he confines himself. But the expression, increase of skill, is applied to that facility which is acquired and can be acquired by practice alone, and cannot be communicated by mere instruction. Thus the weaver who plies constantly at his loom, acquires

thereby a certain skill in his trade, but if he observed that by wetting the thread, or by drying it, the shuttle flew more easily, the discovery would be an instance of that advantageous consequence of a division of labour to which I am at present calling your attention. The prospect of this last advantage however never leads, even in the most civilized societies, to any division of labour, which, but for it, would not have existed. It is too contingent to be the object of speculation, and besides, when any such discovery is made, there is frequently an impossibility of securing its advantages to the person making it.

Thus, of those five advantages of a division of labour, the two first are the securing to each individual the employment to which his powers are best adapted, and the possibility of providing for the wants of several, with the same quantity of labour that would be required to provide for those of a single person. Those two circumstances lead, of necessity, to a division of labour in every society, and the advantages resulting from them can be anticipated before any division of labour has been instituted. The next two advantages are the increased skill acquired by the labourer who confines himself to a single department, and the time saved by escaping the necessity of frequently changing from one occupation to another. These, although they perhaps might not have been anticipated before

some division of labour was established, yet would soon be remarked when a division of labour to any extent was introduced, and would in many cases cause it to be carried to a greater extent than it was before. Reflection will shew that these advantages will result in all instances where men confine themselves to one employment, and therefore the expectation of meeting them will in many instances give rise to a division of labour which otherwise would not have existed.

The wages of labour are, like all other things, regulated by the proportion between the supply and demand, and in consequence, some kinds of labour are more valuable than others. Most persons are naturally capable of performing various kinds of labour of different values. But it would obviously be a waste of a man's powers were he to employ in a less valuable species of labour any portion of his time, which with no greater sacrifice of ease and comfort to himself, he could occupy in a more valuable, and therefore in a better paid employment. What a waste of his powers it would be, were a robust and healthy ploughman to spend half his time in knitting or spinning, or plaiting straw, not that with proper practice he might not do these as well as an old woman, or a child, but because he is equally able to hold the plough, a work which much fewer are able to do, and which therefore receives a better re-

muneration. All parties feel the benefit of this. The workman receives higher wages for his day's work, by devoting the entire of it to the most valuable occupation for which he is fitted. The public is served by getting this work done on cheaper terms, in consequence of all who are capable of it being willing to undertake it, and even those who from being able to do nothing else, are obliged to occupy themselves with some inferior and worse paid employment, are served by receiving higher wages in consequence of the removal of the competition of all those who are fit for any higher employment. In a refined state of society, where the division of labour is carried on to a great extent, every individual who is capable of any kind of work may find some employment suited to his capacity.

Of that advantage of a division of labour which results from its being frequently as easy to do some things on a grand as on a small scale, and to provide for the wants of a multitude as to give the same benefit to one or two, the most striking instance is the institution of a public post-office, and every system conducted on a large scale for the conveyance of letters or parcels. It is as easy to convey one hundred letters from one town to another as it is to send a single letter, and by sending them all by one messenger, the expense of ninety-nine messengers is saved. This instance is the most striking, because each additional letter

appears to occasion no additional expense; but the instances are very numerous where the business of a number can be provided for almost as readily as that of a single person. It is almost as easy to convoy a fleet as a single ship. Roads, harbours, canals, light-houses, offer further examples of the benefit of many being as it were partners in works of a certain description: each derives almost as much advantage from them as if they were exclusively his own, while the expense of making them is shared with a number. According as the density of the population increases, a greater number of such works can be carried on, and finished to a higher degree of perfection. The number of persons to enjoy the advantage of them is increased, while the share which falls to each of the expense of making them is diminished by the entire being shared with a greater number. All the duties of protection and government, &c. which belong to the state, and are provided for at the public expense, are of this nature. In every manufacture, the operation of this principle may be detected. The calculations and measurings that are necessary for one will suffice for a thousand articles. Observe a smith or a carpenter employed at some casual job, how he eyes it, and reflects, and measures, and calculates, and turns over the materials again and again, and if he has an assistant, how much time will be spent

in considering what is the shortest, surest, and best mode of doing the work. If that were his regular trade, the same quantity of thought would do for a number of such jobs, or even less would be requisite, as he probably would learn the best mode of doing it from somebody else.

Adam Smith explains and illustrates with his usual felicity the causes and effects of the increased skill which a workman acquires by confining himself to a single employment. It is evident enough that the division of labour, by reducing a man's business to a single operation, and by making that operation the sole business of his life, must increase very much the dexterity of the workman. But how great that increase of dexterity is, could scarcely be anticipated. Smith states, that a common smith who, though accustomed to handle the hammer, has never been used to make nails, if, upon some particular occasion, he is obliged to attempt it, will scarcely be able to make above 200 or 300 nails in a day, and those too very bad ones. A smith who is accustomed to make nails, but whose sole or principal business has not been that of a nailer, can seldom, with his utmost diligence, make more than 800 or a 1000 nails in a day. But he states that he had seen several boys under twenty years of age, who had never exercised any other trade but that of making nails, and who, when they exerted themselves, could make each of them upwards of

2,300 nails in a day. The making of nails however is not one of the simplest operations, and the increased dexterity acquired from the same cause in other simpler operations is usually much greater. But it would not, perhaps, be easy to find so plain an example of the effects of this increased skill. In other trades this, combined with other causes, produces an increase in the work performed ; while in the example of the nailer, this effect is plainly to be attributed to the increased dexterity acquired by practice, for a common smith, when he undertakes this work, does it in the same manner, with the same tools, only not nearly as well. In this trade the comparison can be made, but in other trades, where the difference would be most striking, the very immensity of that difference prevents us from having any opportunity of making the comparison. No man, not bred to the trade, ever thinks upon any occasion of making a pin or a needle. If he were to attempt to make a pin, he would spend the day in making a single one, which, when made, would probably be as like a nail as a pin. But the consequence of the increased facility with which they are made, owing to a judicious division of labour, is, that the entire quantity of labour consumed in making a pin, including the working the mine for the materials, and the making of the tools, &c. is not more than half-a-minute of one man's labour. The low price at which they are sold

shews that it cannot occupy even so much. The trade of pin-making affords a striking proof of the operation of some of those principles which I have mentioned, as making the division of labour so effective. For instance, a man in one hour sharpens the points of 15,000 pins. In an equal space of time a man can make heads for 12,000, and another can fasten on in an hour the heads of 1,000. This last being at the rate of only about 16 a minute, is, I believe, the most tedious operation in the entire manufacture of pins. But what an immense increase of dispatch and dexterity must be acquired by continual practice to enable a man to sharpen 15,000 in an hour, that is about 4 in a second. And when an operation consumes so small a space of time, the effect of even a very little delay or loitering, in turning from one work to another, would cause a very serious diminution in the entire amount of business done. One man working ten, and another twelve hours, will have made heads and points for 144,000 pins. But suppose that even with undiminished skill (not a very probable supposition) one man should make the head and point of a pin turn about, allowing only a second to be lost each time he changed his work, that, in the 144,000 pins, will amount to a waste of eighty hours, that is, to a waste of nearly four times the number of hours effectively employed. In many other trades this effect of the division of labour is equally

surprising, and it may not be too much to say that many persons, by the medium of exchanges, procure for the labour of one week more goods of various kinds than they could produce in the course of their lives, if they were to devote them all to the direct fabrication of them.

The advantage which is gained by saving the time commonly lost in passing from one employment to another, is remarked by Smith to be much greater than we should at first view be apt to imagine it. The time that is lost is of course more considerable when the works must be carried on at different places, and with quite different tools. But even when the two trades can be carried on in the same work-house, the loss of time, though no doubt much less, is still very considerable. A man commonly saunters a little in turning his hands from one employment to another. When he first begins the new work, he is seldom very keen and hearty, his mind, as they say, does not go to it, and for some time he rather trifles than applies to good purpose. The habit of sauntering, and of indolent, careless application, which is naturally or rather necessarily acquired by every country workman, who is obliged to change his work and his tools every half hour, and to apply his hand in twenty different ways every day of his life, renders him almost always slothful and lazy, and incapable of any vigorous application

even on the most pressing occasions. Independent therefore of his deficiency in point of dexterity, this cause alone must always reduce considerably the quantity of work which he is capable of performing.

The effect of the division of labour, when carried to any considerable extent, is necessarily to produce the article to which it is applied in large quantities. A great number of persons are constantly engaged in its manufacture, since each part has one or more individuals constantly employed at it; and the entire quantity of work performed increases in a much greater proportion than the number of the workmen, in consequence of the increased dexterity which continued practice confers upon each. But however numerous the articles thus fabricated may be, a number of men will not devote themselves to one employment, unless they can derive some advantage from that portion of the produce of their industry which they are not desirous of consuming themselves. This can only be done by exchanging the surplus produce for other articles. The extent therefore to which the division of labour can be advantageously carried, depends upon the extent of the market, within which circumstances of various kinds compel them to dispose of the produce of their industry. It would be a useless waste of labour to produce more goods than the persons who frequent that market are willing to purchase at a

price sufficient to remunerate the labourer for his toil. But when the market is very small, an extensive division of labour would overstock it with the particular commodity produced by such means ; and no person can have any encouragement to dedicate himself entirely to one employment, for want of the power to exchange all that surplus part of the produce of his labour which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for. Hence in thinly inhabited countries many trades that would be more productive if they formed the constant occupation of different individuals, must from necessity be carried on by the same person. Notwithstanding the increase in the dexterity of the nailer, which I have already mentioned, and the increased productive powers of his labour, acquired by confining himself to that occupation, it is impossible that such a trade could exist in a thinly peopled country, remote from any market where the surplus produce of his labour could be disposed of. On a very low computation, he could make 300,000 in a year, but in the wilds of America where could he find purchasers for them? He will find it more to his advantage and to that of the public, instead of making what he cannot sell, and what they do not want, to employ himself in a variety of trades, which in more thickly peopled districts would be kept distinct, and to engage in

every sort of work that is made of iron. In like manner, as one can point 45,000,000 pins in a year, there must be a market extensive enough to consume that number, or the most productive division of labour cannot be introduced into the manufacture of pins. Also in many complicated manufactures, such as this latter is, it is seldom possible to have but one man engaged in any single occupation, and therefore the market must be still more extensive. The proportions of labour required in each department may not be such as without waste to admit of only one man being employed in any one of them. Thus if there was only one employed in making points, one man would not be enough, and two would be too many to make heads. The proportion, to keep all in constant employment, should be four at points, and five at heads; and that would require a market in which 180,000,000 could be annually sold. As there are several other branches of the trade, a still greater number of workmen of each kind would be required to match each other, so as to keep all nearly constantly employed. To find the exact number may amuse those fond of arithmetical recreations. We should express in whole numbers, prime to each other, the proportion of men required in one branch, to those in each of the others, and then the least common multiple of all the antecedents will give

the number of men who must be employed in that branch, so as to prevent any waste.

In a new colony the man most likely to thrive is that sort of character familiarly called a jack of all trades, who in a thickly peopled country is generally on the brink of starvation. In the former case, every one has recourse to him, since from the scarcity of workmen he has, as it were, a monopoly in all his trades. In the latter case, no one employs him, since though he can do many things, each man can get the particular thing he happens to be in want of, done cheaper and better by somebody who has made that work his exclusive trade.

Every thing tends to increase the division of labour which extends the market or increases the number of those who can come for the commodity, or to whom the commodity can be brought. Thus the increased density of the population, by bringing a greater number of people within any given space, extends the market, and renders a greater division of labour practicable. In populations of equal density, the market may be considered as more extended, where good roads and means of carriage by water render it more easy and less expensive to transport goods or persons from one part of the country to another. But the advantages to be obtained by the existence of good roads will not so well repay the cost of keeping them up, in poor and thinly peopled countries, and

therefore these in general will rather follow than lead the division of labour. But the sea and navigable rivers present a cheap mode of conveyance, with comparatively little previous preparation or expense, and accordingly it has been observed that it was in countries favoured with those natural advantages that manufactures, as well as trade and commerce, were first brought to any degree of perfection. Those circumstances in any country which produce a division of labour, by extending the market for manufactured goods, are therefore the density of the population, and the goodness of the road and other facilities for conveying goods or passengers by land or water. The circumstances in the goods themselves are their lightness or small bulk in proportion to their value, which makes the expense of transporting them to distant places comparatively small; and the cheapness of the article itself, or its fitness to satisfy the wants of the poorer and more numerous classes of the country. This last circumstance increases the market, by converting a larger proportion of the community into purchasers. It, as it were, increases the density of the population, since the density of population, as far as it affects the sale of any article, is merely the number of those persons who are able and willing to purchase it. Accordingly, it is in those goods that are intended for the use of the poor that the greatest improvements, by the introduction of machinery

and the use of a more extended and better contrived system of a division of labour, have been established. The poor therefore derive the greatest benefits from such improvements. Those articles that are intended for the convenience or luxuries of the rich alone, can find few purchasers, since the rich are few in number. This paucity of purchasers renders it impossible that in any article intended for the use of the rich only, a minute or complicated system of a division of labour can be established, since the purchasers are too few to render its establishment a profitable speculation. But when an article can generally be purchased by the poor, the market becomes by that alone so extensive as to render the introduction of a proper system of division of labour a profitable speculation. It is therefore in the fabrication of those goods which are generally required by the labouring poor, that the greatest dexterity, ingenuity, and contrivance are to be found. How this is advantageous to the labourer, I shall hereafter point out. The next class of goods, according to the degree in which they admit of a division of labour, are the goods which, from their small bulk in proportion to their value, or their power of being conveniently packed, are the best suited for exportation, and these exportable commodities are also next in order, if the classification is made according to the different degrees of benefit which the labourer derives

from an increase in the productive power of the labour employed in the manufacture of different articles. In such manufactures, labourers may be said to be the principal employers of one another in making articles for their own consumption, and whatever increases the productiveness of labour, must be of advantage to the person who is at once the consumer and the employer. By causing the articles which the labourer wants, to be produced at a less expenditure of labour, it enables him necessarily to purchase them with a smaller portion of his labour, or with the produce of a smaller portion of it. I propose next to consider the mixed effects which the introduction of a division of labour has upon the general condition of the labourer and the state of society, and to make some remarks upon the means of augmenting the good and mitigating the evil thence produced.*

* Circumstances which it is unnecessary for me to mention here, compelled me to depart from this plan.

LECTURE VI.

GENTLEMEN,—Before I enter upon the subject to which I intend to call your attention this Term, I wish to recal to your minds, or to recapitulate a few of the principles which I have already attempted to establish. I defined, then, the utility of any article to be its power of satisfying the wants or wishes of mankind, either directly or indirectly; and by its value I wished you to understand its power of being exchanged for other articles. Of course therefore any thing that may be made the subject of an exchange, may be made use of as a measure of value. However, although a commodity may be a real measure, it may not be a convenient one; there may not exist ready means of comparing its value with that of other commodities.

“In ruder ages, when men’s wishes were confined to men’s wants, the exchange of one commodity for another may have been sufficient to serve their purpose. It mattered not to them that one had cost double the time and labour of the other. Time and labour were to them no further valuable than as they served to obtain what satisfied their simple desires. Like children, their wishes did not extend beyond the present moment. As civilization, and with it, foresight, advanced, men having more wishes to indulge, became more chary of their time and labour. Each commodity then acquired a value which required some measure independent of the passing desire of the moment. Money was then resorted to.” And as in the ordinary transactions of life, exchanges are generally effected through the intervention of money, it is therefore in general made use of as a measure of value : and for most purposes it is a most convenient measure, although at different times the value of money may sustain very considerable variations. There is no more ready mode of conveying a definite idea of the value of any article, than by mentioning its value as measured in money ; that is, by saying how much money it will cost to obtain it in exchange.

But as most of the commodities in which the wealth of a country consists are produced by labour, political-economists make use of it as a measure of value. It is not however, more than money,

to be considered a peculiarly real measure of value, either as being of itself always of the same value, or as always demanding from the labourer the same sacrifice of ease and time. Still labour is the most convenient measure of value, because of its share in producing goods, or as it were purchasing them at the great mart of nature. It may be considered as the price which nature exacts from man for all the commodities of value which she furnishes for his use, and therefore the value of labour can be readily compared with that of other commodities; and it is a convenient measure to compare the the values of those commodities with each other. For this purpose, however, that labour only must be regarded, which is expended in the most judicious and economical manner that the times and circumstances admit of.

In relation to value I also observed, that the value of every article depends upon the demand and the supply, and that indirectly the cost of production of any commodity, as well as its utility, has an effect upon its price. The cost of production, by its influence upon the supply, since men will not produce commodities unless with the reasonable expectation of selling them for more than the cost of producing them. And the utility has some effect, although not so easily calculated, since it is to its utility, in the more extended sense of the word, that the demand is to be entirely attributed.

The price is regulated by the demand and the supply, and will be such a sum as is sufficient to produce an equality between the supply and the effectual demand. I mean by effectual demand, such a demand as actually leads to the purchase or consumption of the article.

I shall this Term attempt to investigate the laws which distribute wealth among the different orders of society ; but before I enter upon the subject, I think it expedient to make a few remarks upon the nature of demand, and its influence upon price and value. The measure of the intensity of any person's demand for any commodity is the amount which he would be willing and able to give for it, rather than remain without it, or forego the gratification which it is calculated to afford him. On this we may observe, in the first place, that there may exist a demand not sufficiently intense to exercise any influence upon price. Thus the demand or desire of very indigent persons for rich and costly articles of dress or furniture, equipages, jewellery, &c. does not affect their price, since such demanders cannot possibly effect a purchase, even if the prices experienced a considerable reduction. Still a demand may affect prices, although it be not sufficiently intense to lead to an actual purchase. Of this an example is, the demand of those who will not purchase at the existing prices, but who would come into the market and purchase, if a

slight reduction should take place. Such a demand always does exist, and has an effect in keeping up prices, exactly similar to the bidding at an auction of the person whose bidding is next in amount to that of the actual purchaser. Ordinary sales are similar to sales by auction in this, that the seller tries to sell as dearly, and the buyer to buy as cheaply as possible ; the difference only consists in the form and mode of ascertaining the greatest prices which the seller can require, without injudiciously diminishing the extent of his sales.

But it is to be remarked, that there may be, and that in fact there generally is, an excess of intensity of demand, which exercises no perceptible influence upon the prices of commodities. This is the demand of those who, if necessary, would pay more than the existing prices, but who do not, because the state of the market enables them to procure the same commodities, or more desirable substitutes, more cheaply. Thus the high prices to which provisions rise in times of scarcity, prove the existence of a latent intensity of demand, which is only called into action by the scarcity which renders it impossible to purchase provisions at the usual cheap rate : the intense demand always exists, though it may not be apparent. But in some cases the demand itself is created by a scarcity, or other peculiar circumstances ; as, when we read of a besieged city being reduced to such distress for want

of provisions, that a dead rat was sold for a considerable sum. Such a case might happen again, and yet such a possibility would scarcely justify us in saying that in ordinary times there existed even a latent demand for such food.

For provisions and other articles of greater or less necessity, the intensity of demand among different persons varies according to the sacrifices of other objects which they can conveniently afford to make ; and yet all will effect their purchases at the same rate, viz. at the market prices, and this rate is determined by the sum which will create an equality between the effectual demand and the supply. Now if the price is attempted to be raised one degree beyond this sum, the demanders, who by the change will cease to be purchasers, must be those the intensity of whose demand was precisely measured by the former price. Before the change was made, the demand, which was less intense, did not lead to a purchase, and after the change is made, the demand, which is more intense, will lead to a purchase still. Thus the market price is measured by that demand, which being of the least intensity, yet leads to actual purchases. If the existing supply is more than sufficient to satisfy all the demand equal or superior to a certain degree of intensity, prices will fall, to accommodate themselves to a less intense demand.

But the intensity of demand varies not only in

different places, and among different individuals, but in many cases the same person may be said to have in himself several demands of different degrees of intensity. Of this there is a very palpable example, when provisions, owing to their scarcity or abundance, sustain a change of price. When they rise, a diminution of consumption is the effect. But the manner in which this diminution of consumption takes place usually, is not by the total abstinence of some from food, while the rest consume their accustomed portions. On the contrary, all continue to eat, as they must, or else cease to exist; but none except those whose wealth renders them indifferent to the price of their food, consume as much as usual. With every decrease of the total supply within the country, a corresponding diminution in the consumption of the great mass of individuals must take place. But the proximate cause of this diminution in the consumption of each individual, is the rise of prices which the scarcity produces. Now that portion which any person ceases to consume in consequence of a rise of prices, or that additional portion which he would consume if prices should fall, is that for which the intensity of his demand is less than the high price which prevents him from purchasing it, and is exactly equal to the low price which would induce him to consume it. On the other hand, for that

portion which, notwithstanding the high prices, he continues to consume, he must have had a demand, the intensity of which was at least equal to those high prices which did not prevent him from purchasing it. Carry on this train of reasoning in your minds through successive degrees of scarcity and consequent high prices, and you will come to the conclusion, that each individual contains as it were within himself, a series of demands of successively increasing degrees of intensity ; that the lowest degree of this series which at any time leads to a purchase, is exactly the same for both rich and poor, and is that which regulates the market price ; and that in the case of the rich man, the series increases more rapidly, that is to say, the intensity of his demand increases more rapidly in proportion to the diminution of his consumption, than in the case of the poor man. I have chosen the example of provisions as being the most obvious and palpable, and as most frequently affording a practical instance of the principle which it illustrated ; but the same observation is equally true, although not so strikingly, in every case in which a diminution of supply would occasion a diminution in any individual's consumption, without leading him to give up the use of the article altogether.

I have made those preliminary observations in the hope that they may render more intelligible to some

a species of reasoning which I shall probably have occasion to employ once or twice in the course of this Term. They are not however essential to the comprehension of the subject to which I intend to confine myself to-day, which is the analysis of rent. This analysis I shall enter upon, merely for the purpose of disengaging the cost of production from this element of complexity, and thus of rendering questions concerning wages and profits more simple, by freeing them from a source of confusion and vicious reasoning, in circles to which they are particularly liable. Indeed it is impossible to comprehend clearly, many important questions relating to wages and profits, and to the effects which our institutions, by affecting these, may have upon the happiness of the people, and the general prosperity of the country, without first examining the nature and source of rent, and the circumstances in which it originates, and which determine its amount.

While the air, the sun, the sea, the light, afford their assistance gratuitously to man—why, it may be asked, is he obliged to pay for the use of the earth, which is equally with the other natural elements, the pure gift of the Creator, unpurchased by labour or exertion of any kind. It will at once be answered, because the earth, unlike the other elements, is limited in quantity, and is appropriated, or at least is capable of being appropriated, or made

the subject of exclusive property. Resting satisfied for the present with this answer to our first enquiry, the next question is, what is it that settles the amount of rent, and that makes some farms set for a higher rent than others, and land in general obtain a higher rent at one time than at another. To this it may be answered, that rent is settled by contract, and that the use of land, like any thing else, is made the subject of exchanges, and that the rent of land is therefore subject to the operation of the common principle of demand and supply, and that some land is set for a higher rent because its fertility or situation gives it an advantage over the cheaper farms. This is all indisputable, and is so obvious that it is scarcely worth mentioning, except for the purpose of leading to further enquiries. We may suppose that every landlord is anxious to get for his land as much as any solvent and respectable tenant can be induced to give, and that the tenant is anxious to get the farm as cheap as he can; and mutual competition will determine the rest.

The supply is the entire quantity of land in the kingdom: but what creates and regulates the demand? It is undoubtedly, as far as the greater portion of the earth is concerned, the power which land has of affording a certain produce necessary or useful to the support or comfort of mankind. This produce in fact generally sells for more than is sufficient to pay for the labour of producing it, with

the usual profits. This surplus is demanded by the landlord, as rent for the land to which it is owing.

Here then is the first question which admits of any momentary doubt, and of which the solution requires any consideration—Is rent to be attributed to the high price of the produce of the earth, or is the high price of produce caused by rent, or do they mutually react upon and influence each other. On the one hand it may be said, and truly, that high prices produce rent, by enabling the tenant to pay it; and the necessary effect of competition is, that the landlord is enabled to procure as rent whatever the land gives the tenant the ability of paying, consistently with his obtaining the usual profits for his advances. On the other hand it may be said, though not with so much truth, that the high price of agricultural produce is wholly or partially caused by rent, and by its effect in increasing the cost of production, since the farmer will naturally require such a price for his corn as will suffice to pay his rent, the wages of the labour employed upon his land, and the fair and usual profits in his trade. This last argument, however specious it may seem, is fallacious. Rent certainly forms no part of the cost of production, at least in such a sense as to affect prices, and enable the tenant to procure a higher price for the produce of his farm. The cost of production of any commodity has no direct immediate effect upon its price or

value. It only affects it through the medium of its influence upon the supply. It naturally limits the supply to such a quantity as can be sold at a price sufficient to pay the producer the cost of production, since no man will manufacture what he does not hope to sell at a price sufficient to repay the expenses of producing it.

But how does this affect the question of rent and prices? Rent cannot have the effect of diminishing the supply. The circumstance that a man has to pay a high rent for his farm, will not make it his interest to produce less abundant crops, and if the price is insufficient to pay the rent and the expenses of the farm, he cannot in general mend his condition by diminishing the produce. It will be more difficult for him to pay his rent out of the diminished crops, and he cannot expect to raise the prices by his own single resolution of not producing the usual supply. When the supply of any commodity is lessened, in consequence of the price not being equal to the cost of production, the diminution of the supply, and the consequent increase of the price, are caused by individuals who have not in view such an end, which could only be effected by the combined operation of a number. But individuals cease to produce, because the low prices have rendered it an unprofitable employment. This raises the price, although to do so is not the object they have directly in view. Prices insuffi-

cient to defray the cost of production, diminish the supply, by their effect upon those who are engaged, or who are about to engage in the manufacture, and the effects upon those are different according to their different dispositions and circumstances. Some possessing a large stock on hands, which they find it difficult to dispose of to advantage, diminish the number of their labourers, and thus produce less than they were accustomed to produce. Others decline entering into a trade which they perceive not to be prospering, and others abandon it altogether. This latter course is evidently never pursued by any to procure an increase of price, of which others, not themselves, would derive the entire advantage. Indeed it is almost too evident to require any argument to shew that the interest of an individual, and consequently his conduct in managing his farm, will be the same whether he has to pay a rent for it, or is obliged to pay interest on a mortgage or other debt, or to expend an annual sum of the same amount in the maintenance of a large family, or whether the profits are to be absolutely at his own disposal. In any of those cases his object must be to cultivate his farm in such a manner, as according to the average price of agricultural produce, will leave the greatest surplus after paying all the expenses of cultivation with the usual profits of stock. The average amount of what this surplus is, on the supposition that the cultivation is conducted with

average skill is what the landlord may reasonably demand for rent. If less were paid, the tenant would enjoy so much more than the usual profits of stock, and others, content with more moderate profits, would outbid him ; and if the landlord sets his land for the lower rent, he is merely doing an act of liberality, with which at present we have no concern. Our present investigations relate merely to the amount of rent which the landlord can procure for his land, and the circumstances which determine it. On the other hand, if the landlord demands more than the amount I have just mentioned to be his reasonable claim, the tenant will not be able to pay the rent, reserving to himself a fair profit on his capital, and no prudent man will offer such a rent for the land ; and although the avidity of the landlord and the recklessness of the tenant may sometimes lead to such a contract, it will always turn out equally disadvantageous to both ; it breaks the tenant and it impoverishes the land. It is fortunately a property of land, that tilling it with an insufficient capital, or forcing it to yield too many of those crops which for a time would enable the tenant to pay the largest rent, has the effect of impoverishing the soil, and of diminishing its value for a considerable period, and this opposes some check to the cupidity of landlords, as the exertions which the tenant must make, who is called upon to pay too large a rent, will injure the land,

and compel the landlord to accept a smaller rent from succeeding tenants, and thus punish him for his avidity.

We may therefore consider those two principles as fixed, namely, that rent has no influence upon the price of agricultural produce, and that the rent or annual value of land, like the value of other things, is determined by circumstances, over which the contracting parties, who in this case are the landlord and tenant, can exercise no control. For when once a man is in possession of land, whether as tenant or proprietor, the cost of production, as far as it can affect prices by affecting the supply, must be those expenses merely which vary with the manner in which he cultivates his farm, or with the amount of produce he raises on it, and therefore a fixed charge upon the tenant cannot alter the supply. If the price of agricultural produce is not sufficient to pay the rent, wages, and profit, for producing it, it will depend upon certain principles, which I shall presently proceed to explain, whether rent shall be diminished, or less corn be produced.

The capability of a farm to yield rent depends upon its circumstances, viz. its situation, its fertility, and the price of agricultural produce. Thus far all agree. Even those who do not assent to the theory of rent, which I am about to explain, do not hesitate to admit those two principles. Let us proceed to investigate more minutely the circumstances

which determine the price of agricultural produce, and which thus regulate the amount of rent.

Land is of various degrees of fertility, and one farm, with equal labour and expense of cultivation, will yield a greater produce than another of the same extent. An advantageous situation, such as being nearer to a convenient market, will render one farm more valuable than another of equal extent and fertility. The difference of crops, in favour of the more fertile land, or the difference of expense of sending to market, &c. in favour of the more advantageously situated land, is evidently a sum which the tenants of those lands can afford to pay as rent, over and above the sums which they could pay for the land less favourably circumstanced. If one farm yields annually 1,000 quarters of wheat, and another, with equal expense of cultivation, yields only 900, if they are similarly circumstanced in other respects, the rent of the former must exceed that of the latter by the price of 100 quarters, and with such a difference of rent the two farms will yield the same net profits to the occupying tenants.

But a farm is not like a simple machine, which, with a certain amount of labour, produces a certain amount of commodities, and more or less in proportion as the labour is increased or diminished, until the entire power of the machine is put into

requisition. On the contrary, all land has this quality, that the gross amount of the produce is not proportional to the quantity of labour employed in its cultivation. In general, by increasing the labour and expense of cultivating a farm, its gross produce may be increased, but not in the same proportion; and by diminishing the labour and expense of cultivation, the gross produce will be diminished, but not in the same proportion.

Let us now suppose that there are lands of different degrees of fertility, and that the first, with a certain amount of labour, yields 100 quarters of corn, the second 90, the third 80, and so on, these being the quantities which the several farms will yield, to what, for convenience, I shall call the first and least application of labour and capital. Now, if the land of the first kind is more than sufficient to supply the wants of the community, no such thing as rent can exist; or if rent is required, it must be only nominal, a mere trifle, incapable of being made the subject of calculation. For no rent can be paid unless the price of corn or other agricultural produce is more than the cost of producing it, including, of course, the usual profits on the land which yields the rent; and in the circumstances I have supposed, corn cannot sell for more than the cost of raising it on the best land. The first proposition is evident. When the price of corn, &c. is only equal to the cost of producing it, there

can be no surplus out of which the rent of the landlord may be paid : and in this case corn cannot be sold at a higher price, merely to enable the tenant to pay the rent. If all the land of the first quality is not set, no rent can be obtained for that which is taken, since whatever the amount of rent may be which is demanded for it, those who possessed land of the same quality, and were unable to find tenants, would offer their land at a still lower rate, and the effect of competition must be, that no land would obtain a rent while land of the same quality and circumstances remained unoccupied for want of any person being found who was willing to pay any rent for it. But if without an increased demand for corn, all the land of the best quality is taken, the price of produce cannot be more than sufficient to pay the expense of raising it. If it sold at a higher price, every farmer would naturally raise as much as his farm, without a greater proportional expense of cultivation, would yield, and this would cause a production of more than there was a demand for, which is incompatible with a state of things in which the price exceeds the cost of production.

But as population, and the consequent demand for the produce of the earth, increase, the land of the first quality will become insufficient to satisfy the wants of the community without a more extended cultivation, and a further outlay of labour

and capital. But this second outlay will not yield as great a produce as the first. The produce from the first was 100 quarters, that from the second will be less, suppose 90. Let this be the amount that land of the second quality will yield to an equal outlay of labour and capital. In order to mark the differences more strongly, I have supposed the several qualities of soil to differ by so large a proportion of their produce, although the fact is, that the adjacent qualities approximate much more closely to each other. One acre may yield six times as much wheat as another, and every intermediate number of grains may be yielded by lands of the intermediate qualities. But this does not affect the accuracy of the reasoning through which I am endeavouring to lead you. As the fertility of various soils, and the different proportions of returns made to successive outlays on the same soil, decrease by such minute imperceptible steps, I may, in illustration, neglect all differences under a certain amount, say 10 quarters, and then land of what I shall call the second degree of fertility, will yield to the first outlay as much as land of the first degree to the second outlay, and so on. This supposition could not vitiate the reasoning, unless I attempted to draw any conclusion founded upon the particular amount at which, in illustration, I assumed those differences to be worth noticing; but in all the arguments and illustrations I have employed, I use

the word quarter, to signify an arbitrary measure, and you might, at will, substitute for it the word grain, or pint, or measure.

As soon as the wants of the society require for their satisfaction an amount of corn which cannot be obtained without raising some portion at this increased cost of production, that is, with a return of 90 quarters to an outlay which formerly produced 100, corn must rise in price, so that these 90 quarters will cost as much as 100 did before. A less price would not recompense those who cultivate land of the second quality, or who by doubling their outlay upon the land of the first quality, make it produce 90 in addition to the 100 which it yielded before. Unless corn obtained this increased price, the farmers would not find it for their interests to raise the increased supply which the wants of the society demanded. One might hastily imagine that as land of the first quality will yield 190 quarters to a double outlay, the farmer would be sufficiently renumerated if he received for 95 quarters as much as he was formerly paid for 100, as such a price would give him for 190 quarters, or the produce of his double outlay, twice as much as he formerly received for 100 quarters, the produce of a single outlay. But such reasoning is not sound. It is not enough that the price of all the corn he raises should pay the expense of raising it. In order to induce him to raise the increased quantity,

it is necessary that the price of the additional portion thus raised should repay him the addition of expense which it has cost him. Otherwise he will find it for his interest not to incur this additional expense. Thus in the case just supposed, of 95 quarters repaying the expense of a single outlay, if the farmer raise 100 quarters with one outlay, he will gain 5 quarters in addition to the fair profits on his capital, and by doubling the outlay, he will lose that advantage and gain nothing more than the usual profits. There are in short two opposite miscalculations, that a careless reasoner might make, in regard to the price which is necessary to encourage a certain degree of cultivation. One is, that the farmer will not employ an additional quantity of labour and capital in the cultivation of his farm, unless a proportional increase of produce may be expected: the other, that it will be his interest to cultivate, as long as the entire price of all the produce is sufficient to repay his expenses, together with the usual profits. What is really necessary and sufficient is, that the price of the produce raised by the last outlay or expense shall be sufficient to repay that expense, with common profits. If it is less, the farmer will make a greater profit by avoiding this outlay, which is not recompensed by an equivalent increase of produce.

When therefore population increases, so that the wants of the society cannot be satisfied by all the

corn that can be raised at that cheap cost of production, which for the first outlay procures a return of 100 quarters, prices must rise to such a height as to induce the farmer, by a more expensive cultivation, to raise a greater supply, that is, to such a height that 90 quarters shall be sufficient to repay the expense which formerly required and received a return of 100 quarters. Land of the second quality, which yields this return to the farmer's capital, will then be taken into cultivation, and land of the first quality will produce a rent of 10 quarters. It will produce so much, because as land of the second quality is now cultivated for the sake of the 90 quarters which it yields, that of the first quality, which to the same outlay yields 10 quarters more, can afford to pay those 10 quarters to the landlord, and still leave the cultivator a fair profit on his capital. But a greater rent than 10 quarters cannot be paid for this land as long as the produce of the land of the first and second quality is more than sufficient to satisfy the wants of the country. For the rent of the land of the first quality cannot exceed that of the second, by more than the difference of the returns they make to the same expense, that is, by 10 quarters, and the same arguments that proved that in the first stage of society land of the first quality could yield no rent, will prove that in the state of society we are now considering, no

rent can be paid for land of the second quality. Either some land should be yielding a rent to the landlord, while land of the same quality, equally advantageously circumstanced, cannot be let at any rent, for want of tenants willing to take it, which the competition of landlords will prevent. Or if all lands of this quality are set and yield a rent, corn must be sold at a higher price than the cost of producing it on this land, and the competition of the farmers will not allow this. For as long as corn is sold at a higher price than its cost of production, the farmers will raise as much as they can, and I have supposed that the wants of the society do not require so much corn as can be raised without a greater cost of production than is necessary in the cultivation of land of the second quality.

In the same manner, as population advances, recourse must successively be had to inferior soils, and to recompense and induce such extended cultivation, prices must rise. And the natural price or cost of production must be equal to the cost of raising corn on the worst land which the wants of society require to be brought into cultivation. In the next lecture I shall draw some consequences from this theory. I shall point out some facts which prove that it is not founded on an imaginary supposition, and I shall endeavour to remove some

objections that have been brought against it. I shall also make a few observations upon an erroneous argument that has been brought forward in support of it, and shall explain what the fact on which that argument is attempted to be founded, really tends to prove.

LECTURE VII.

GENTLEMEN,—In my last lecture I attempted to give an explanation of the manner in which, as population increases, inferior soils must be brought into cultivation, and the soils already cultivated must be forced, at a greater proportional expense, to yield a greater produce. I have shewn that rent has therefore a tendency to increase as population increases, and that the natural price of corn, or its cost of production, may be measured independently of rent; that it will be equal to the cost of raising it on that land which pays no rent, or to the cost of production of that portion which is raised under the most naturally disadvantageous circumstances. I shall to-day endeavour to prove this theory of rent, to free it from objections, and to point out the consequences to which it leads.

I believe, indeed, that some of the objections made to this theory are caused by the manner in which it is sometimes stated. It is said that rent is caused by the existence of land of different degrees of fertility, and that nothing but the cultivation of inferior soils will produce rent. Now such statements are not correct. Rent is not caused by the cultivation of inferior soils. It is caused immediately by the high prices, which occasion a great part of the produce of the earth to sell for more than the cost of raising it. These high prices are caused by the necessity of resorting to inferior soils, for the purpose of producing some part of the required supply. But if those inferior soils did not exist, or were left uncultivated, prices would be still higher, as the supply would be still scantier, until those high prices would call inferior soils into cultivation. In short, high prices are the cause, and the cultivation of inferior soils the effect. This extended cultivation has the effect of reducing prices, although it cannot reduce the price below the cost of production on those soils, since without such a price, those soils will not be cultivated. The highest limit beyond which the price of corn cannot permanently rise, is determined by the fertility of the next inferior soil, not yet under cultivation, or by the cost of forcing the richer soils to yield permanently a more abundant produce. The existence and cultivation of those inferior soils do

not produce rent, but they regulate it, and set a limit to it, and prevent the proprietors of richer land from having such a monopoly as they would otherwise possess.

These three causes therefore may be said to regulate and produce prices and rent. 1st. The supply of land being limited. 2nd. The different degrees of fertility of different soils. 3rd. The power which land has of yielding a greater produce, provided an additional quantity of labour and capital be applied to its cultivation ; this increase of expense however, bearing to the preceding outlays a greater proportion than the increase of produce obtained by its means will bear to the preceding total amount of produce. Of these causes it is to be observed, that the first alone would be sufficient to produce rent. If all lands were of equal fertility, and up to their highest point of cultivation, yielded a produce exactly proportional to the expense of raising it, still prices might rise so high as to enable land to yield a rent. Whatever is useful, and is limited in quantity, is capable of possessing value, if it can be made the subject of exchange ; and it will be valuable if the quantity is less than what could be consumed, even if every man were to get as much as he desired gratuitously. But if this were the case, the laws which regulate rent and prices would be very different from what we perceive them in fact to be. In such a case,

prices would not rise above the cost of production, nor would rent exist until all the land in the country was tilled up to its highest point of cultivation, and bore as much as it was capable of producing. And when the total produce of the country became insufficient, then the price of corn would rise above the cost of production, and rent would begin to exist.

This can be easily proved. Let all the land in the country be capable of yielding, year after year, one measure of corn per acre, to a certain expense of cultivation, and be capable of having its produce increased proportionally to the expense of cultivation, up to ten measures; and let an average production of five measures per acre be sufficient to satisfy the wants of the community. Under these circumstances, rent cannot exist. If a man took a farm of 100 acres, at one shilling an acre rent, and raised five measures per acre, he would have a greater net profit by giving up half his farm, and transferring the labour and capital to the other half, on which he would then raise ten measures per acre, or 500 measures in all, with the same expense of cultivation, and half the rent that it cost before. Whatever theory of rent is adopted, this general principle should be carefully borne in mind, that agricultural produce cannot sell for more than its cost of production, as long as there exist ample unemployed means of raising further produce at the same cost.

The existence of the second and third cause which I mentioned to you as producing and regulating rent, is indicated by the fact, that a permanent increase of prices has been constantly attended with an increased production, and that rent existed when but a very small portion of the present supply of corn was raised within the kingdom. The slightest observation is sufficient to convince any one, that in almost every farm in Ireland more corn could be produced, if a greater amount of labour and capital was expended in its cultivation. But although such additional expenditure would produce some return, yet that return, with the present price of corn, might not be sufficient to repay the outlay. But if the wants of an increasing population could not be supplied without such expensive cultivation, then corn would necessarily rise to such a price as to indemnify the farmer who effected it.

This theory of rent may be said to consist of two propositions. First, that the rent of land depends upon its fertility and situation, and upon the price of agricultural produce. Secondly, that the cost of production, or natural price of agricultural produce, depends upon and is regulated by the expense of producing that portion which is raised with the greatest amount of labour. Those two propositions are, I believe, almost universally admitted, although some of the consequences that necessarily result

from them are frequently disapproved of, and alleged experience is brought forward against them. As for example, in the investigation of the effects which would follow if all the lands in the kingdom were to have their fertility doubled, or by any improvement in agriculture could be made to yield double the quantity of produce at the same expense as it now yields its present amount. This would diminish rents, for as this double quantity of corn, &c. would not be required, the inferior soils would be left uncultivated, and the rent of the better soils, being the difference between their produce and that of the worst soils actually cultivated, would undergo a corresponding diminution.

This startles some, and they cry, do you infer that agricultural improvements are injurious to the landlord, and diminish his rent? That is contrary to all experience. This argument does not apply to the supposition against which it is directed, and there is a mixture of truth and falsehood in it. But the real state of the case may be easily ascertained. Improvements in agriculture do not spread suddenly and generally through the kingdom. The farmers who adopt them first, reap a great advantage from them, since the increased quantity of produce which they thus obtain is (in consequence of the improvement not being in general use) not counterbalanced by a corresponding reduction of price. Indeed, the decrease of price occasioned by an im-

provement which only a few persons adopt, is almost imperceptible; and as the improvement comes into general use, the increase of population creates a sufficient demand for the additional quantity of food thus provided, and thereby keeps rent up to, or even raises it beyond its former level. But primary and secondary causes and effects ought not to be confounded. The first and primary result of the universal adoption of an improved system of agriculture, would certainly be a general reduction of rent. Some idea of this may be formed by observing the effect which a very abundant harvest sometimes has upon the condition of the farmer. He suffers more by the fall of price, than he gains by the abundance of his crops. A succession of such harvests would ruin him, or compel him not to cultivate so highly, and this would equally diminish the competition for land, and produce a reduction of prices and of rents. Now, agricultural improvements just give the means of producing such abundant supplies every year, and if generally introduced, would, with the present high rents and extended cultivation, entail certain ruin upon the farmers. Ultimately such an increase of population might take place as to raise rents even above their former level. But this secondary and contingent effect cannot be confounded with the primary and immediate effect, without much confusion of thought and language. It is accurately

true to say, that the first effect of the universal adoption of an improved system of agriculture, would be to lower rents; and that it would have at the same time a tendency to create such an increase of population as would ultimately restore rent to, or even raise it above, its former level. What should we reply to a man who should contend that a brisk trade would impoverish the workman, and should defend his opinion by saying that a brisk trade would produce high wages, and thus render the workman indolent and extravagant. We should request him to distinguish between the necessary primary effect and the contingent remote effect, and we should say that the high wages would, in the first instance, have a tendency to enrich the workman, and that according to his intellectual and moral education, the ultimate effect might be, increased exertion and judicious expenditure, or idleness and extravagance. We shall meet with many instances of this species of confusion in Political-Economy, especially in cases where the principle of population, as it is called, is made use of as the intermediate step between the primary and the secondary effects. With respect to improvements in agriculture, I believe it is quite clear that rent in America would not now be so low as it is, if the system of agriculture there were in the same rude state in which it was in this

country 200 years ago, when population was proportionally thin.

To improvements in agriculture it is principally owing that corn is not constantly and rapidly increasing in price. But its cost of production is not increasing, because the increased expense arising from the necessity of resorting to inferior lands, or of compelling the soils already in cultivation to yield a greater produce, has hitherto been obviated by the gradual spread of increased skill. I believe that without any new discoveries, but merely by bringing into general use what is already known, that Ireland could raise nearly double the produce which is yielded at present, without materially increasing the cost of production, or natural price of provisions. This would give support to a proportional increase of population, and in the mean time many improvements would probably be made, and brought partially into use. Such partially adopted improvements may be considered as resources on which an increasing population may draw as their wants increase. The slowness with which agricultural knowledge spreads, has the effect of preventing every improvement from being attended with the immediate ruin of all farmers, who, at the time of their introduction, might happen to hold land under leases which they were unable to surrender. The fallacy of those who appeal to

experience to prove that it is absurd to suppose that rents can possibly be reduced in consequence of agricultural improvements, lies in this, that the universal introduction of an improvement is an imaginary case : what the immediate effect would be, can be ascertained only by reasoning. According to the theory of rent which I have been explaining, its effect would be different from that of the gradual spread of improvement ; and yet that such would be the supposed effect, is urged as an objection to the theory, because experience shews that the gradual spread of improvement has not that effect.

It is also said that this theory must be false, for experience shews that there never was a country in which, for the best and most fertile land at least, some rent has not been paid ; whereas if the theory were true, there would have been in every country a certain period, during which rent would have been unknown, viz. that period during which all the wants of the inhabitants can be satisfied with the corn produced at the cheapest cost of production, that is, by the first and least application of capital to land of the greatest fertility. This objection is a fair one, and certainly requires an answer. In the first place then, this theory of rent is brought forward only to explain the causes which determine farmers' rents on the system in which they are demanded in these countries, where the land is let to the tenant as the result of a

contract which either party may enter into as he thinks proper, and where the amount of rent is a fixed sum, not dependent upon the success of the tenant in raising great or scanty crops. Hence no objections to this theory can be drawn from the examples of those countries where contracts of this nature are not freely made. The theory in question does not pretend to determine what amount the serf or slave, who is compelled to till the soil, can be forced to give to his lord or task-master. It only determines the sum which a tenant will pay, who is free to take land or not, as he thinks proper, and who need not take any land, unless by doing so he can obtain the same remuneration for his labour and capital as if he devoted them to any other employment. Such a state of things has seldom existed at the beginning of any society, and therefore experience can scarcely be appealed to, except in the case of some modern colonies, when it strongly corroborates this theory. Indeed such corroboration is so strong, that the theory itself has been objected to, as if it were founded on a partial induction, drawn solely from observation of the modern settlements in America and New Holland.

But even in these there are some circumstances which might mislead a careless observer, as rent, or a small sum to purchase the fee simple, appears to have been paid at the very commencement for

land. Such sums however have been very small in amount, and partake more of the nature of an acknowledgment to the Sovereign, than of rent to be paid out of the profits of the soil. In such cases too, both the buyers and the sellers had in their consideration the increase of value which they anticipated their lands would receive with the progress of colonization. This diminished the supply and increased the demand. In many cases the purchasers were content to forego all immediate advantage from all, or from a great part of their purchases, and to wait contentedly for the increased value which they knew their land would derive from the progress of colonization, independently of any exertions or expenses on their part. In many cases also, those who derived land from the gift of the crown, were by the same considerations prevented from bringing them into market for sale, and though they would gladly set them on lease, they could not find a tenant to pay rent for them. Such land could not yield a rent, because corn would not be worth more than the cost of production on them. But the fee simple might be sold, and would procure some slight sum, in consideration of the rent, which all parties knew it would be worth at some future period. Besides, the habits and feelings which the settlers brought with them from the old world, had much influence on those transactions. The colonists had been

in the habit of considering landed property as equivalent to wealth and dignity, and could not readily reconcile themselves to the idea that a man might be very poor, and yet possess an unencumbered fee-simple estate of great extent and fertility. When they bought a tract of land very cheap, they imagined that they had obtained a great prize, and in general they purchased more than they would have done if they had made more prudent calculations, and in consequence they frequently accumulated wealth less rapidly than they would have done if they had been contented with smaller estates. But in consequence of the great demand for labour, and the high rate of profits, their wealth increased in spite of these miscalculations. The natural sources of their prosperity, counteracted their errors. Where the labour of a single man, well directed in agriculture, is worth £100 a year, and where the rate of profits is 15 or 20 per cent, and provisions cheap, it is difficult for an industrious and economical family to avoid acquiring at least a competence. Though I believe the speculation of purchasing and clearing lands in the back settlements, seldom succeeded with those who did not contribute their own exertions to the task.

With respect to all rents, which merely give the landlord a certain portion of the produce, these may be paid even in the earliest stage of society,

while much of the best land still remains unoccupied. These can be paid, as they add to the price of corn by increasing the cost of production. Such rents existing in the form of a proportion of the produce, may exist in the early stages of society, but they impede the progress of cultivation, and as soon as they are partially abolished, they fall quickly into total disuse. Tenants and landlords find it then for their interests to exchange them for a fixed composition. Practically such a form of rent has not existed for centuries. Tithes have long ceased to be exactly proportional to the produce. If an exact tenth of the produce had been universally paid, the partial introduction of tithe compositions would have had a curious effect. It would have ruined the farmers in parishes where the composition did not take place, and in other cases it would have transferred a tax from the consumer to the landlord. As the analysis by which such consequences can be proved is, in the present state of things, more curious than useful, I shall not take up your time with it.

But besides the objection drawn from the best land not being rent free in new settlements, it is urged that there ought, if the theory were true, to be some land in our own countries cultivated rent free, as the worst soil taken into cultivation, it is said, does not pay rent: and it is said, there is no such land, therefore the theory is false. Here both

the assertion and the argument are erroneous. There is such land, and even if there were not, the theory might be true. There is not, it is true, much land in cultivation which appears to pay no rent, but this apparent non-existence of such land is caused by several circumstances. That there is such land as would repay by its produce the expense of cultivation, and yet would not enable the tenant to pay any rent, might be conjectured from this fact, that there is much land so bad, as at the present price of corn, it would not even pay the expense of cultivating it. There is also land which yields a very considerable rent. There are, apparently, all intermediate degrees, and therefore it is probable that there exists some land of that particular degree of fertility which would just repay the expense of cultivation, exclusive of rent. Such land may sometimes appear to pay a rent, by forming part of a farm where either a gross rent is paid for the entire, or a certain sum per acre for all, rich and poor, letting the inferiority of some be compensated by the fertility of other parts, and thus the farmer may appear to be paying rent for the bad land, although it is for part of the good land he really pays it. In many cases also, inferior soils require that a considerable expense should be laid out upon them before they will yield any thing. Such expense is not repaid unless by the profits of many years, and therefore a tenant with a short

lease could not effect those improvements, even if he got the land for his term rent free. Those improvements are therefore in general effected by the landlord, and the rent which he gets from the tenants is frequently no more than a reasonable profit on the capital expended on the land. In those cases the land may be said to yield no rent. It has been cultivated by the landlord and tenant jointly, and the tenant pays a certain sum to the landlord under the name of rent, but in reality as the profit for the landlord's advance of capital, not as the annual sum paid for the use of the original inherent powers of the soil. The distinction is not made by the tenant, nor is it important that it should be made, as when the improvements are effected, they are taken into consideration in the value of the land, and are regulated by the same principle as if they had been placed there by nature. What expectation of increased rent will lead to such improvements, is a question depending on the rate of profits. What increase of rent those improvements, when effected, will actually produce, is a question depending upon the laws which regulate and govern rent.

But even if there were no land in cultivation which yielded no rent, the theory I have attempted to explain might not be less true. As the theory does not depend so much upon the varying fertility of different soils, as upon the con-

tinually decreasing returns which land will give to successive equal applications of labour and capital, all that is valuable in the theory is contained in these assertions, that at a certain price of agricultural produce, a certain increase of cultivation will produce increased crops, but the increase may not be sufficient to compensate for the increased expense, but that if prices were higher, they would encourage and reward such cultivation ; and that there is always a certain portion of labour which exactly produces an equivalent return with usual profits ; and that the cost of production of corn, &c. may be measured, exclusively of rent, by the cost of production of that portion which, to satisfy the wants of the country, must be produced under the most disadvantageous natural circumstances. This theory therefore does not require that all lands should admit of a more extended cultivation, or that there should be any land in the kingdom incapable of paying any rent. I therefore cannot agree with Mr. Malthus, in supposing that the rent which the worst land could pay, as pasture land, should be deemed part of the cost of production of corn.

So much of the rent that is at present paid for land is in reality the profit of capital actually expended, that some have thought they could reduce all rent to this source, and failing to make this out satisfactorily, they represent rent as a compensation either for the capital laid out in improvements, or

as a compensation for the money actually laid out in the purchase of the land by the landlord, or those from whom he derives his title. I need not take up much of your time with an answer to the latter part of the alternative. The tenant has no concern with the purchase money of the land. Paying a high price for the fee simple will not enable the landlord to procure, or the tenant to pay, a high price for the use of the soil. The purchase money being high, is the effect of rent, not the cause. If land passes through several hands, that does not increase its value, and if all the land in the kingdom was now in the hands of the original proprietors, the same rent might be paid for them as their present owners receive: and although part of the rent of land, and sometimes even the whole, is only the price paid for the use of buildings, drains, fences, and other improvements effected on the land; yet that is not always the case. I have seen farms in Ireland for which a very high rent was paid, although the total value of all the capital expended in improving the land did not amount to half as much as the rent paid for it in a single year. In such lands the rent cannot possibly be looked upon as a compensation or return for the capital expended in effecting improvements upon the land.

Before I conclude this subject, I wish to point out an erroneous argument, to prove the continually decreasing powers of the soil, that is to be

found in a very instructive and entertaining book. I allude to Torrens on the production of wealth. I allude to this false argument not merely from an unwillingness to allow you to acquiesce in false reasoning, but because I conceive that some important consequences do result from the facts upon which the argument is founded. To avoid the possibility of misapprehension, I shall quote the very words of that author, whose style in this passage, as well as all through his work, is deserving of much praise for its perspicuity. In page 115, the argument proceeds in those words—"The principle that each additional application of labour and capital to the improvement of land effects a diminished proportional increase, is supported by the direct evidence of facts. When small capitals are laid out upon the soil, and cultivation is conducted in an unexpensive manner, the land proprietor, without trenching upon the farmer's reasonable profits, often receives half the produce as his rent; but when large capitals are invested in the soil, and the system of high farming is pursued, the proprietor, in order to leave the cultivator a reasonable return on the stock which he employs, must be satisfied to receive as his rent, a third, a fourth, or even a fifth part of the produce. This demonstrates that each additional quantity of produce, is raised at an increased expense. For if one hundred labourers raised, from a given surface,

four hundreded quarters of wheat, and two hundred of these replaced, with a reasonable profit, the capital which the farmer expended in setting them to work, then the remaining two hundred, or half the produce, might go to rent. And if two hundred labourers could raise eight hundred quarters, or in other words, if a double expenditure occasioned a double produce, then as four hundred quarters would afford the farmer the same return on the capital which employed two hundred labourers, as two hundred quarters had afforded him on the capital which put two hundred labourers in motion, the other four hundred quarters would be disposable ; or in other words, one half of the produce of the farm might still be appropriated as rent. It is only because the farmer cannot increase the quantity of produce in the same ratio in which he increases the quantity of work done upon the farm, that the proprietor receives a less proportion of produce as his rent. Where one hundred labourers raised four hundred quarters of wheat, then two hundred labourers could not raise eight hundred quarters, but would raise some less quantity, say seven hundred. Now the half of seven hundred quarters could not be taken as rent, because it requires four hundred to replace, with a reasonable return, the capital which the farmer expended in putting two hundred labourers to work, and therefore only three hundred, or less than the half of

the produce, remains as the land proprietor's portion. In the progress of improvement, the proprietor receives a constantly diminishing proportion of the whole produce, because the whole produce bears a constantly diminishing proportion to the capital which raised it."

I trust that it is almost unnecessary for me to point out to you the error that pervades the train of reasoning I have just read. It is inconsistent even with the theory of rent adopted by the ingenious author, and here attempted to be proved. It proceeds upon the supposition that 400 quarters is the produce of the last application of labour and capital to land, at a time when 200 quarters is sufficient to pay the labourers employed in raising the 400 quarters, and to give the farmer the usual profits on his advances ; and this state of things is supposed to exist before the land has been forced by an equal additional application of labour and capital to yield 300 quarters more. This could never be. It is impossible that land should be capable of yielding 300 quarters, to an application of labour and capital for which 200 quarters would be a sufficient recompense, and yet that such a power should not be made use of. Remember that when labour and capital are applied to land with a diminished proportional return, the cause must always be such a change of circumstances or of prices, as renders this return a sufficient remuneration.

ration for advances for which the same return would not formerly have been a sufficient recompense. But Mr. Torrens's argument proceeds on the supposition that cultivation can be extended, and additional capital laid out with a diminished rate of return, while the same advance of labour and capital requires the same remuneration as before.

This defective argument is resorted to by Mr. Torrens for the purpose of shewing that this admitted fact, viz. that as rent rises in amount, the landlord receives a less proportion of the total produce of the soil, is in itself a sufficient proof that successive applications of labour and capital to land are always attended with diminished returns. Now there is no necessary connexion whatever between those two propositions, and therefore we might reasonably have expected that the train of reasoning employed to prove the existence of such a connexion should be found to be erroneous. What makes such an error the more remarkable is, that all the examples given by writers on Political-Economy, to illustrate what is called the decreasing fertility of the soil, would rather seem to prove that not only the portion but the proportion of the produce received by the landlord is continually increasing. If you will take the trouble of examining the examples given by Ricard's Principles of Political-Economy, page 56, and of computing in each instance the amount of rent, and the total

amount of produce, you will find that the proportion of rent to produce seems continually increasing. And Mr. Senior, in a letter to Lord Howick, page 62, attempted to prove from this system, that rent must increase faster than gross produce. His calculations are however erroneous, being founded on the supposition that the successive soils of decreasing fertility are equal in extent. His calculations covertly assume this, which is unproved, and contrary to the fact. But in fact the landlord's proportion has been decreasing, and a very important conclusion may be drawn from this circumstance, viz. that the portion of produce which is raised by the last application of labour and capital to land, bears a considerable, and with the progress of population, an increasing ratio to the total amount of produce which was raised before such last application of labour and capital took place. I fear that I have not stated this conclusion in such a manner as to make the *vis consequentiæ* very clear and intelligible. But I hope that the few following remarks, with a little reflection on your part, may be sufficient to remove all obscurity from the subject. First, it is to be remembered that the capital most productively expended, is not necessarily most productive when referred to its total produce. The total produce depends upon the total amount of capital, and upon its rate of productiveness. Thus, if the rate of pro-

ductiveness of the first application of capital is equal to a return of thirty-fold, but that the amount of capital which admits of being expended so productively is only equal to £100, then the entire produce of such productive capital will be only £3,000. Now if the capital of the next degree of productiveness gives a return of only twenty-fold, while the entire amount of capital which admits of being expended with the second degree of productiveness is equal to £1,000, then the entire produce of the capital of the second degree of productiveness will be worth £20,000, while that of the capital of the first degree was only £3,000. A similar circumstance may exist with respect to lands of different degrees of fertility. If 100 fields of the most fertile land yield 100 quarters of corn each, and there is no more land in the kingdom of that degree of fertility, the entire produce of such fertile land will be 10,000 quarters. Let a field of equal extent of the next degree of fertility yield to similar cultivation only 80 quarters, but let there be in the country 1,000 fields of such fertility, and the total produce of land of the second degree of fertility will be 80,000 quarters, being equal to four times the produce yielded by land of the first degree. I have given those examples not for the purpose of proving any thing, but to explain the proposition which I am about to prove, viz. that the produce yielded by land of the

lowest degree of fertility, or to the last application of capital, not only may be, but actually is, on the whole, greater than that obtained from more fertile lands, or by earlier applications of capital. In what I am about to say, I shall make use of the expression, "resorting to land of a less degree of fertility," to signify all the different modes in which an additional portion of produce is obtained at an increase of expense, whether that increase of expense is caused by the diminished rate of return from the superior soils, or from the labour and capital being applied to new soil of an inferior quality. Adopting this form of expression, we should say, that as population increases, resort must be had to inferior soils for the necessary supply, and that the amount of soil of the last quality under cultivation is so great, that its produce exceeds that of all the other soils. Perhaps this proposition, when proved, may be understood more clearly. The fact is, that as additional supplies are raised, the landlord's absolute share of the produce is increased, while his proportional share is diminished. Now when an inferior soil is resorted to, the landlord gets an increased portion of all the corn that is raised, independently of this last soil. The portion of it that goes to labour and profit is therefore diminished, and this increase of the landlord's, and decrease of the tenant's share, is measured by, or is proportional to, the inferiority of

the last soil taken into cultivation. The increase of the tenant's share is equal to the produce of the last soil taken into cultivation. And as the tenant's share increases faster than the landlord's, this last quantity must be great, relatively to the inferiority of the last soil, and the tenant's share of the produce before this last soil was cultivated. The same effect might be produced by agricultural improvements causing a greater addition to the total produce of the soil than to the differences of the returns to successive applications of capital. In either case we would be warranted in concluding, if we judge of the future by the past, that the cost of production of corn, if it increases at all, must increase very slowly, and that with each step a greater increase of population must arise to create the necessity of taking another step. We shall afterwards see what a favourable effect this will have upon the condition of the labourer. On the next day, I shall proceed to the subject of profits.

LECTURE VIII.

GENTLEMEN,—It is frequently complained of as an unjust and an unreasonable thing, that the labourer, who seems to produce every thing by his toil, should not in return receive the entire, or at least a much greater part than he does receive, of what he has assisted to produce. That his wages are so low, is sometimes attributed to the wicked combination of employers, who take advantage of his necessities or his ignorance, to impose unreasonable and unequal terms upon him, in order thereby to secure enormous profits to themselves. Such arguments are, I believe, principally propagated by men who are conscious of their invalidity, and whose object it is to create disturbance, by stimulating the passions of the poor and ignorant, and persuading them that their poverty is caused by oppression or misrule. I shall not apply myself

now to the consideration of those arguments, persuaded as I am that they never can make any impression upon those who hear me now, and that those who adopt such arguments, or who acquiesce in them, are in general inaccessible to any considerations of justice, or to any arguments except those which are addressed to their own immediate interests. Still it is for other reasons important that we should investigate the circumstances which determine the amount of profits and wages, and then we shall incidentally observe that they both are confined within limits which it is beyond the power of the legislature, by any direct exertion of their authority, to extend. Here legislation and combination may do mischief, but cannot do good. They may destroy a source of revenue, but they cannot transfer it to another class. Violent, and unjust, and turbulent proceedings may extinguish profits, but they will not thereby increase wages : or they may depress wages, but will not thereby increase the rate of profits. Those propositions will, I trust, be made evident, when we shall have ascertained what profits are, what are the circumstances from which they are derived, and what it is that regulates their amount. The rules of justice do not appear to have much concern with the matter.

If the labourer should argue that the contract under which he received such low wages was

unequal and unjust, and that he had a right to repudiate it, and to demand employment at a higher rate of wages, since it is to him and his exertions that the fertility of the land is to be ascribed, let him however say how great a portion he could cultivate with the powers given him by nature, unassisted by any other instrument. With the spade and other implements of husbandry, he could do something considerable. But the spade could do nothing without the man, and the man could do very little without the spade. What shall determine to which the work is to be attributed. If a man's energies are rendered 50 times more productive by the assistance of this instrument, is the owner therefore entitled to demand and receive 49 parts out of every 50 which the workman executes. Certainly not, the workman would say, for I can procure a spade for 2s. 6d. from my neighbour the smith. Granted : but will such a price give the smith such a remuneration in proportion to his toil, as you think you are entitled to for yours. Well, the labourer might answer, I will grant to others the justice which I claim for myself, and give the smith 10s. for the spade, and that will not deduct much from the produce of my labour. But could the smith afford to sell a spade even at that price, if he were compelled himself to extract the ore from the bowels of the earth, to convert it into iron, to bring it to his forge, and to give it form and fashion. The labour

of a life would scarcely be sufficient for such an enterprize.

A further addition therefore must be made to the price of the spade, to pay the liberal wages which are to be received by those who toil to extract the ore from the mine, to convert it into iron, to bring it to the forge, to make the roads, the carriages, the ships which gave the means of transport, and above all, to those who erected and built the stupendous machinery which was employed in some of those undertakings, and the machinery again by whose aid the other machines were made. The man who buys a spade pays his proportional part of all those person's wages.

Here also a new element of complexity is introduced. The labourer who extracts the ore from the mine, cannot conveniently wait for his wages until it has gone through every process, and is sold to the consumer in its finished form. Were he compelled to do so, this circumstance would in itself be a considerable disadvantage, affecting those engaged in that occupation. It would diminish the competition among those labourers, and would justly and necessarily procure them a higher rate of wages. This, of course, would add to the price of the spade, and the effect would be the same if any person advanced to the miner the value of his work, to be reimbursed by the sale of the finished article. The person who makes the advance is only induced

to do so by the expectation of a profit, otherwise he will not take the trouble, or run the risk, or deprive himself in the mean time of the use of the money which he might possibly require for the satisfaction of his own wants. I have said enough to shew how soon the price of all things would rise beyond the power of the labourer to calculate, if any alterations should be made by law in the wages of all classes of workmen. What indeed the workman generally has in his mind, when he adopts the pernicious argument to which I alluded, is such a state of things as would increase his wages, without at the same time proportionally increasing the wages of those who produced commodities for his use. This would never take place for all, or for any class. If the wages of the labourer were arbitrarily increased by law, the commodities on which he expended them would rise in a still greater proportion, both on account of the increased wages of those employed in producing them, and the general waste and destruction of capital which an arbitrary interference with contracts never fails to produce.

What are the principles which regulate the contract between the capitalist and the labourer, and in the absence of legislative interposition, distributes the fruits of past and present industry between profits and wages? This subject at first appears a little confused, and there is some difficulty

in any attempt to elucidate it. But I think that the causes of obscurity here, consist rather in a difficulty of expressing certain propositions, than in any difficulty of conceiving or demonstrating them. Let us attend carefully to the important part which capital performs in the work of production, and we shall see how long a period must frequently elapse before certain labour has produced its full effects.

To analyze, for example, the cost of production of a cotton gown. The expense of freight forms part of the expense of the raw material. The price of the ship is paid by the freight of the different cargoes ; among the rest, by the cargo of which the raw materials of the gown formed a part. Of this freight, part is applied to the expenses of navigating the ship, and part to replace with the usual profits, the original cost of production of the ship. Of this cost of production, the price of the nails, for example, which were used in building the ship, forms a part. Again, part of the expense of making those nails, is the price of the machinery which raised the ore. Carry on this analysis in your mind, as far as your imagination dares to wander, and you will find in the most distant ages, certain employments of labour, and accumulation of capital, indirectly contributing to the production of this cotton gown. So that it is hardly too much to say that the first capital accumulated in the

empire may have had its effect in producing this gown; and what is more extraordinary, that remote capital may not have yielded all its profits until that gown was worn by its present possessor.

This last assertion may appear to be a startling or an obscure paradox. Let us examine it more minutely. If I fail to convince you of its truth, let me at least make it intelligible. All the commodities which men consume, and which can be made the subject of exchanges, owe their existence and their value to labour. The exceptions to this are very trifling, and are of such a nature that they do not vitiate any of the conclusions drawn from it. On the other hand, all labour, properly so called, has consumption for enjoyment, or what I shall call unproductive consumption, ultimately in view. In making use of this expression, I am anticipating the subject of production and consumption, which I do not intend to enter fully upon for several months. To explain merely what I mean by unproductive consumption will serve my present purpose. I consider every consumption unproductive, where the value of the commodity consumed is destroyed, and is not transferred to some other commodity. In such consumption consists all the enjoyment that man derives from wealth. Thus, the food eaten by the labourer is unproductively consumed, its value is not transferred to any other commodity. It is true that the labourer, by his toil,

may create an equal or a greater value than what he has consumed. But it is the value of his labour, not of his food, that reappears in the articles he produces. Whether he saves or spends his wages, the value of his work will be the same. What he does spend is consumed for his enjoyment. But there is also a consumption where the value of the article consumed is not destroyed, but is transferred to some other commodity. This I call reproductive consumption. Thus the coal consumed in working a steam engine employed in making cotton goods, is reproductively consumed. It forms part of the cost of production of the muslin or calico, and its value reappears in the increased value it gives to the article which was produced by its means. I think it right to apprise you, that I do not employ those terms exactly in the same sense as some other writers, and that they would call the consumption of food by a labourer productive, while I call it unproductive. It would be out of place now for me to prove that such a use of the terms is inconsistent and inconvenient. It involves a false hypothesis, and renders it impossible to distinguish between productive and unproductive consumption. For my present purpose it is enough to state the sense in which I use them, and the distinction I make between them. The question to be asked is this—*Is enjoyment or reproduction the immediate*

object of the consumption? By enjoyment I understand every advantage or pleasure which the consumer derives from the use of the article, without the mediation of any exchange.

Such unproductive consumption is the end which all labour has ultimately in view. The workman himself may not have this object in view. He works, because he is employed and paid by the manufacturer, who employs him and pays him, because he hopes to sell to a merchant the produce of his work. The merchant may sell to the retailer, and it may be the subject of fifty exchanges, but each person buys it either to sell it again or to consume it. But every person who buys and sells it, does so for the sake of profit, and except in the peculiar case of money, it cannot be bought by every body merely for the sake of selling it again, and thus be continually increasing in price. It at last comes into the hands of a person who purchases and consumes it for the sake of the enjoyment it affords him. Until that event takes place, the labour which produced it has not been productive of any enjoyment or utility to man. And all those who were employed in producing or exchanging it, must have derived their wages and profits from some other productive source. And this is not the less true, although centuries should intervene before the ultimate consumption takes

place. Neither the labourer nor the capitalist however can remain so long a time without his wages or profits. Let us examine how this is obviated. The labourer is paid by the manufacturer who employs him, and he can then expend his wages in any manner he thinks proper, and consume something produced by the toil of others, although nothing produced by him has yet been consumed by any one. He is subsisting on an advance derived from some person who, for the sake of profit, abstains from an enjoyment within his reach. The manufacturer, in like manner, sells to the merchant, the latter to the retailer, who sells again to the consumer. Each receives the amount of his advances, with a profit, from the next person into whose possession the article comes, and each pays the preceding owner with goods previously existing, which, instead of thus expending for profit, he might have converted into a source of enjoyment. But there is a suspension of enjoyment from this article, until it comes into the possession of the unproductive consumer. He pays for the labour of making it, and all the intermediate profits. He need not pay this out of revenue existing prior to the manufacture of the article. But he pays more for it, in consequence of the delay. And although each labourer or capitalist has only the sale to his immediate successor in view, yet it is the unproductive consumer that sets

the whole in motion ; and if all hopes of its unproductive consumption were destroyed, the whole system of makers and sellers would stop, and the goods, without the possibility of sale, or of further labour or capital being expended upon them, would remain in their existing state, in the possession of the existing proprietors. No direct advantage is produced by any goods, except at the moment when all or some part of their value is being destroyed.

A confusion of ideas is here very apt to arise, if we do not distinguish, with sufficient care, between the sources from which commodities are derived, and the occasions on which they are distributed. With such a confusion, an answer might be given to what I have said, by replying that labour might be productive of enjoyment long before the value produced by it is acquired by the unproductive consumer, that it might set other labourers in motion, and that they are thus enabled to support their families, &c. Without denying this, or interfering in the least with any doctrine respecting the importance of finding occupation for the labourer, I shall for the present only request you to keep in mind the distinction to which I have drawn your attention, and you will perceive that in all such cases those employments do not produce the goods which the labourers consume, but are only the occasions on which they are distributed.

The goods must have been previously in existence, independent of the labour by which, on those occasions, they are earned. Thus, although from unproductive consumption the consumer alone derives any advantage, yet labour is only useful so far as it supplies or produces the materials for unproductive consumption. And this remains equally true, although the value produced may have been repeatedly transferred from one commodity to another. Political-Economy regards value only. The commodities are the substances in which this important quality resides. In this respect there is no essential difference between the cases in which the substance is changed, or remains the same. To the ship is transferred the value of the timber of which it is composed, which has only undergone a mechanical alteration, and part of the value of the machinery employed in constructing it, and of the coal burnt in those processes where fire is required, although not a single particle of that machinery or that coal forms part of the ship to which their value has been transferred.

Now, the labourer who produces goods ultimately destined for consumption, cannot wait for his wages until those goods are ready to be consumed, and then consume them, or what he can receive in exchange for them. He cannot wait so long, and where several have contributed directly or indirectly at different intervals, it would be impos-

sible to settle their contending claims. All this difficulty is removed, the employer pays wages to the labourer according to a contract made between them. He pays the wages immediately, and in return receives the value of his labour, to be disposed of to the best advantage. The employer does this for the sake of the profit which he expects to make by the transaction. Hence the value of the labour fixed in, or transferred to, any article, is greater than the wages of that labour. The difference is the profit made by the capitalist for his advances: it is, as it were, the discount which the labourer pays for prompt payment. It is in the capacity of consumer that the labourer has any concern with the rate of profits. The addition which the delay makes to the value of the labour, is exactly equal to the subtraction from its wages made for prompt payment. If the labourer, owing to profits being high, receives only 5s. for making an article which sells for 6s. it is owing to those profits that the article sells so high as 6s. instead of 5s.

The rate of profits depends upon the proportion which exists between the advance made by the capitalist, and the return which he receives, and the length of time for which that advance is made. For the sake of simplicity, let us suppose that all advances are made at the same interval, say a year, from the time of sale; and having by this

abstraction removed all consideration of the length of time, we shall say that the rate of profit depends upon the proportion between the advance made by the capitalist, and the return which he receives. Let us also suppose that this advance is always made in the form of wages paid to the labourer, and it will follow, that the rate of profit depends upon the proportion in which the value of any commodity is divided between the labourer and the capitalist; since, on the suppositions I have made, the one will represent the absolute amount of the advances made by the capitalist, the other the absolute amount of his profit. This proposition may be considered useless or untrue, as depending upon false suppositions. It is, however, true in those cases in which it does apply, and all other cases may, with a little care, be reduced to them. And such reduction must be made, whenever we resort to labour as a common measure for comparing the values of commodities. Whatever advances are not made in labour, must be reduced to the measure of labour. If a capitalist expends £50 in raw materials, it must be considered as so much advanced on account of labour. In order to make use of labour, as a measure of value, we, as it were, reduce every thing else of value to that denomination. This is similar to what we naturally do when we measure a person's property, and compute how much money it is worth, and say

a man is worth £100,000, although his property consists of various commodities besides money.

Mr. Torrens's objection to the proposition in question arises entirely from his not understanding it in this sense. I shall give his argument in his own words, in the introduction to his *Essay on the External Corn Trade*, page 15—"The doctrine that profits rise and fall, as wages fall and rise, Mr. Hill gives up in all cases, except those in which the terms are used, not according to their accustomed acceptation, but with reference to proportions. It may be easily shewn, however, that the doctrine that profits depend on wages is equally untenable, whether the terms alteration of wages, alteration of profits, are employed with a reference to proportions, or whether they are used in relation to quantities. Let us suppose that a capitalist advances to a labourer 20 quarters of corn as wages, and 20 quarters as seed, and let the produce returned to the capitalist at the end of the year be 60 quarters. In this case, if we deduct from the whole produce, as Mr. Hill contends we should, what is necessary to replace the seed, 40 quarters will remain to be divided between wages and profits: and as by the supposition, wages are 20, profits must be 20 also; that is, as the whole advances of the capitalist for wages and seed were 40 quarters, and as he has 20 quarters remaining over and above the replacement of those advances, the rate

of his profit will be 50 per cent. Now let us vary our supposition, and assume that while the quantity of labour employed, and the quantity of produce obtained remain exactly as before, an improvement takes place in cultivation, which enables the farmer to crop his field with 10 quarters of seed, instead of with 20 quarters. In this case, when from the whole produce of 60 quarters, the 10 quarters required to replace capital, in Mr. Hill's sense of the term, are deducted, 50 quarters will remain to be divided between wages and profit. Let these 50 be equally divided, as the 40 quarters formerly were, between the labourer and capitalist, each getting 25 quarters, and then the shares or proportions will remain exactly as before. But though the proportions or proportional wages remain unchanged, yet profits will have risen from 50 to upwards of 70 per cent. The capitalist, after replacing his expenditure of 25 quarters for wages, and 10 quarters for seed, will have a surplus of 25 quarters remaining, while in the former case, after replacing an expenditure of 20 quarters for wages, and 20 quarters for seed, he had a surplus of only 20 quarters remaining."

Now in all this I perfectly agree with Mr. Torrens, with this slight verbal difference, that in the two cases which he supposes, I would not say that proportional wages remained the same, because I should consider the sums spent in seed as spent

in wages. This supposition is necessary in order to take up production from the very commencement. The value of the corn consumed as seed may be measured in wages and profits ; and so much as consists of profits, adds to the total profits of the capitalist, but adds nothing to the rate of profits, since this addition is compensated by the greater length of time during which the capitalist is deprived of his advances. We use the term capitalist and labourer, although there has been a succession of capitalists and many labourers employed in production.

To the principal proposition, all verbal objections may be obviated, if it is stated thus. If all advances are made at the same interval, say a year before the sale of the article, and consist exclusively of the wages of labour, the rate of profits will depend upon, or will be the proportion between, the shares of the value of the complete article received by the labourer and the capitalist. But if some of the advances are made for other purposes than the payment of wages, the same proposition will be true, by considering such advances as if they were so much money then paid as wages, and if the advances were made at different intervals from the sale, the average of those intervals must be taken, and in proportion as that average is less or more than a year, the rate of profits must be considered as increased or diminished in the same

proportion. Of those two qualifications, the second is clearly understood in every statement, and the first is only used in order to prevent the necessity of taking into consideration the succession of capitalists from the beginning to the complete work. The nature of those two corrections, and their effect, are the same, whatever the rate of profit is ; and therefore it is usual, still having those corrections in view, but not expressing them, to say, that the rate of profit depends upon the proportion of the shares of the final value received by the labourer and the capitalist.

But Mr. M'Culloch's argument against this proposition not only contains that misapprehension of its meaning and qualification which I have already remarked, but also involves a serious miscalculation, from which, I conceive, another very considerable error has originated. I shall give his argument in his own words—"Suppose an individual employs a capital of 1,000 quarters, or £1,000 in cultivation, that he lays out the half of this capital in the payment of wages, and obtains a return of 1,200 quarters, or £1,200. In this case, assuming he is not affected by taxation, his profits will amount to 200 quarters, or £200, being at the rate of 20 per cent., and will be to wages in the proportion of 2 to 5. Suppose now that the productiveness of industry is *universally doubled*, and let it be further supposed that the

additional 1,200 quarters, or £1,200, is divided between the capitalist and his labourers in the former proportion of 2 to 5, or that the capitalist gets 343 quarters, or £343, of additional profits, and the labourer 857 quarters, or £857, of additional wages. In this case, both parties will obtain the same proportion of the produce of industry as before, and if we look only to them, we must say that neither wages nor profits had risen. But when we compare, as is invariably done in estimating profits, the return obtained by the capitalist with the capital he employs, it will be found, notwithstanding the constancy of proportional wages, that the rate of profit has increased from 20 to 54 per cent.”—*Prin. of Pol. Econ.* p. 481.

The first remark to be made upon this argument is, that it does not make the correction which is necessary, and therefore so far his argument, if correct, does not concern me, since we do not take proportional wages in the same sense. The correction must be made by supposing that the 500 quarters expended in seed, implements, &c. are as so much wages paid to the labourer. In any other sense, proportional wages cannot be the same in different employments. But the error which I am now about to point out is more serious in itself and in its consequences. Mr. M'Culloch calculates the rate of profits, after this increase of productiveness of labour, as if the advances of the ca-

pitalist remained exactly as before ; the profit is £543, and he supposes the advance to remain £1,000 ; whereas, on his supposition, the advance made by the capitalist is £500 for seed, and £500 for the old wages, and £857 for the additional wages, in all £1,857 ; and the rate of profit is only 30 per cent. instead of 54 ; and even this increase of profit is caused by the diminution of proportional wages. This calculation has led Mr. M'Culloch constantly to assume, that an increased productiveness of industry is one of the causes of a rise of profits. But I think that an accurate analysis of the subject would lead to the conclusion, that if the productiveness of industry were universally doubled, the condition of the labourer would be considerably improved, but the rate of profits would remain the same as before. The wages of labour, and therefore the advances of the capitalist, would be doubled, and as his receipts would be also doubled, the rate of profits would remain as before. At the same time, I think it is utterly impossible to attach any precise meaning to the expression, " that the productiveness of industry is universally doubled." In the example which I have just cited from Mr. M'Culloch, I should be disposed to say that the productiveness of labour was more than doubled, since the produce is doubled, while the advances measured in labour were diminished.

In general, by capital is understood all wealth devoted to production or exchange for profit ; and by stock is meant such wealth as is devoted to unproductive consumption. This distinction is not always adhered to. Capital is frequently used to signify what may be capital, although it is not used as such. Capital and profits are so analogous to principal and interest, that in furtherance of the analogy, the word capital is frequently used in an extended sense. Thus, if a man spends annually the interest of his money, or the profits of his capital, he will neither increase nor diminish his wealth ; but if he spends more, he will become poorer ; and as in the one case he is said to be spending his principal, so in the other he is said to spend his capital, although, properly speaking, he does not spend his capital, but converts to stock, and uses as such, what ought to be employed as capital. That may be capital at one time, and for one person, which at another time, and for another person, is stock ; but this does not prevent the things themselves from being distinct, even although there are a few cases in which a thing may appear to partake of the nature of both. It is the use to which any thing is dedicated that determines whether any thing is to be considered as capital or stock. I shall not now enter into any consideration of the question—What regulates profits, and determines

their amount? I have attempted merely to shew what they are, and how their amount is to be calculated. My next lecture shall be entirely devoted to the investigation of the laws which determine their actual amount.

LECTURE IX.

GENTLEMEN,—The theory of rent which I endeavoured to explain in a preceding lecture, has been made the foundation of a most ingenious theory of profits. It supposes, and correctly, that as population advances, there arises a necessity of resorting to inferior soils for the requisite supply of provisions, or of forcing the soils already in cultivation to yield a more abundant produce. In either case, labour and capital become less productive. The same amount of labour and capital is employed to raise a less quantity of corn. That this must be the case, when inferior soils are resorted to, is evident, the inferiority of the soils consisting in this, that to the same expense of cultivation they yield a less return, or at least that their produce does not bear so high a proportion to the expense of cultivation as in the case of better

land. The same consequence follows when the additional supply, or any part of it, is forced from the land already cultivated ; it being a property of all lands to yield each additional supply required from it, at a more than proportionally increased expense. Agricultural improvements have a contrary tendency ; they diminish the cost of production, and thereby render the labour and capital employed in farming, more productive. This effect of improvements is sometimes less than, sometimes equal to, and sometimes greater than, the opposite effect produced by the increase of population, and accordingly the productive powers of agricultural labour sometimes diminish, sometimes remain stationary, and sometimes increase, as the society advances in population. On the whole, however, it is generally supposed that the march of population is more certain and constant than that of improvement, and must outstrip it in the long run, and therefore that there must be a constant tendency to decrease in the productive powers of agricultural labour. Whether this tendency is counteracted wholly or partially, it leaves undisturbed the theory of rent, which rests upon this principle, that if a less abundant supply of corn were required, it could be produced at a less proportional expense than the actual present supply ; or that if a larger quantity were acquired, that addition could only be produced at a greater proportional expense. From

these principles, it evidently follows that some corn is raised with a less cost of production, exclusive of the rent, than other portions are ; but all corn of the same quality will have the same natural and average price, viz. such a price as may be sufficient to remunerate the grower of that quantity which, in order to satisfy the wants of the society, must be raised under the most naturally disadvantageous circumstances. But the corn which is raised with less expense, under more favourable circumstances, being sold at the same price, will leave an excess of profit to the grower of it. This excess, originating not in the superior skill of the farmer, but in the superior advantages of his farm, will necessarily be required and paid as rent. Thus rent equalizes the profits upon all farms, since whatever advantage one farm, from its fertility or situation, may have over another, is demanded by the landlord as rent.

But it is alleged, and I think without sufficient reason, that rent exercises a considerable influence over profits, and some of the most distinguished writers have adopted the theory, first, I believe, proposed and explained by the late Sir Edward West, which considers profits to be almost entirely regulated by the fertility of the last and worst soil that is brought under cultivation. Mr. M'Culloch, in his "Principles of Political-Economy," page 486, lays down the doctrine in the following words, which

he prints in italics:—" *The decreasing fertility of the soil is therefore, at bottom, the great and only necessary cause of a fall of profits.*" The theory is an ingenious one, and I should feel much pleasure in assenting to it, and it is with corresponding regret that I have come to the very contrary conclusion, namely, that the decreasing fertility of the soil has scarcely any direct effect upon the rate of profits, and that it exercises only a remote influence, if any, by its effect in retarding the increase of population.

The proof usually given of the theory to which I have alluded, may be thus briefly stated. When inferior lands are taken into cultivation to satisfy the increasing wants of the society, the same amount of labour and fixed capital produces a less return than before; but this diminution will not, and cannot, entirely fall upon the wages of labour, since the labourer could not support himself and family if it took place; some part of it must therefore fall upon the profits of agricultural capital, and since the profits of capital employed in different trades will preserve their usual level, this permanent depression of the profits of agriculture must be accompanied by a corresponding permanent reduction of profits in all other trades; and thus as society advances in population, and is compelled to resort for subsistence to corn raised at an increased expense of capital and labour, the

profits of every trade must, at the same time, decline.

The supporters of this system universally, I believe, maintain, that the increase of capital in any country, unaccompanied by an increase of population, has not even any tendency to reduce the profits of capital, since they say that the last capital employed in any manufacture will necessarily be as productive as the first, and probably more so ; and they exemplify it by saying, that if a thousand hats were required, the last would not be made at a greater cost of production than the first, and so on for any greater number.

Before I proceed to give what I consider a more accurate system of profits, and of the causes which determine their amount, and produce their rise or fall, I shall briefly point out the fallacies in the two arguments of which I have just given you a sketch. In the argument used to prove that the decreasing fertility of the soil is the great and necessary cause of a decline of profits, it is, I conceive, unwarrantably assumed, that the effect cannot be entirely borne by the labourer, and that therefore of necessity some part of it must fall upon capital. This necessity I cannot perceive. As population was advancing, the wages of labour must have been more than what would be necessary to the subsistence of the labourers, with such families as would keep up an unvarying population ; they may sus-

tain some reduction, and why not the entire amount of the reduction that has taken place in the returns made to labour and capital? It should be remembered that these diminutions in the returns to capital and labour proceed by imperceptibly small differences, and not by sudden steps, and that as long as population increases, the labourer may sustain some reduction in his wages. And even if the labourer cannot bear the entire reduction, and continue to support himself and his family as usual out of the diminished wages, what is it that determines how large a portion of the reduction shall be borne by *him*, and how much, from *his* inability to bear the whole, will be thrown upon the capitalist? To say merely that part must be borne by the labourer, and the rest by the capitalist, is a very loose way of regulating a matter which must be settled by contract. Even on the principle against which I am contending, I see no way of determining how much of the diminution the labourer can bear, except by leaving him such wages only as shall be sufficient for his subsistence, and that of such a family, on an average, as shall sustain a merely stationary population. This cause, therefore, of a reduction of profits, can only operate at the period when population ceases to increase. But I do not say that it is expedient that the wages of his labour should be thus reduced, but merely that while population is increasing, he cannot occasion a

fall in profits by his inability to bear a reduction of wages. The matter is left open to contract, where the only circumstance which increases or causes the rate of wages is the competition of the employers, and this will not be increased by an increase in the number of labourers, unaccompanied by an increase of capital.

In the argument used to prove that the increase of capital has no tendency to diminish the rate of profits, the fallacy, I conceive, lies in the assumption, that without an increase of population an increased supply of any article can find purchasers without a reduction of price, and that therefore the additional capital can be employed in the same manner, and with the same rate of profits, as the old capital was before such addition took place. This I think is not true, but it is enough to say that it has never been attempted to be proved.

But I shall content myself with those allusions to the fallacies contained in those arguments, since the most satisfactory refutation of any error is the proof of the opposing truths; and for my purpose, it is enough if you will grant me your attention for a few moments, without rejecting any proposition merely because it is inconsistent with the theory to which I have just alluded. I think that were it not for the progress of improvements and discoveries in the arts, and the increase of population, the rate of profits would continually decline, as the

quantity of capital accumulated in the country increased.

Capital is useful, by advancing to the workman the value of his labour, before the produce of his labour is sold to the consumer. It also assists the labourer materially, by supplying him with instruments, tools, and machinery. These, which I may call by one general name, machines, are of various degrees of efficiency. By their help the labourer can execute more work than he could possibly do without their assistance. Some make his labour twice, some four times, and some ten times as efficient. It is however evident that the owner of a machine which gives assistance in this manner to the labourer, will be paid for the use of it in proportion to its value, and the injury it receives from use, and the time during which it is lent, and not in proportion to its effect in increasing the efficiency of labour. This is an immediate consequence of the principle of competition, which produces an equality between all the advantages and disadvantages of the different modes of employing capital. If the owner of one machine could obtain more for its use than the owner of another of equal value and durability, people would purchase, and artificers would then make the former rather than the latter, until the profits of each were reduced to their level. This level must be determined by the less efficient machine, since the sum paid for its use can never exceed the value of the

assistance it gives the labourer. Thus, if with the aid of any instrument a labourer could execute exactly twice the quantity of work which he could perform without its assistance, then its use cannot be worth more than half the value of the work which the labourer performs with its assistance, that is, equal to the wages of the labourer during the same time. If more were demanded, the labourer would find it more advantageous to forego its assistance, and the employer would have the same quantity of work performed more cheaply by two labourers unassisted, than by one with the machine. Thus the sum which can be paid for the use of any machine has its greatest limit determined by its efficiency in assisting the operations of the labourer, while its lesser limit is determined by the efficiency of that capital which without imprudence is employed in the least efficient manner ; and these principles are not altered, whether the use of the machine is paid for in the first instance by the labourer, or his employer, or whether they make or purchase the machine, and reimburse themselves by its profits for the labour or expense it costs them. The profits of capital employed in every industrial undertaking must find their level, and the height of that level must be determined by the profits of that capital which is naturally the least efficiently employed.

In order to consider more accurately the manner

in which different portions of capital are employed, with different degrees of efficiency, in assisting labour, and rendering it more productive, I shall make the supposition of a society, which for simplicity I shall suppose perfectly destitute of capital at the commencement, but possessed of all the skill and information which exist among the inhabitants of these countries at the present day. Capital operates in rendering labour more productive, principally by these means—1st. By assisting the labourer with suitable machinery, including under this term all instruments, from the rudest and simplest tool, to the most exquisite and complicated machine. 2ndly. By advancing to the labourer the means of his subsistence, or the value of his labour during the progress of his work, and thus enabling him to remain steadily at his work, disengaged from the necessity of producing his own subsistence. Without capital applied in this manner, and belonging either to the labourer or his employer, little progress could be made: every man would be constantly occupied in producing the means of his own subsistence, and it is evident that little, if any, machinery could be produced, as the labourer is not supposed to have provisions to maintain himself while making such instruments. This application of capital to the support of the labourer, until his work has arrived at maturity and is fit for consumption, is therefore prior to the former,

which consists in the introduction of machinery. They both agree in this, that by means of capital properly employed, labour, at the end of a certain period, will have produced goods of more value and utility than it could have done if it had been set directly to the production of such goods, without deriving any assistance from capital.

It is not easy to conceive by what slow steps the first accumulations of capital must have been made. Capital appears entirely the product of labour and previous capital. All, even the simplest kind of machinery, is itself produced by labour and machinery ; that labour itself requiring to be supported by provisions already accumulated ; that is, in other words, by capital. The matter appears to go in a circle, capital being alike the offspring and the parent of capital. Imagine a number of intelligent and industrious men, placed in a fertile country, in full possession of all the gifts of nature, but utterly destitute of capital. With what difficulty would they eke out a miserable subsistence, possessing no tools except what they could fashion with their hands, and teeth, and nails. It is probable that they would quickly relapse into barbarism. But if undaunted perseverance and industry should rescue them from such a fate, they would have immense difficulties to encounter, and their first progress in wealth would indeed be slow. If, however, any succeeded in procuring something beyond the means

of his present support, and that some should do so is necessary, on the supposition of any progress in wealth taking place, he would then be able to command a certain quantity of the labour of other people, by offering them in exchange for it as much of the means of subsistence as they could have procured by employing it for themselves. This capitalist must then make it his business to endeavour to make that quantity of labour which he can command as efficacious as possible. This will probably be effected by employing part of his capital in paying labourers for making tools, and part of it in paying labourers who use those tools when made. Those tools must of course be such as, in proportion to the cost of production, or labour expended in their fabrication, will be most efficacious in increasing the productive powers of labour. Suppose those tools to be spades, or any other instruments of agricultural or manufacturing labour. As soon as one is made, he may put this first machine into the hands of the ablest labourer he can find, paying him as wages, so much as, without the aid of such an instrument, he could earn for himself. The profits which the capitalist or owner of this instrument will reap, will be the difference between the quantity of work which the labourer can do with and without its assistance. But as the number of such instruments increases in the hands of the same or different capitalists, other and inferior

labourers must be employed to use them, and according to the principle which I have already laid down, the rate of profits must be determined by those cases in which the efficiency of capital is the least ; that is, on the supposition I have just made, the profits of a single tool will be equal to the difference of the quantities of work which the feeblest labourer could execute with and without its use. It cannot be more, for then the labourer could earn more by declining its assistance ; and it ought not to be less, for as there are not supposed to be instruments enough for all, the competition of labourers will compel the inferior labourers to accept such wages as will leave this profit to the capitalist, as the latter will have the choice among several labourers equally good, some of whom must necessarily work without any capital. But as the quantity of capital increases within the country, other causes will come into operation to diminish the profits of this kind of instrument : as soon as a sufficient number of those instruments is in existence to satisfy the wants of the society with the goods produced by their means, more cannot be employed with equal effect, since their products in such cases could not continue to be sold at the usual prices : and the owners of capital now becoming more plentiful, must sustain a reduction of profits, either by employing more in the usual manner, and selling their goods at reduced prices, or by

furnishing their labourers with tools, which, though more effective than those hitherto used, are expensive in a still greater proportion, or by giving it altogether a different direction, and making other instruments to assist labour of some other kind. But in every case the profits of capital will be regulated by that portion of it which is obliged to be employed with the least efficiency in assisting labour, since none will be diverted to this employment as long as the owner thereof can derive a greater profit by giving it any other direction.

This extends to the profits of capital that principle of an equality between the supply and the effectual demand which in all cases regulates value. The price is always equal to that sum which is compatible with the entire supply being disposed of. Much more than this it never can be, since on this supposition a part of the supply would remain unsold, the proprietors of which, to avoid the loss consequent upon having a useless stock of articles left on their hands, will reduce their prices, and by competition, diminish the price of the article elsewhere. Neither can it be much less, since the possessors of goods will not readily sell them for a less price than they can get. But from the very meaning of the terms, it is manifest that all can get that price which produces an equality between the supply and the effectual demand. In the case of capital and profits, this equality between the supply and

the effective demand is produced by such a rate of profit as is equal to the assistance which is given to labour by that portion of capital which is employed with the least efficiency, which I shall call the last portion of capital brought into operation : and for the reasons already mentioned, the rate of profits cannot be much higher or lower than this. This subject may perhaps be made clearer, if we pursue a little farther the analogy between the price of goods and the profits of capital. In each alike we may remark, that there generally exists among some an intensity of demand, which however exercises no influence upon price or profits. The intensity of the demand is the sacrifice one would make to obtain any commodity, if the alternative were to be compelled to remain without it. The high price to which provisions rise in times of scarcity, is a proof of the intensity of the demand for them at all times. It proves the price which persons are willing and able to pay for them, when the alternative is to starve. And yet, although the desire of food is equally imperious among the rich in times of plenty, it does not lead them to pay this high price for provisions, because when food is abundant, it could not all be disposed of at such prices ; it must fall to such a sum as will bring the effectual demand to an equality with the supply, and then, however intense any man's desire may be, it will not lead him to pay a high price for

that which he can as well procure on cheaper terms.

In the same manner, if a spade makes a man's labour twenty times as efficacious as it would be if unassisted by any instrument, $\frac{1}{20}$ only of his work is performed by himself, and the remaining $\frac{19}{20}$ must be attributed to the capital. And this is the measure of the intensity of the demand for such an instrument. A labourer working for himself would find it for his interest to give $\frac{1}{20}$ of the produce of his labour to the person who would lend him one, if the alternative was that he should turn up the earth with his naked hands; or if he worked for another, his employer might pay a similar sum for the purpose of supplying him with an instrument. But this profit is not paid, because on account of the abundance of capital in the country, much must be employed in cases where, in proportion to its quantity, it is not so capable of multiplying the efficiency of the labourer; and the profits on this portion must regulate the profits of the rest.

You may remember that the effect of demand and supply, in regulating the price of commodities, is frequently slightly influenced by the cost of production, which determines the average prices, and prevents buyers and sellers, especially in the case of the more durable manufactured commodities, from departing very far from those prices to which they know the value of the article will soon conform

itself. But of capital there is not, properly speaking, any cost of production, except that sacrifice of the present to the future which is made by the possessor of wealth, who employs it as capital instead of consuming it for his immediate gratification. The amount of this sacrifice varies very much in different ages and countries, and even in different persons of the same age and country. In many instances it is very slight, since we find that many persons save without any prospect of profit, but merely from the love of accumulation, or the preference of the future to the present. On the other hand, many spend, in their present gratification, what they know they might profitably employ as capital. This prospect, however, of deriving a profit from their accumulations, is a strong additional motive to save, although its influence will vary considerably, according to the manners, habits, disposition, circumstances, and general situation of the country. It will not generally be strongest where the rate of profits is highest, although, *cæteris paribus*, it would necessarily be so. But without departing from my present purpose, I cannot now enter upon the enquiry of the circumstances, which combined with the rate of profits, will have most influence in strengthening the principle of accumulation in any country.

From what I have said, it may sufficiently appear that some portion of capital must be employed to

less advantage, principally on account of the following causes:—1st. Inferior labourers must be employed to use the instruments provided by the capitalist. This, although a real, is yet a slender source of the diminished rate of profits. 2ndly. In order to find employment for all the increased capital, machinery must be resorted to, of greater value in proportion to its efficiency, when labourers are not numerous enough to create a demand for all the instruments of the more efficacious kind that can be procured for them. 3rdly. Articles which are produced partly by means of capital, will overstock the market for them, and must be sold cheaper; and more articles will be made by various descriptions of machinery, which with a higher rate of profits could not exist, as such profits could be procured only by means of such prices as purchasers would be unwilling to pay. These causes of low profits, the effects of capital accumulated in the country, generally come into operation all at the same time, although it is convenient to consider them separately. Each capitalist will endeavour to get as much profit as he can, and his interest, and the necessity of the case, will be his guide in determining him to employ more labourers, or to give higher wages, in order to prevent other capitalists from withdrawing them from him, or to sell his article cheaper, in order to prevent the goods, now produced in greater quantities

than heretofore, from remaining on his hands unsold.

It may be thought that this analysis of profits is imperfect, as applying only to the profits of that portion of capital which is employed in machinery, or in assisting labour; but that I appear to have left altogether out of consideration the profits of that portion of capital which is employed in paying the wages of the labourer, or in advancing to him the means of his subsistence while the product of his labour is incomplete or unsold. This is usually called circulating capital, and it is evident that the profits of this must be regulated by the profits of fixed capital. Both must keep their level, or bear their natural proportion to one another; and I have confined my investigations to fixed capital, because I conceived that its profits admitted more readily of a comparison with labour, being regulated by that portion which the necessity of employing all the capital within the country compels to be least efficiently employed.

The additional capital is so mixed up with the former quantity, that no separation can be made, except in imagination. A machine may render labour 1,000 times more productive, and yet may partly consist of that capital which is least efficiently employed, since perhaps a similar machine, made in a less expensive manner, might be nearly as efficient in increasing the productiveness of labour. In such

a case, I consider the difference in expense between the two machines as the last application of capital in this respect, and the difference of their efficiency is the measure of the efficiency of such last application. On a future occasion, I shall attempt to point out the secondary causes which influence the rate of profits, and the effects which low profits, produced by increased capital, exercise upon the prosperity of the country. In my next lecture I shall call your attention to the primary causes which regulate the wages of labour.

LECTURE X.

GENTLEMEN,—Our next subject of enquiry is naturally relating to the wages of a labourer, and what it is that determines their amount. In their whole science of Political-Economy, there is no subject more important than this. The class whose livelihood depends upon the wages they receive as a remuneration for their labour, is a very numerous one. In Ireland it is, I believe, more than equal to all the other classes. In England not quite so much. There is no question, therefore, that we should feel so desirous of resolving with accuracy as this, how far, and by what means, legislation can promote the prosperity of this numerous class of our fellow countrymen—whether by directly regulating their wages by law, or by making such wise rules for the promotion of trade and industry as will enable the labourer, by fair contract, to procure

from his employer an adequate remuneration for his toil. What adds a peculiar importance to such enquiries as those we are now entering upon is that the opinions held respecting them may exercise an immense influence over the peace and happiness of the country, independent of the effect they may have upon legislation. This it is that makes it so important that all should be aware of the truth. As far as legislation is concerned, false opinions held by a few might be disregarded ; but obedience, peace, and order, are more likely to prevail where every person sees that he cannot attribute his misfortunes and difficulties to the state of the laws. Those who live upon the wages of their labour, form not only the most numerous, but also the poorest, and the most ignorant class of society. It comprises those who, when they suffer, are the least able to assist themselves, or to investigate the causes of their calamity. Sudden vicissitudes in their small incomes generally arise from causes which they cannot be aware of, and over which, even if they knew them, they could exercise very little control. The rich man whose income is diminished, may retrench a little from his superfluities ; but to the poor labourer, a diminution of income means a deprivation of some of the necessities of life. I shall not at present enter upon those enquiries which relate solely to the vicissitudes of trade, and those periods of unusual prosperity or adversity which occasion-

ally throw a momentary light or shade upon the condition of every order of society. I shall for the present confine myself to those causes which determine the permanent, natural, or average rate of wages.

There is one cause commonly assigned for the relative wages of labour in different countries, to which I cannot agree, and which is generally supported by a confused species of reasoning, confusing primary and secondary causes, and mixing metaphor and analogy with apparent demonstrative reasoning. The doctrine I allude to is this, that the value of labour, like every thing else, depends upon the cost of production, and that the cost of production of a labourer is that sum which according to his natural or artificial wants, is sufficient to support the labourer, together with, on the average, such a family as is necessary in order to keep up the population of the country, and to enable it to increase or remain stationary, according as the wants of the nation require an increasing or a stationary population. We know how the cost of production of any article has the power of regulating its average price, since the being able to procure such a price is the only and the necessary condition on which any persons will continue to produce the article. But the attempt to prove this truth by analogy, and to find out what is the cost of production of common labourers, appears to be a trifling with

a serious subject. No such calculations are made previous to the production of a common labourer. He is not produced for the sake of what he can afterwards earn. The expression therefore, "cost of production," is merely metaphorical when applied to such a case; and no argument can be drawn from it, since the analogy is deficient in the very circumstance through which the cost of production affects the price of articles of commerce. But it is said that if the country requires stationary population, the labourer must earn so much as, according to the scale of living which habit or necessity has introduced among his order, will be sufficient to support himself, and on an average, such a family as will keep up a stationary population: and if an increasing population is required, he must earn more in order to maintain a larger family, in proportion to the rapidity with which the population is required to increase: for that otherwise the stationary in the one case, or the increasing population in the other, would fail to be kept up.

In this I have given, I trust, a fair statement of the arguments generally used to prove that the wages of the labourer depends upon the expense of his maintenance and usual style of his living, instead of his expenses and his mode of living depending pretty much upon his wages, as most people, and I confess myself among the number, would most readily imagine to be the case. The argument, if logi-

cally stated, would assume the form of a hypothetic syllogism, in which the premises, viz. the major, which contains the substance of the argument, and the minor, which is usually suppressed, as if it were self-evident, are both false. But laying aside the rules of logic, as a reference to them is not often a very intelligible or popular mode of explaining the subject, you may observe that the argument consists of two propositions, connected by the alternative phrase "otherwise." Thus—the labourer must earn certain wages according to his real or imaginary wants, otherwise the population required by the country would not be kept up. The validity of this argument requires that the second proposition should be impossible, and should follow from the denial of the first. Now, is this the case? Does a population fall short or decrease, or does it ever cease to increase, in consequence of the wages of labour proving insufficient to support the necessary family? If such an event ever takes place, which no one attempts to prove impossible, it is an instance of that alternative case, on the impossibility of the existence of which, the argument depends; unless, indeed, such an interpretation is given to the phrase "population required by the country," as will deprive both the argument, and the proposition proved by it, of all meaning. Indeed the argument and proposition are generally stated without this latter phrase, and I think the omission has the ad-

vantage of rendering them more intelligible. But even granting that population will always march on at its proper pre-determined pace, and that the wages of labour will always be sufficient to sustain it on its march, does it never happen that this increase of population has the effect of depriving the labourer of some of the comforts which he had heretofore enjoyed ; may not the labourers, by descending a little in the scale of comfort, be enabled to support that average family which is necessary to increase the population ? Indeed those who hold the opinion which I am combating, generally maintain, although not very consistently, that the increase of population frequently deteriorates the condition of the labourer, and diminishes his comforts ; that in fact it is the most usual and natural cause of such a change in his situation. Is not this an admission that the circumstance of the labourer's being used to a certain degree of comfort, is not sufficient to procure it for him permanently, by keeping down the population to such a quantity as is consistent with his obtaining his usual rate of wages, since, notwithstanding such habits, the population does increase, so as to compel the labourer frequently to surrender many of his accustomed enjoyments. I do not deny that it is for many reasons desirable that the labourer should be accustomed to think a certain degree of comfort indispensable. Such habits, such wishes on his part,

if not the cause of his receiving suitable wages, are at least the effect of his prosperity, and therefore imply that his situation is such as we should all desire it to be. Such wishes and habits may even lead to a continuance of his prosperity, by inducing him to make extraordinary exertions, rather than forego those comforts and decencies which he has been used to consider indispensable to his happiness ; and it may prevent him from forming those reckless matrimonial engagements which are supposed to produce a redundancy of population, inconsistent with the comfortable subsistence of the labourer. All I am contending for is, that the wages of the labourer depend upon the value of his labour, and not upon his wants, whether natural or acquired, and that if his wants and necessities exercise, as they do, some influence upon the wages of his labour, it is indirect and secondary, produced by their effect upon the growth of the population, and that this effect is not analogous to the effect which the cost of production has upon the price of commodities. My present enquiry is not what has brought this or any other country to its present state, but what it is that in the present state of population, science, and civilization, has the power of determining the amount of wages which the labourer receives.

I have already remarked that we ought, in Political-Economy, carefully to distinguish between the

primary or immediate causes of any phenomenon, and those whose influence is remote or secondary, and which either act through their effect upon the primary causes, or perhaps in some instances modify the effect of those primary causes themselves. The neglect of this distinction has had the effect, if I mistake not, of producing among political-economists many disputes about words, or which might almost be disregarded and considered as merely verbal, were it not that we often see deductions of serious consequences drawn from propositions originally founded on verbal subtleties or misapplications of language. I think that the doctrine which makes the price dependent upon the cost of production, and be regulated by it exclusively, has its origin in this source. The cost of production does indirectly or mediately affect the supply in most cases, and in some it influences even both the supply and demand, or at least the effect which the existing state of supply and demand has upon prices. But all this influence upon prices is indirect and mediate. The importance of the question, whether rent ought to be considered a part of the cost of production, is caused by the same confusion, to which we naturally become more liable as we approach more complicated questions.

There are many matters which have the most powerful effects upon the fate of the labourer, and in common conversation it might be allowable to

attribute his prosperity or misery to causes which affect him very remotely ; and this follows from the nature of the language used to communicate our ideas to each other. Most effects are produced by a variety of causes, all concurring to the same effect, and all essential to its production ; so that if any one of those causes had been absent, the effect would not have been produced. Some of those causes are generally certain laws of nature, others are mere facts, and properly speaking they altogether combine to form one cause. But in ordinary conversation, if we were asked the cause of any event, we should not answer by stating all the causes which concurred to produce it. We should attend more to the object which the interrogator had in view, and merely inform him of that cause which we supposed him previously ignorant of ; and we should not hesitate to say that that was the cause, whether it was a fact or a law of nature, and whether its connection with the event enquired about, was immediate or remote. Hence the word cause is used in a very extended sense. But this does not make it the less important to distinguish the immediate and primary, from the mediate and secondary causes, and to examine and lay down accurately the rules by which they are connected. We shall then be able to form clear ideas, and what is scarcely less important, to use correct and consistent language respecting the ope-

ration of those causes, and we shall not be involved either in a confusion of ideas or a verbal controversy, if we find, as we frequently shall find, the primary causes producing a certain effect, and that effect reacting upon the secondary causes, in such a manner as through them to influence the primary causes, and thus to prevent the first effect from being permanent. Examples of this species of rotation are very numerous, and I shall mention some of them at another time : to do so at present would be a disorderly digression. I may however remark that such instances shew very strongly the necessity of studying the subject methodically, as very little progress can be made by detached arguments. By merely selecting what part of the circle he begins with, any man may by tolerably specious reasoning, draw any consequence he pleases. But before I engage further in any argument to shew that the wages of labour do not depend upon the wants of the labourer, it may not be out of order to shew upon what I think they do and must depend.

It is evident that the wages of labour, like the exchangeable value of every thing else, must depend upon the relation between the supply and the demand. It is also plain enough, that the supply consists of the present existing race of labourers. But on what does the demand depend? Undoubtedly, in the case of the great body of labourers,

the demand is caused by the utility or value of the work which they are capable of performing. Menial servants, and those labourers usually termed unproductive, must be maintained by funds derived from other sources: but the wages of the great mass of labourers must be paid out of the produce, or the price of the produce of their labour. This, then, supplies us with a measure which we can apply to the wages of certain labourers, and by proportion to which, on the principles mentioned in a former lecture, the wages of every class of labourers can be ascertained. This gives us the measure of each labourer's wages in the articles which he contributes to produce, and by proportion we ascertain the quantity of any other article which he can procure in exchange for them. The average value of any article depends upon the quantity and value of the labour which called it into existence, considering as one of the causes of the superior value of labour, in forming part of the cost of production, the greater length of time which must elapse before the article on which it is expended can come into the consumer's hands. It is true that this addition to the value of the labour, does not appear in the form of increased wages to the labourer, because the latter requires his wages for his immediate subsistence, and the ultimate value of his labour is, as it were, discounted for him by his employer, who keeps the work, and when disposing

of it, charges the full value of the labour if he sells it to the consumer. But if he gives it to any intermediate merchant or manufacturer, he in return has, as it were, to pay discount for the interval between the time at which he parts with it and the time at which it is ultimately sold to the consumer. In other language, he receives profits only proportioned to the length of time which has elapsed between his payment of the labourer's wages and his receiving the price of the article in the state in which he disposes of it. But each person thus receiving a profit on the advances which he was compelled to make, while the commodity was in his possession, it comes to the consumer or ultimate purchaser charged with a profit proportional to the time elapsed between the payment of each labourer's wages and the ultimate sale of the finished article. In this manner the relative values of any two things are found, by comparing the quantity and the kind of labour employed in the production of each, taking care in the comparison, to make an addition to the value of each day's labour, proportioned to the rate of profit in the country, and the interval that must generally elapse between the execution of that labour and the completion and sale of the entire work. The share of the article which each labourer will receive, is found by computing how much of the entire value consists of labour, and how much of profit, and then dividing the former

share among the labourers, in proportion to the quantity and value of each man's labour. Thus, if the rate of profits is ten per cent. per annum, and a commodity is fabricated by the labour of ten men, each contributing equal quantities and values of labour, and each being paid his wages, on an average, a year before the sale of the article. Then the wages of each labourer must be $\frac{1}{11}$ of what it sells for, the remaining $\frac{1}{11}$ going as profit to the capitalist; and this must equally happen whether the article is one of luxury or necessity. A similar result would take place, if instead of ten, the work was executed by nine labourers, one of whom was entitled to double wages, on account of the difficulty, hardship, or disagreeableness of the employment, the skill required to execute it, or any of those circumstances which make one man's labour more valuable than another's. He will receive $\frac{2}{11}$ of the price of the work, the rest of the labourers and the capitalist will receive $\frac{1}{11}$ each. Hence the real wages of the labourer, that is, his command of the necessaries and comforts of life, will depend entirely on the rate of profits, and on the efficiency of labour in producing those articles on which the wages of labour are usually expended. To make this clearer, suppose that a single labourer employed for a year in the cultivation of that inferior soil which yields no rent, or more accurately speaking, employed in the production of that corn in the

price of which rent does not enter as an ingredient, can raise 44 quarters of corn, then profits being at 10 per cent., his wages must amount to 40 quarters : and if a cotton weaver's labour is, on the ground of superior hardship, or skill, or any of those principles to which I have already alluded, equal to once and a half that of an agricultural labourer, then the wages of such a manufacturer for one year must be 60 quarters of corn ; and if 20 quarters are sufficient for the consumption of himself and his family, then the one will have the price of 20, and the other that of 40 quarters, to expend in the purchase of other necessaries, comforts, or luxuries. Now suppose that the labour of 20 men for a year can produce calico enough to clothe 330 families, then the rate of profit remaining as before, each weaver must receive as wages the price of as much calico as would clothe 15 families, and of course this would be the same as the price of 60 quarters of corn. Hence the agricultural labourer could procure sufficient calico to clothe his family for the price of 4 quarters of corn. But if manufacturing industry was one half less productive, then 20 labourers would earn only the clothing for 150 families, and the price of the clothing of a labourer's family would be equal to the price of 8 quarters of corn ; that is, to $\frac{1}{2}$ instead of $\frac{1}{10}$ of the agricultural labourer's wages.

In the same manner may be calculated how much

of any commodity can be procured by any labourer in exchange for his wages, viz. by first calculating what portion will be received by the labourer employed in its fabrication, and then, on the principles which determine the relative wages of labour, determining the proportion that must exist between the wages of this latter labourer and those of the one whose wages we desire to ascertain. A labourer will not receive for his wages either more or less than the amount of what he produces, minus the profits received by the capitalist. The proportion of the price of the article which will go to profit, will depend upon the rate of profit in the country, and on the length of time for which the advance is made. If the rate of profits was 10 per cent., and every man's labour was of equal value, and employed at the average interval of a year from the production of each commodity: then of the price of every article, $\frac{1}{11}$ should go to the capitalist, and the remaining $\frac{10}{11}$ should be divided among the labourers in proportion to the quantity of labour which each devoted to its fabrication, and the prices of articles should be proportional to the quantity of labour employed in its production; and the wages of the labourers would depend upon the productiveness of labour: the more they produced, the more they would receive.

Now how does the supposition I have made, differ from the real state of facts? 1st. One man's

labour is not equal in value to that of another.

2nd. There is an immense difference between the various lengths of time that elapse between the employment of a labourer, and the sale of the commodity in producing which he has been employed. Of those circumstances, the first has evidently only the effect of introducing a new consideration into the calculation, which distributes to each labourer his share of the price of the finished commodity. The rate of profits being the same, the sum to be divided among the labourers will be also the same, namely, $\frac{1}{1+q}$ of the value of the entire article, and each man's share will be proportional to the quantity and relative value of his labour jointly. The principles on which the relative values of different kinds of labour are to be computed, I mentioned in a former lecture. They are the natural effects of free competition, and of circumstances which tend to diminish the competition among labourers in certain employments, by rendering many persons unwilling to engage, or unable to succeed in them. The fact, therefore, that labour of different kinds is of different degrees of value, does not in the least interfere with the truth of this proposition. *The wages of labour depend upon the rate of profit and the productiveness of labour employed in the fabrication of those commodities in which the wages of labour are paid*, and therefore the comforts of the labourer will depend upon

the rate of profits, the relative value of his labour, and the productiveness of that labour which is employed in fabricating those commodities on which he wishes to expend his wages. Now, is the truth of this proposition affected by the second circumstance which I mentioned, namely, that different lengths of time must frequently elapse between the employment of the labourer and the ultimate sale of his work? I think not in the least. It renders the calculation more complex, and therefore more difficult to be described, though not more difficult to be conceived; but it leaves unaltered the principle on which the calculation is to be made. The proportion of the wages of the different labourers employed in making any article is to be estimated on the same principle as before, namely, by a reference to the value of each man's labour, and to the quantity which he gave; but there is a little more complexity in the computation of the proportion of the entire work which is to be divided among the labourers. Compute it thus: to each man's wages is to be added a profit proportional to the interval that must elapse between their being advanced and the sale of the article. This will give the proportion of the total value of the article to the share distributed in wages among the labourers. Observe that this last calculation does not suppose that I know the absolute amount of wages paid to any labourer; it only supposes that

I know the proportion of their wages one to another, and I have already attempted to explain the circumstances upon which this proportion depends. Let an ordinary day's labour of some particular description be taken as the unit or standard, by relation to which every other kind of labour is to be measured. It is not necessary that this unit should be of an average value between the extremes. By relation to this, the value of the labour which any man bestows upon an article may be expressed by a number, and another number will express the profit on the advances made to him. The wages of the other labourers and the corresponding profits may be similarly expressed, and the sum of those numbers will represent the entire value of the article. In the same way, the value of any other article may be calculated, and therefore the quantity of any commodity or commodities which a man may receive in exchange for the labour of a day, a week, or a year. It is true that in many cases no man could make those calculations; but the principle of competition leads to the same result with as much certainty as if such calculations were made and acted upon in every instance; and it is useful to bear in mind the principle of this calculation, because it shews the circumstances upon which the wages of the labourer depend, and to which we should direct our attention when we wish to ameliorate his condition. We must diminish

the rate of profits, or increase the productiveness of labour. It is demonstrably true, that nothing else can procure him any increase of wages.

He cannot gain much by a reduction of the rate of profits. If a labourer earns 8d. a day, advanced to him at an average interval of a year before the produce of his work is sold, a reduction of profits from 10 to 5 per cent. would not add $\frac{1}{2}$ d. a day to his wages, and the total surrender of profits could not raise his wages to 9d. a day; besides, it is utterly impossible for any direct act of legislation to diminish profits in such a manner as to improve the condition of the labourer. This can only be effected by the gradual increase of capital, and by the spread of peace, and order, and justice, and freedom, and security; in short, by every law, and custom, and circumstance which would enable capital to accumulate, or invite it to come, or induce it to stay. From the wages of the labourer must be necessarily abstracted a certain sum proportional to the rate of profit, and an additional sum for an insurance against fraud and outrage. Every destruction of property by fraud or violence increases the amount of this insurance, and thus the irresistible nature of things imposes a tax upon the labourer sufficient to indemnify his employer for every injury occasioned by his misconduct. Another necessary consequence from what I have proved to you to-day is, that taxes, unless so far as their

sudden imposition disturbs the channel in which industry has been accustomed to flow, cannot affect the condition of the labourer, except when they are imposed upon the commodities on which he would desire to expend his wages. The payment of a tax may be considered as part of the cost of production of the commodity on which it is imposed, and in all cases it falls upon the unproductive consumer ; that is, upon the person who consumes it in such a manner as that the mere consumption does not transfer its value to any thing else.

At first, this consequence might seem to follow from what I have stated respecting the proportion in which the price of any commodity is divided between the labourers and the capitalist, viz. that the introduction of machinery might sometimes diminish wages, for that taking, as we must, the expense of making the machine as a portion of the cost of production of the article, some of the labour must have been expended at a greater length of time before the sale of the commodity, and therefore a greater proportion of its price will consist of profits, and this will have the same effect in depressing wages, as if an increase was made to the rate of profits. The answer to this is, that a machine is never resorted to, except for the purpose of producing commodities more cheaply, that is, more cheaply independent of any reduction in the wages of labour or the rate of profits. Such re-

duction would produce a corresponding reduction of price, independent of the machinery. Therefore from the cost of production there must be more labour subtracted than there has been profit added, and each man's labour will purchase more of the article than it did before.

I trust, Gentlemen, that you will attend to the difference between a proof founded on an abstraction, and one founded upon a supposition. The former cannot but lead to truth, although its application may be a matter of some difficulty; the latter may lead to truth or falsehood, according as the supposition upon which it is founded is or is not conformable to the reality of things. The doctrines respecting rent, to which I called your attention this Term, are founded on a supposition which I attempted to shew was verified by experience. The theory of profits which I attempted to prove on Tuesday, is founded partly upon facts lying within the knowledge of all, and partly upon abstract reasoning. The theory of wages which I explained to-day, is founded upon mere abstract reasoning, and cannot be false in any time or country. Other circumstances may powerfully affect the rate of wages, or profits, or rent, but they must do so in some manner not inconsistent with the propositions which I attempted to explain to you. In my next lecture, which will conclude the business of this Term, I shall shew

some of the consequences that result from those propositions, and the manner in which rent, wages, and profits, vary in relation to each other with the progress of society.

LECTURE XI.

GENTLEMEN,—It is by no means a useless or uninteresting occupation, to reflect upon the various changes which in the progress of society take place in these great sources of revenue, namely, rent, profits, and wages. To investigate what laws and customs tend to increase or diminish those sources, is the principal object of Political-Economy. To-day I intend merely to give a slight sketch of the principles on which such enquiries may be conducted, and of the inferences regarding them that may be drawn from the propositions which in the course of this Term I attempted to prove and to explain. The result of such enquiries will not, I trust, be displeasing to the benevolent mind. The laws according to which wealth is created, distributed, and consumed, have been framed by the Great Author of our being, with the same regard to our

happiness which is manifested by the laws that govern the material world. We shall find that all the causes which diminish any source of wealth originate in vice or folly—in a course of conduct which our higher faculties forbid us to pursue. At first sight it would appear, and many reasonings have proceeded upon the supposition, that the three principal classes have interests directly adverse to each other. That the landlord gets all the produce of the soil, except what is divided between the labourer and the capitalist. The more they take, the less is given to him. The more he gets, the less remains for them; and therefore as rent increases, the portion that is divided between the labourer and the farmer must suffer a corresponding diminution. In the same manner, as the fruits of industry are divided between the capitalist and the labourer, it might hastily be supposed that the gain of one must be the loss of the other. But the fact is not so. The parties to every contract have just at the time of making it, an interest opposed to each other, each being desirous to get as much, and to give as little, as he can. But the competition of others prevents this adverse interest from operating to the detriment of either, and previous to the contract, all parties have a common interest that the articles which are the subject of the exchange should be produced in the best and cheapest manner.

As a source of revenue, rent is capable of increasing without any exertions on the part of the proprietor. It increases naturally with the progress of society, as the increase of population creates a necessity of resorting for subsistence to inferior soils. This naturally raises the price of agricultural produce, and enables the landlord to receive a higher rent. Improvements in agriculture have a contrary tendency ; they lower the prices of agricultural produce, and, if suddenly and universally introduced, would lower prices and diminish rents. But their introduction is never suddenly universal : they spread slowly, and population increases at the same time, so that one cause counteracting another, the price of corn is kept nearly stationary ; consequently land, now taught more cheaply to yield a more abundant produce, is capable of yielding a higher rent, and the income of the landlord is increased, although the society is not obliged to pay a higher price for the materials of its subsistence. As the quantity of land within the kingdom remains the same, while the number of labourers, and quantity of capital, and total amount of rent are increasing, it is sometimes supposed that the condition of the landlord improves faster than that of the other classes. The increased rent is paid for an unaltered quantity of land ; but the total quantity of profits is earned by an increased quantity of capital, and the total quantity of wages by an in-

creased number of labourers ; so that the profits of a given quantity of capital, or of a single labourer, may diminish, while the rent of any given estate will increase. This is true. But unless where the natural course of things is interfered with by artificial institutions, the number of landlords has also a tendency to increase. So that the same quantity of land will be distributed among a greater number of proprietors, and the relative situation of the classes will remain as before, and a greater number of men will be supported by the rent of land, a greater number by the profits of capital, and a greater number by the wages of their labour. Also, as society advances, the various articles of comfort and luxury will be more cheaply made, so that the same amount of rent will suffice to purchase a greater quantity. An estate in England would probably, at the present day, furnish ten families with the same amount of necessaries, comforts, and luxuries, that a single family could receive from it 200 years ago.

It is certainly a desirable thing that there should be in the country a number of persons, without toil or danger, in possession of comfort, and even affluence. Their advantages from education and society, their natural sense of honor and independence, will render them useful, as examples, to the rest of their countrymen in many respects. They will always form a very respectable class, and will

naturally have much influence in discountenancing many habits of meanness and servility, which otherwise might spring up in a society, if every individual's time and thoughts were devoted to the pursuit of gain. I do not say that the character or conduct of a landlord is likely to be better on the whole than that of a merchant or a labourer. His birth and education may give him advantages in some respects, and lay him under disadvantages in others. But his faults will not be of the same kind, and that is an important circumstance. We are more easily led into those vicious habits, from which we perceive none of our acquaintances to be free. It is therefore important that all should not be subject to the same temptations. Nothing but universal custom can blunt our feelings of what is right or wrong, and few who have an opportunity of viewing and comparing both, will hesitate to prefer the former, and to mark that preference at least by their approbation. Besides the advantage of the salutary influence of the examples of landlords upon society, another benefit results from the increase of rent as a source of wealth. The landlords themselves, and their families, are a numerous class, whose happiness, therefore, is a matter of no small concern. Increased rents afford the materials of subsistence and innocent enjoyment to an increased number, and the effect of improvements of all kinds is, that this increase takes place without a

reduction of wages or profits. The number who participate in those advantages is not as great as it would be, were it not for several artificial institutions, which tend to prevent the division of landed property, and even without such institutions, there would be little reason to apprehend that the number of landed proprietors should ever become too great.

But in Political-Economy, profits and wages are more important sources of wealth than rent. They differ from rent in this, that they afford a stimulus to production, and so far as one does not interfere with the other, it is desirable that both should be as high as possible. But legislation can do nothing here, every thing must be left to contract. The rate of profits may be measured, as I have attempted to shew, by the efficiency in assisting labour, of the least efficient capital. An example may prove this. Suppose the last capital employed in any manufacture is so efficient that an increased expense of machinery, equivalent to the labour of 100 men, shall produce a return equal to what would be produced by the labour of 10 additional men per annum. While this is the last application of capital, and only partially introduced from want of sufficient capital to introduce it universally, profits must be exactly 10 per cent. per annum. They cannot be more, for this last capital is not capable of yielding more. At a

higher rate of profits it would be cheaper to employ 10 men per annum, than 100 men at once. And profits cannot be less than 10 per cent., for the proprietors of this last applied capital will obtain 10 per cent. for it, if they pay the same wages to their labourers, and obtain the same price for their goods, as other people. We must take care not to confound the last capital applied to land, with the last or least efficient capital, considered with a view to its efficiency in superseding labour. For instance, when inferior soils are brought under cultivation, some of the capital employed for that purpose is of the most efficient kind in superseding labour, and it is its efficiency in this latter respect that regulates profits.

The rate of profits has a tendency to decline with the increase of capital, but in the progress of society this tendency is in a great measure counteracted by several circumstances. 1st. The increase of population gives a greater scope for the employment of capital, and provides a more extended market for its productions. The increased capital is required to advance wages to an increased number of labourers, to supply them with the requisite machinery, and to produce the commodities required for the consumption of an increased population. 2ndly. Improvements have the effect of keeping up the rate of profits, by finding new employments for capital, and new modes of assisting

and superseding labour. This cause of increased profits is in no manner detrimental to the labourer, since it is caused by the increased efficiency of capital in assisting his powers of production. The increase will always leave to him at least the same share as before, and generally even a greater, and will lead to a further accumulation of capital, to the additional advantage of the labourer. 3rdly. Increased skill, and good conduct on the part of the labourer, is a source of increase of profit in a slight degree. It enables the capitalist to construct machinery more cheaply in proportion to its efficiency, and it adds to the value of the labour, which is multiplied or superseded by its means. This cause, however, has much greater effect in increasing wages than in adding to the rate of profits. 4thly. As society advances in civilization—intelligence, attention, and industry will be more generally possessed by the capitalist, and the vigorous exertion of those qualities will in some measure counteract the tendency of profits to decline.

Still it is on the whole probable, that capital will accumulate so fast as that profits will decline, but the effect of a decline of profits, when produced by such a cause, will by no means be detrimental to the society. It will be accompanied by many advantages. The first direct and most striking effect of a habitually low rate of profits is to render the

future and present period of nearly equal importance in all pecuniary speculations. In comparing future with present advantage, a lower rate of discount is necessary than when profits are high: and permanence and durability become of more importance, and will be purchased by a greater immediate expenditure when profits fall. An annuity, or a constantly recurring advantage which partakes of the nature of an annuity, will be purchased at a greater immediate sacrifice than before, in proportion to the period for which the advantage is to endure. And, in the same manner, for any advantage to be gained at a future period, a larger annuity in the mean time will be paid, or a greater intermediate sacrifice of toil and expense will be made. The calculation to prove this is almost too evident to require any statement of it. In comparing any present and future advantage, if each is to be measured by the price that it would cost at the time of enjoyment, an allowance must be made in the comparison, for the profit that in the mean time might be made of the price of the former. If the rate of profits is 20 per cent. per annum, two advantages, of which one is to be enjoyed now, and the other at the end of a year, would be of equal present values when their proportions were as 5 to 6, since £100 now, would at the end of the year be made £120. If the rate of profits is 10 per cent., the proportion must be as 11 to 10; if 5 per cent.,

as 21 to 20 ; and so on, as the rate of profits diminishes, the proportion will become nearer to equality. In consequence of this state of things, many permanent investments of capital will be made, which while the rate of profits was higher, could not have been done except at a disadvantage, and generally in all kinds of works, durability will be more studied, and will be purchased by greater sacrifices than before. This is very favourable to the accumulation of capital within the country, since a larger proportion than heretofore will be laid out in durable improvements, which cannot be removed or transferred to another land. While the rate of profits is high, it is of importance that the returns to capital should be quick, and a speedy return will be preferred to one of much greater amount, if the latter cannot be received until the expiration of a long period. But as the rate of profits diminishes, the interval between the outlay and the return becomes of less importance, and durability, when the returns are contemplated at a distant period, becomes an object of attention. Thus roads, canals, quays, docks, bridges, and all kinds of buildings, public and private, will be constructed with greater care, and will become desirable modes of investing capital. Improvements in land, by fencing, draining, &c. will be made, which could not be effected with the same prices of agricultural produce, if the rate of profits was higher.

And as losses from ignorance or negligence will be more severely felt, greater care must be observed in the conduct of every business, and thus the wages of labour will become more mixed up with the profits of capital. For although in analysis, it is convenient to distinguish between wages and profits, yet part of the profits which the capitalist appears to derive from his capital, is in fact only a return for his skill and labour in superintending the business in which it is employed. Thus in some trades the greater part, and in almost all, some part of what appears to be profits, is to be considered more properly as wages, and in the same manner, in many employments: what is denominated wages consists partly of profits of the capital, either employed by the labourer in his trade, or expended in procuring his education. As profits fall from the accumulation of capital, this union prevails more. Capital, in consequence of the increased competition, will do little unless it is wisely and carefully superintended, and the labourer will in general be possessed of some capital, the employment of which will add to the apparent wages of his labour. Education also, which implies a present sacrifice to procure a future good, will probably become more prevalent, and the country possessed of a redundant capital, will offer to the general market of the world such goods as require in their fabrication the employ-

ment of intelligent labourers and of skilfully directed capital, and will procure at a cheaper rate by means of exchange, such goods as can be manufactured without skill or capital.

Many other consequences, which I need not dilate upon, follow from abundance of capital, and the consequent low rate of profit. For example, cleanliness will be most likely to prevail where such a state of things exist. Dirt is scarcely more disgusting to the senses, than it is injurious to material wealth. In many articles of use and enjoyment, it produces a rapid decay. At the same time, cleanliness generally requires some immediate expense or labour to keep it up, and therefore, as the durability of articles becomes more important in comparison with a slight immediate expense, cleanliness will become more indispensable as a measure of economy. This cause will make it grow into a habit, and be observed even when no wealth would be destroyed by departing from it. Humanity to the inferior animals will become general, nearly in the same manner. It will become good economy, as an animal's power of doing work for a longer period will become more important. Indeed there is a strong analogy between those two virtues. Nothing but habit can reconcile men to dirt or inhumanity, and they both bring a certain ultimate loss to the owner of property,

and they can both be generally avoided by an exceedingly light present expense.

The disadvantages of a low rate of profits are—
1st. The reduction of the income of the capitalist.
2ndly. The difficulty it adds to the accumulation of capital.
3dly. The inducements it holds out to the proprietors of capital to remove it to another country. Those disadvantages are, with the progress of society, counteracted by the abundance of capital, which notwithstanding the low rate of profits, makes their total amount very large, and by the habits of saving, and the prudent regard to the future, which must exist in such a country. The disposition of capital to migrate is checked by the manner in which much of it will be invested, in bridges, canals, rail-roads, &c. which cannot be removed, and by the manner in which the wages of his skill and industry are mixed up with the profit of the capitalist. This skill and industry will be comparatively useless, if he transfers his capital to another land. Accustomed to the superintendence of labourers possessed of a certain degree of skill, intelligence, and honesty, he will dislike to employ those whom alone he can procure in a country where capital is less abundant. The greater security too of his life, liberty, property, and character, will be inducements to the capitalist to withstand the temptations which high profits might offer to

him to migrate to a comparatively barbarous country, and if a little capital does migrate, its loss will not be felt, the quantity removed will be so small, compared with the abundance left behind.

The causes which affect the wages of labour are in constant operation, and the condition of the labourer is rarely stationary for any length of time. Some of the changes produced by the progress of society lay him under disadvantages, and others have a tendency to improve his condition. I have shewn that his wages depend upon the productiveness of labour and the rate of profit, and that as capital increases in the country, the rate of profits has a tendency to decline. But we have also seen that the productiveness of agricultural labour has a tendency to diminish. This is a serious evil. Every man has occasion to use the produce of the earth; and as more labour becomes necessary to produce the same quantity of corn, the wages of the same quantity of labour cannot purchase as much corn as before, and consequently the labourer finds increased difficulty in providing subsistence for himself and his family. The increase of population has also a tendency to raise the rate of profits, and thus lower the rate of wages. This latter tendency is counteracted by the increased accumulations of capital. But the evil arising from the necessity of resorting for subsistence to inferior soils, may be

neutralized by other circumstances, which will probably occur as society advances. 1st. Improvements in agriculture have an effect in diminishing the cost of production of corn, which may be equal, or even superior to the contrary effect produced by the increase of population. There is no necessary relation between the magnitudes of those effects ; either may exceed the other ; and the condition of the labourer is materially affected by the direction and amount of the excess. Having this in view, such institutions are to be preferred as will cause the beneficial effects produced by the progress of society, to exceed the prejudicial effects resulting from the increase of population. The skill and capital of the country remaining the same, what effect an increased population will have in increasing the cost of production of corn will depend upon the relative quantities and fertilities of the different soils, and the natural capabilities of the country, over which man cannot exercise any control. The subject of population is too extensive to be discussed at present, and therefore I shall merely observe, that population naturally increases, and that there is little room for the wisdom of legislation, except to provide that no artificial stimulus shall be given to its increase. But the advantages which naturally accompany, though they do not necessarily follow from, an increase of population, are placed more within man's control. Wise

institutions and good habits may make them far more than a compensation for the decreasing fertility of the soil, as on the other hand, corrupt habits or injudicious regulations may annul them altogether, and allow the march of population to produce an unmitigated evil. Agricultural improvements will naturally take place as population increases. There will be a greater demand for the produce of the soil, and necessity is proverbially the mother of invention. A greater number of people turning their thoughts to the same pursuits, and the general diffusion of education and increased means of communication, naturally lead to the same result. But this secondary effect of the growth of population, this beneficial counteracting influence, is very dependent upon the wisdom of our institutions for the extent to which it will prevail. Undoubtedly, a dense population is in many respects highly favourable to the diffusion of knowledge and civilization, but it does not necessarily lead to such results. Freedom and security are equally essential; and the intellectual, moral, and religious education of the people are not less necessary. If these are carefully protected and promoted by our institutions, and if no artificial stimulus is given to the increase of population, we have every reason to hope, that with the progress of society, population and wealth will increase together, and that more human beings will be supported in greater comfort

than heretofore. At least our trust in the wisdom and goodness of the Supreme Being, would lead us to expect with confidence that it will be so. For experience and reason alike prove that there is a certain degree of poverty among the inhabitants of a country, which is incompatible with obedience to the laws, with an intellectual or moral education, and is adverse to the propagation of true religion.

Besides the progress of agricultural improvements, there are many other circumstances to counteract the evil arising from the necessity of resorting for subsistence to inferior soil. An improved system of division of labour, and the extension of machinery in manufactures, enables the labourer to live even more comfortably than before. He will gain more by the diminished prices of all other articles, than he will lose by the dearness of food and all raw materials. And in general, as comforts of every kind become cheaper in comparison of articles of necessity, so the number of those possessing such comforts will increase in proportion to those who are stinted to the means of a bare subsistence. Means of communication will become cheaper and more universal, and that part of the cost of production of commodities which is composed of the expense of transferring goods from place to place, will diminish. I do not apprehend that in the natural course of things, the increase of

population, with all its attendants and consequences, will be prejudicial to the labourer. His condition will depend upon the relative value of his own labour, upon the rate of profits, and the productiveness of that labour which is employed in the production of those commodities upon which he wishes to expend his wages. The progress of society, if it is well governed, and if the people are moral and obedient, has a tendency to alter those three quantities in a manner favourable to his condition. If life and property are secured, the rate of profits will diminish, and labour will become more productive, and the relative value of each man's labour will increase.

Of course this increase will not be such as to affect the relative values of the labourers of any one country: that would be absurd. All cannot rise in proportion to each other. But commerce, which exchanges the productions of human labour, has the same effect as if the labourers themselves could remove from one country to another, without greater expense or inconvenience than attends the removal of the goods which they manufacture. Hence the same laws which regulate the wages of labourers in any one country, govern also those of the labourers existing in every part of the world. I shall hereafter shew that taxes and restrictions upon trade have not any considerable effect in modifying this proposition. The differences in the relative

values of labour in different employments are caused, principally, by the necessity of the labourer possessing superior skill and intelligence, or encountering greater hardships, or having a greater degree of confidence reposed in him. I have also shewn that in a highly civilized society, skill, intelligence, and integrity will be more general, and therefore will have a less effect in increasing wages ; while on the other hand, the labourer already in possession of all the necessities and comforts of life, will not easily be induced to engage in a disagreeable or unhealthy occupation. To induce him to do so, he must be highly paid for the hardships he encounters, and in consideration of the higher qualities which are unemployed. The reverse of all this holds in a less civilized society. Intelligence and integrity will be rare, and must be dearly purchased by those who desire to employ labourers possessed of such rare and valuable qualities, while to men in a state of destitution, a slight increase of wages will be a considerable inducement to undertake an unwholesome or disagreeable occupation. Hence, independent of every difference of soil or climate, the exchanges between two countries such as I have described, will consist principally of articles produced by that species of labour which in each country is relatively cheapest. The one will export articles where skill and integrity are required on the part of the workman,

and where intelligence and capital are required on the part of his employer. The workman's labour here will be of the most valuable kind, it will be carefully and wisely directed, and the low rate of profits will make his wages amount to a considerable portion of the finished work. Nothing can compete with him except other labour of the same kind, directed with equal skill, and his wages will consequently always remain high. But the case will be different in the less civilized country, where life and property are insecure, and capital therefore scarce, and profits high, and the labourer needy, ignorant, and dishonest. The exports of this country will consist of articles produced by the most unwholesome and disagreeable labour, but in making which, skill and honesty are not required from the labourer ; such exports, in short, as in a lecture of last Term I said were naturally produced in a country where slavery was allowed. Here the workman's labour will be of the most unwholesome kind, and will be directed by an ignorant and needy employer. The value of the work executed by him will be small, and the insecurity of property, and the higher rate of profits, will make a greater part of it go to his employer. His work will require no intelligence, and his competitors will be slaves, and brutes, and machines.

Such must be the fate of the labourer in every country where disorder prevails, and life and property are insecure. Give him arms and discipline, and he may acquire power and imagine himself free, for he will cease to obey the laws, but be ruled by some demagogue with a rod of iron. His imaginary freedom will consist in being governed by laws hastily framed by a dishonest and ignorant legislature, and administered by a corrupt and passionate tribunal with remorseless severity. But even if the habits which lead a demagogue to success were such as naturally produced calm reflection, freedom from passion, integrity, and wisdom, still, while anarchy and turbulence prevail, immutable necessity ordains that the labourer shall suffer this part of the hard condition of the slave. He must encounter severe toil, and receive scanty wages. From this state of degradation and slavery, order and obedience can alone relieve him. I have now, Gentlemen, got over the driest and least interesting part of Political-Economy, and I am sensible that my lectures have been obscure and uninteresting; but I proceeded according to this order, putting first the most abstract principles, because I am convinced that it is the only method by which truth can be attained, or even any progress made. Had others done so, my task would have been lighter. Next Term I

shall be able to engage with more interesting subjects, relating to the trade, commerce, production, taxation, &c. of the different European Kingdoms.

A P P E N D I X.

NOTE ON PAGE 32.

MANY questions respecting value are sometimes rendered difficult of comprehension, by a complexity necessarily produced by the manner in which the business of life is conducted. This complexity does not affect the truth of any of the conclusions, although as it sometimes detracts from the accuracy of the manner in which elementary principles are simply stated, it may be urged as an objection to the conclusions which are drawn from them. Thus in estimating the cost of production, it may be said that the same land, labour, and capital, are often employed at the same time in the production of several different commodities. These are sold separately, and how then is the cost of production of each to be ascertained. The difficulty of solving this question will disappear, if we attend to the manner in which the cost of production influences the prices of commodities. The demand and supply regulate the price, and the cost of production influences it, by confining the supply to such a quantity as can be sold at a price sufficient to repay the cost of production. But still it is the relation of the supply and demand that immediately regulates the price both of the whole and of each part. But the relative value of the parts may vary with the circumstances that occasion a variation in the demand for the several parts. And in such cases, in general, any circumstance that increases the demand for one part, without increasing the cost of production, will diminish the

price of the other parts. For as the cost of production has not increased, the principle of competition will prevent the price of all the parts from being more than the cost of production. And as the demand for one part has increased, its price, and its supply will also increase; but this being necessarily attended with an increased supply of the other parts, for which there has been no increased demand, will diminish the price of those parts.

Thus the freight of goods outwards and homewards ought to pay the expense of the voyage in and out, with the wear and tear of the ship, usual profits, &c. If, then, any circumstance connected with the state of trade, usually creates a greater demand for freight homewards, it will have a proportional effect in diminishing the freight of a cargo outwards. The encouragement therefore given by the present rates of customs to the importation of timber from Canada, has a considerable effect in reducing the freight of all goods sent to America, and of encouraging emigration, by reducing the fares to passengers.

The business of farming is, in this respect, still more complicated. This complexity arises from the necessity of a rotation of crops, and from the manner in which some of the products of agriculture are partially rivals to others, by answering the same purposes. As an illustration, let us consider what would be the effects of the general introduction of turnip husbandry into a country where it was previously unknown. The first effect would be to diminish the cost of production of sheep—the animal fed on that root—and of wheat, as the crop next in rotation, unless so far as those effects might be counteracted by any increase of population. But the effects would not stop here. The produce of the sheep consists of mutton and wool, of which the former would experience only a slight decline of price, as the effect of its lessened cost of production would partially be obviated by driving its rival beef from the market, and thus obtaining an increased demand. The fall therefore in wool, the *peculiar* product of the sheep, would be more considerable. But as beef sustains a slight fall of price, while the cost of pro-

duction of black cattle remains undiminished, their peculiar products, viz. hides, cheese, and butter, must experience a corresponding rise, although no alteration has been made in the cost or mode of producing them. A similar train of reasoning would lead us to conclude that if any new use was discovered for hides, which had the effect of producing a great increase in their price, these consequences would follow—a fall in the price of beef and of mutton, and a rise in the price of wool and of wheat. These would be instances of a change taking place in the relative values of commodities, without any alteration in their cost of production: unless by a metaphysical abstraction, not very consistent with our notion of what the cost of production is, we suppose the cost of production of an entire complex commodity, to be appropriated in different proportions to its several parts.

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Adam Smith uses the expression "effectual demand" in a somewhat different sense. He understands by it, the demand of those who are willing to pay the natural price of the commodity. Such a demand he calls effectual, "since it may be sufficient to effectuate the bringing of the commodity to market." The definition I have given in the text will I trust be found a more convenient one, as it is upon effectual demand, so defined, that the prices of commodities depend. The expression "proportion between the demand and supply" is a very indefinite and vague one, and is apt to mislead. To maintain the truth of the proposition, we cannot attach definite and uniform ideas to the terms "proportion," "demand," "supply." To give an instance of the manner in which this proposition may mislead, I shall give an example which shews the fallacy of this doctrine, when accurate deductions are attempted to be drawn from it. I quote from D. G. Lubé, M.A., on the gold currency. "As, then, exchangeable value varies *directly* as the demand, and *inversely*

as the supply; that is, since the *greater* the demand, and the *smaller* the supply, of a given article, the *higher* will be its value, and *vice versa*;—any one acquainted with the first principles of arithmetic will know, that it may be expressed by a fraction, whose numerator shall be the *relative demand*, and denominator the *natural supply*; for the value of a fraction varies *directly* as the numerator, and *inversely* as the denominator. Thus, in general terms, making (*d*) stand for the demand, and (*s*) for the supply, the fraction $\frac{d}{s}$ will represent the *relative value* of each commodity.”—Page 66. Again, “Let us suppose, for instance, that while the *demand* for food rose, in consequence of the increase of wealth and population, in the ratio of 3 to 5, the *supply* was at the same time augmented in the proportion of 8 to 9; the value of produce, in the first instance, would be represented by $\frac{3}{8}$, and in the second, by $\frac{5}{9}$: any one at all versed in the doctrine of fractions, will know that the first fraction is to the second as 27 to 40. These two numbers then, 27 and 40, will represent the several values of agricultural produce at the periods assumed.”—Page 70.

PAGE 39.

Colonel Torrens argues, with much ingenuity, that profit does not form part of the cost of production, but that it is the excess of the price of a commodity above its cost of production, and that it is only because it does not form part of the cost of production that it exists at all. The question, however, originates in a verbal dispute, or in a misconception of the meaning of the expression “cost of production.” “Labour” and “profit” are not corresponding terms. To be accurate, we should speak either of labour and capital, or of wages and profits. Adhering to this language, it will be correct to say that commodities are produced by labour and by the employment of capital; and their cost to the consumer, i. e. the price he has to pay for those, is called wages and profit: and those

are therefore, relatively to him, the cost of production. In like manner, the cost of production to the capitalist is what the production has cost him ; that is to say, the wages he has paid to the labourer, and the use of the capital which he advanced, and which he is deprived of until he is reimbursed by the sale of the commodity. This latter is not profit, indeed, but it is the sacrifice for which profit is required, and by the extent of which the amount of profit is regulated. As profit, therefore, measures this sacrifice, it is not inconvenient, although it may not be accurate, to speak of wages and profits as constituting the cost of production of an article in the possession of the manufacturer. He has paid wages to the labourer, and he has surrendered the profit which he might have derived from any other employment of his capital. Many similar cases will occur to the reader, where, instead of labour, employment of capital, and use of land, we substitute their prices, viz. wages, profits, and rent. As in the case of a small proprietor cultivating his own land with his own capital and labour, he ought to get for the produce an amount equal to the wages he might have earned by his labour, the profit he might have made of his capital, and the rent he could have procured for his land. If it were asked, what does the manufacturer or merchant gain, since he derives a profit only equivalent to the use of the capital he surrenders ? I should say that he converts a source of revenue into revenue itself, just as the labourer gains by an employment which converts into a revenue his natural capacity for labour, and as a landlord gains by receiving rent for the productive powers of the soil.

PAGE 57.

Potatoes appear to be in very bad repute among political economists. Some even hint that the poverty of Ireland is in a great measure to be attributed to the use of this food. The reader may form some idea of the horror with which they have

been viewed, by looking to the Index to Mr. M'Culloch's edition of Smith's *Wealth of Nations*, where, under the title "Potatoes," he will find a reference for the "rapid and alarming progress of potatoes in France." Such language would be more applicable, if they eat men instead of feeding them. Something however may be said to vindicate them from the charge of creating or aggravating the poverty that prevails in Ireland. The strongest objection which is urged against the use of potatoes arises from the impossibility of storing them from one year to another. "The whole crop must necessarily be exhausted in a single year; so that when the inhabitants have the misfortune to be overtaken by a scarcity, its pressure cannot be alleviated, as is almost uniformly the case in corn-feeding countries, by bringing the reserves of former years into the market. Every year is thus left to shift for itself." This is undoubtedly a disadvantage, which, however, I think is compensated by the utility of potatoes as food for cattle. This use, as it were, stores them up for succeeding years; and in times of scarcity, when potatoes rise in price, it then becomes unprofitable to feed cattle with them, and the portion usually devoted to this purpose is drawn out as a reserve to satisfy the wants of the population.

In the three years terminating the 5th January, 1826, the annual average number of swine exported from Ireland to Great Britain was 74,000. Besides that large number of swine, there were exported 340,000 cwts. of bacon and pork. The immense quantity of potatoes which was consumed in fattening those animals, formed a resource out of which the wants of the human population could have been supplied had a scarcity occurred. Although potatoes cannot easily be hoarded or exported, yet pigs can; and potatoes may be considered as the raw materials of which pigs are manufactured. But whatever be the staple food of the people, if the nation is poor, a dearth will occasionally occur; and if we look to the history of England, or of any country at a time when it ^{was} as poor as Ireland is

now, we shall find that dearths and famines were more frequent there, and more tremendous in their effects than they have been in Ireland during the last thirty years.

A second objection is, that on account of the bulk and weight of potatoes, a scarcity can never be materially relieved by importation. Now, in the case of a poor country with a perfect freedom of trade existing between it and a rich one, which has a similar soil and climate, as in the case of England and Ireland, this immobility of potatoes is rather an advantage to the poorer country. If a scarcity here cannot be relieved by importation, neither can it be aggravated by exportation. If potatoes could easily be transported from place to place, the latter event would most frequently take place. Their price would necessarily rise to the same height in both countries. But prices rise faster in proportion to the scarcity, in a rich than in a poor country, and therefore whenever there was a scarcity common to both countries, exportation would take place from Ireland to England.

It is said that people who live chiefly on butcher's meat and corn, would probably enjoy a greater quantity of other articles, so that it would be possible for them in times of scarcity to make such retrenchments as might enable them to elude its pressure. Mr. M'Culloch also observes, that so long as potatoes are used only as a subsidiary species of food, their introduction serves to improve the condition of the labourer, and they frequently afford him additional means of support when there is a failure of the corn crops. Now I do not understand how potatoes can afford additional means of support to corn-fed people in times of scarcity. Where are the potatoes to come from? They surely are not grown as a reserve for years of scarcity, to be thrown away in years of ordinary plenty. The ordinary cultivation will be the ordinary consumption, and there will not be an additional supply of potatoes to compensate for a deficient harvest of corn.

As to the possibility of eluding the pressure of a scarcity of provisions by a retrenchment of other articles, that (putting im-

portation out of the question) is impossible. A single family may do so, but an entire population, however wealthy, cannot. In this respect the poorest and the wealthiest countries are on an equality. If the supply is deficient one fifth, the consumption must diminish one fifth. If the population is wealthy, prices will rise very high to enforce that diminution of consumption. If it is poor, a smaller rise of price will produce the same effect, and that is all the difference. The *demonstration* of this is obvious.

What gives an appearance of plausibility to the common declamations against the use of potatoes is, that they confound the custom of living chiefly upon potatoes with the poverty which introduces that custom. And then it is argued that people who live upon Bread and beef, can more easily purchase articles of furniture and of clothing, and will form a richer and more comfortable population than those who have the means of procuring nothing more expensive than potatoes. This is true. But the question is, whether the use of the potato produces poverty, or aggravates its evils, or the contrary. On this head the principal complaint is that it is a cheap, and wholesome, and palatable food, and consequently produces an inconvenient increase of population, and that this increase of population lowers the wages and depresses the condition of the labourer. Also it is said to be favourable to the comfort of the population, that the price of subsistence should bear a high proportion to the price of comforts and decencies, for that then the number of those who enjoy such comforts and decencies will bear a high proportion to the number of those who possess but the means of a bare subsistence. And it is said that the introduction of such a cheap food as potatoes, prevents the existence of that high proportion. I shall consider separately those arguments, which indeed are not very consistent with each other.

It is certain that in any given state of the population, the cheapness of food, arising from a facility of production, cannot be injurious to the inhabitants. It will not lower their habits,

nor depress their condition, but it will have the directly contrary effect. The real wages of their labour do not depend upon the price of provisions, but upon the value of the articles which their labour produces. Of that sum, the less is required to purchase food, the more will remain to purchase other things. The labourer's condition will be the more elevated, and he will find it the easier to provide the comforts and decencies of life for himself and his family. But it is said, such a state of things cannot last. The facility of procuring food will produce a redundant population, inconsistent with the prosperity of the labouring classes. But admitting that the population will increase with great rapidity, what injurious effect has this on the condition of the labourer. Even upon the principles of the anti-populationists, it only affects him by creating a difficulty of procuring food, by increasing the cost of production, and thus raising its price. The necessity of resorting to inferior soils, so far as it is not counteracted by agricultural improvements, reduces the wages of labour as measured in provisions; but other consequences of an increase of population, are, a better system of a division of labour, increased facilities of conveyance, improvements in manufactures: all these increase the command of the labourer over all the conveniences and decencies of life. Thus, if food is too cheap in comparison with articles of clothing and furniture, an increase of population is the remedy. An increase of population produced by cheapness of food cannot therefore be deemed an evil, unless a man is prepared to maintain, that cheap food, which would otherwise be a good, is an evil, merely because of its tendency to increase the population, and that an increase of population, which would otherwise be a good, is an evil, merely because of its tendency to raise the price of food.

It is an advantage to a country to be supplied with cheap food, when that cheapness results from a low cost of production. But the poverty of a country may also be the cause of provisions being cheap. They are then cheap, not because they are

easily produced, but because the labour which produces them is of little value, and is sold cheap. Unfortunately this is the chief cause why potatoes are so cheap in Ireland. Many circumstances have thrown difficulties in the way of employing capital in Ireland. Either from natural disposition or education, the Irish labourer is a bad workman. Property and life are not adequately protected, and notwithstanding the low wages of Irish labour, it is not found a profitable expedient to employ it in manufacture. However, the influence of those causes is probably on the decline. A fuller protection will be afforded to property and life, capital will flow in, the Irish will become more industrious, more skilful, more honest workmen, and will receive a better remuneration for their labour. When this takes place, potatoes will rise in price, as the labour employed in their production will become more valuable. Dearthness is only an evil when it arises from the quantity of labour employed in production, but when it arises from the high price of that labour, it is an indication of prosperity. On the other hand, when cheapness of provisions is caused, not by the low cost of production, but by a low price of labour, it is a symptom of poverty, but it alleviates that evil, although it indicates its existence.

Another charge is brought against potatoes, which, if it were well founded, would indeed be a most serious one. It is alleged that the potato crop is irregular, uncertain, and extremely liable to failures. As a proof of this it is asserted that in bad seasons the price has *frequently* risen to three times the price of ordinary years. I believe that at the commencement of the present century, wheat was nearly three times its present price. That, certainly, does not *frequently* occur with respect to potatoes: in my own experience I never knew it to take place. While writing this, a book was sent in to me, and the wrapper about it was a sheet of a report made in 1818, on the cause of the typhus fever which had then lately been raging in Ireland. This report attributed the origin of the fever in certain parts of Ireland to the sufferings of the peasantry, arising principally from the

dearness and scarcity of food—potatoes, it said, being at the time the fever appeared, from $3\frac{1}{2}$ d. to 4d. a stone. The report proceeded to state the abatement of fever in the following year, which led some to think that the epidemic had worn out. But the framer of the report attributed this beneficial change to the comfortable condition of the peasantry—potatoes, it said, being then only 3d. a stone. If a variation in the price of potatoes, in the proportion of 3 to 1, was of frequent occurrence, a variation from 4d. to 3d. would not have been spoken of, as if those prices were the extremes.

But the variations which take place from year to year are not entirely to be laid to the blame of the potato. Our customs and husbandry are the principal cause. First, in many parts of Ireland, potatoes are not a regular marketable article. It is the custom for every labourer to take from a rood to an acre of land, on which he plants potatoes for his own family. Thus, at the commencement of the season, each person is entrusted with the entire store destined for his own consumption, or at least with a very great part of it. It is evident that in a year of scarcity this custom has the effect of preventing that rigid economy which otherwise would mitigate the scarcity, by spreading the deficiency over the entire year. Any single husbandman may happen to have a bad crop in a good year. A scarcity, therefore, in his little store does not alarm him, nor prevent him from dispensing the usual supply of potatoes to himself, his family, and his pig. Were he obliged from the commencement to resort to the market for food, the rise of prices would indicate the scarcity, and would enforce a timely attention to economy, and thus prevent the occurrence of a dearth.

Those little husbandmen, too, are necessarily bad farmers. They have no selection of land in which to plant their potatoes; they are obliged to put up with any land they can get, and from want of capital they are unable to lay out a sufficient quantity of manure upon the land. So hardy is the potato, that in ordinary years it yields a tolerable crop, and it ought not

hastily to be reputed a variable crop if it fails in bad seasons, when badly cultivated upon land in which it ought never have been planted.

The potato, when properly cultivated, suffers less from unfavourable weather than any kind of corn. Excessive drought or excessive wet are its only enemies, and of all inclemencies of the weather the effects of those can best be remedied by agricultural skill and capital. With proper drainage the potato will bear rain and wind that will lodge, or rot, or blight half the corn in the country, and in years of drought they can be watered without much expense. It is probable that the present generation will witness the general introduction of machines for this latter purpose.

I have merely alluded concisely to the arguments that may be urged in defence of potatoes, because I think that the presumption is entirely in their favor. He who argues against them should make out a very strong case. Providence has bestowed upon the world a prolific, wholesome, and palatable vegetable. These qualities must insure its general cultivation in all countries adapted to its growth. And it is a hard matter to believe that the introduction of this plant should naturally and almost inevitably introduce general distress. It would be a singular instance of permanent national unhappiness, being introduced by any thing except a course of irreligion, vice, or folly.

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“The proportion between the different rates both of wages and profit in the different employments of labour and stock, seems not to be much affected, as has already been observed, by the riches or poverty, the advancing, stationary, or declining state of the society. Such revolutions in the public welfare, though they affect the general rates both of wages and profit, must in the end affect them equally in all employments. The proportion between them, therefore, must remain the same, and

cannot well be altered, at least for any considerable time, by any such revolutions."—*Wealth of Nations*, Book I. Chap. 10.

PAGE 133.

In "Ella of Garveloch," one of Miss Martineau's 'Illustrations of Political-Economy,' the doctrine is very boldly asserted, that it is the taking and cultivation of inferior soil that subjects the better land to the payment of rent.

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Mr. Ricardo contends that tithes, by raising the price of agricultural produce will fall wholly on the consumer. They will be, as it were, an addition to the cost of production. In this he falls into an error which occurs frequently in his work, namely, that of supposing that the cost of production influences the price without diminishing the supply. As if men first determined what they should consume, and then had the goods made according to order, and paid the cost of production, because on such terms only would the goods be produced for them. He says, "goods rise, because otherwise the requisite supply would not be afforded." The fact is that goods rise because the producers limit the supply, as well as they can calculate, to such an amount as they hope to dispose of at a remunerating price, and when they miscalculate and produce too much, prices fall, notwithstanding the cost of production, and the producers suffer a loss, and are compelled not to produce such an abundant supply. This is most evident in the very case of agricultural produce, where the price varies from year to year, and is never fixed as the average. In an abundant season prices fall, and the consumer does not pay more in order to encourage the producer on future occasions to raise the requisite supply; and in a season of scarcity prices rise above the cost of production.

The effect of tithes, supposing the population to be unaffected, and putting importation and exportation out of the question, would be, by raising prices to tax the consumer, and by diminishing the usual consumption and production to reduce rents.

Mr. Ricardo makes a distinction between high prices as caused by a scarcity, and as caused by a great cost of production. I cannot recognise the propriety of such a distinction. An increase of price can only be produced by a diminution in the supply or an increased intensity of demand. The latter may be produced by the increased wealth of the population, the former by an increased cost of production. But in this case it is the diminution of the supply, not the increased cost of production, that increased the prices. If no change had taken place in the cost of production, the same diminution of supply would be necessary and sufficient to produce precisely the same increase of price.

The same opinion, that an increase in the cost of production of an article will raise its price without diminishing its consumption, combined with some confusion in reasoning, led Mr. Ricardo to assert that a tax upon the profits of the farmer would be advantageous to the landlord.

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“In short, let the Ricardo economists turn and torture the thing as they will, rent is nothing more than the interest of the capital laid out in the purchase of, or improving the land; the value of which depends not so much upon the fertility, as on the situation and the uses to which it may be applied.”—*Lube on the Gold Currency*, page 25.

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I consider the consumption by labourers to be as strictly un-

productive as the consumption of rich landlords or capitalists. The opposite opinion appears to lead to several serious errors, and is, I think, founded upon a false analogy, and a misconception of the nature of productive consumption. The distinction I have made between productive and unproductive consumption, is by the object which the consumer has immediately in view in the consumption. If the object is profit, or to transfer a value to some commodity, then the consumption is to be deemed productive. But if the maintenance or enjoyment of the consumer is the object which he has in view, and the value is not, *by such consumption*, transferred to some other commodity, the consumption may be considered as unproductive consumption. This is the only distinction which can be consistently adhered to. On any other distinction, it will not be found easy to give an answer to such questions as these. If two labourers earn, the one ten shillings, the other twenty shillings a week, and if the latter spends fifteen shillings, and saves five, how much of his consumption is to be deemed productive? . Is it the ten shillings which he spends on necessities, or is the five shillings to be added which he spends on luxuries? In either case his labour adds a value to the work beyond the amount of his consumption, and which would not be increased or diminished by an increase or diminution of his expenditure. The value added by the toil of the labourer to any commodity, is the value of his labour, that is, the amount of his wages. It certainly is not equal to the amount of both his wages and his consumption, and it would be an inconvenient and unnecessary enumeration to say, that the value of his labour is equal to the amount of what he spends in necessities and in luxuries, and of what he saves.

Persons are misled by a false analogy. Inanimate matter has no will, no choice to work or to refuse, no power to select a master. It therefore does its work gratuitously, and therefore the work done has no value except that which is caused by the expcuse of making and working the machinery. The supply is not limited by any other principle. If a greater value was

created by their work, more machines would be made and worked, until the increased supply reduced the value produced by them to the amount just stated. But in the case of men the matter is different. They may work or not, as they think proper, and the number of men willing to work at any time is limited, and an additional supply cannot be immediately procured. They may choose their masters and their employments, and make terms for themselves, and are not driven like machines to work for such a sum as in the most economical manner will be sufficient to keep them in repair, and to supply them with the commodities necessarily consumed during the work. The wages of labour can never sink to this limit, and have not even any tendency to approach it.

This opinion, together with an error as to the source from which profit is derived, has led to the agricultural theory which represents land as the only source of wealth. The supporters of this theory alleged that land, besides the wages of the labourer, and the profit of the farmer, yields a net surplus produce which is paid as rent to the landlord; but that in manufactures, no value is added to the manufactured commodity, except the value of the provisions and other articles consumed by the labourer during the progress of the work. No value therefore is created by such labour, since the labourer is consuming for his support as much as he is producing by his toil.

Now this argument proceeds upon a total disregard of the productive power of capital, which is the source of profit, and without injury to the consumer or labourer, produces a surplus equally net as the rent of land. Besides, the value produced by the labourer, or the wages he receives, may much exceed the value consumed by him. He may be a painter of eminence, annually creating a value of £10,000, and perhaps not spending £1,000. But even the sum consumed by the labourer does not detract from the value produced by him. The necessity he lies under of procuring food and raiment is not caused by his labour. The ultimate object of all production is consumption, and I

would not deem any labour unproductive of wealth or utility merely because the value of the produce is shortly afterwards consumed by the labourer and his family. The two very opposite errors are nearly allied—that of considering the artisan's consumption as productive, and his labour as unproductive. It might with as much reason be contended that land does not produce any wealth, since the net surplus it yields is punctually consumed by the landlord. There are in the savings banks in England several millions of money, deposited there by labourers, whose wages must to at least that amount have exceeded their consumption.

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Those who argue against the proposition, tacitly admit the propriety of the correction relating to the time. For they omit an obvious argument that would be perfectly valid if the correction was not implied; I mean an argument founded on the supposition that the return remaining the same as before, and the advances to labourers remaining the same, the return by the introduction of some improvement, should be yielded at a less interval of time from the period when the advance was made. This, it might then be argued, would not alter the proportional wages, while it would increase the rate of profit per cent. per annum.

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Some idea of this doctrine appears to have passed through the mind of Adam Smith; but he did not dwell upon, nor form it into a system. “When the most fertile and best situated lands have been all occupied, less profit can be made by the cultivation of what is inferior both in soil and situation, and less interest can be afforded for the stock which is so employed. In the greater part of our colonies, accordingly, both the legal

and the market rate of interest have been considerably reduced during the course of the present century."—*Wealth of Nations*, Book I. Chap. 9.

Adam Smith appears not to have possessed much taste or capacity for long or subtle trains of reasoning. The "*Wealth of Nations*" is written with very little attention to system, and this circumstance has probably tended to increase its utility. It prevented any error from infecting the entire work. An erroneous principle could never lead the author far astray. He possessed all the qualities necessary for writing a most useful work, while the science was yet in a rude imperfect state. Strong good sense, freedom from prejudice, extensive information, love of truth, and profound observation, are the qualities eminently displayed by the author of the "*Wealth of Nations*."

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The expense of supporting the labourer in that style which he has been accustomed to consider indispensable to his decent subsistence, has no effect in regulating the rate of his wages. The mode in which he usually lives is dependent upon the amount of the wages he usually receives, and not on the latter upon the former. The relation of the labourer to his income and expenses is the same as that of the landlord and capitalist to theirs. In all cases alike you may reasonably presume that the income of any class of men is large, if you observe them habitually incurring great expenses; but in all cases alike I conceive it to be plain, that the income of no class of men can be kept up or prevented from sinking by continuing the expenses in which they were accustomed to indulge in better times. This appears sufficiently evident without proof, or is best proved by the investigation which I have attempted to give of the source from which the income of each class is derived, and the circumstances by which the amount of it is regulated.

But it may not be useless to remark upon a few facts which

appear to countenance the opinion that the wages of the labourer depend upon the price of the articles on which he expends them. The first is, that wages are generally high in great towns, where provisions are usually dear, and the expenses of living great. This, however, depends upon the principles which regulate the relative, not the absolute, wages of labourers. The expense of living in a large town is a disadvantage which must be compensated by increased wages, otherwise labourers would remove from the town to the country, until, from the scarcity of labourers, wages in town should rise to such an amount as to make up for the expense of living in town. But does the same argument apply to the case of a difference of price of provisions in different times. The labourers have not the power of adjourning their existence from one period of time to another, in the same manner as they can remove from town to country, if such removal will increase the amount of the necessaries of life which their wages can command. The cases are not analogous, therefore, since the cause which operates in one, does not exist in the other.

I may also remark, that the high wages of labourers in large towns arises, in part, from their superiority in skill, as the best workmen naturally flock to the place where employment is most easily procured, and where competition is greatest. Another cause why the rate of wages sometimes appears to be affected by the price of provisions is, that the price of provisions is in reality affected by the rate of wages and the wealth of the labourer. If the quantity of food bears the same proportion to the population in two different periods or countries, the price of provisions will be greatest in that period or country where the labourer can afford to pay the most for his food.

As no inference can be drawn from those facts, the doctrine must depend upon argument. The following is the argument usually used to prove that the wages of the labourer depend upon the expenses incident to his condition. If the wages of the labourer are more or less than a certain amount, pro-

portioned to the expense of supporting a labourer according to the usual style of living among his class, the population will increase or diminish until wages rise or fall to that amount. I shall not now enter upon a full discussion of an argument involving the complicated question of population. The argument is fallacious, even if the facts upon which it is founded were true; but I believe no example was ever found where the population diminished or ceased to increase, while the labourers had the power of supporting their usual average families by giving up a portion of their usual comforts. They never will embrace that alternative which would affect the population. I said that the argument was fallacious, because it only goes to prove that the population would diminish, until at the expiration of a considerable period, wages would rise to their former amount. The intermediate time, being equal to at least one generation, would afford space and opportunities for a change of habits, feelings, and circumstances to arise among the labourers.

The doctrine is carried frequently much farther than any supporter of it attempts to push the proof. Miss Martineau, in her Tale entitled "French Wines and Politics," lays down the doctrine, *that in a season of scarcity the wages of labour will rise so as to preserve their usual proportion to the price of provisions, although no increase will, at the same time, take place in the price of commodities produced by labour.* What is the inducement to employ a labourer, if his wages will cost more than the produce of his labour? Is it physically possible, in a time of scarcity, that every person can obtain his usual portion of provisions out of the deficient supply? Does experience shew that in a scarcity the wages of labour sustain any increase?

This opinion, which Miss Martineau is singular in supporting, is anticipated by Mr. Ricardo, and easily refuted.—(Principles of Political-Economy, page 177. See also the quotation in page 247.) Mr. Ricardo's own opinion is not, however, more correct—"The price of labour will express, clearly, the wants of the society respecting population; it will

be just sufficient to support the population, which at that time the state of the funds for the maintenance of labourers requires. If the labourer's wages were before only adequate to supply the requisite population, they will, after the tax imposed upon wages, be inadequate to that supply, for he will not have the same funds to expend on his family. Labour will therefore rise, because the demand continues, and it is only by raising the price that the supply is not checked."—(Ricardo, page 251.) I should say that the "wants of the society respecting population" are the number which the society can support in happiness and comfort. This depends, among other things, upon the institutions of the country, and it is possible that a bad law, by diminishing that number, may diminish the wants of the society respecting population. Mr. Ricardo argues thus:—The wages of labour indicate the wants of the society respecting population, because they enable the society to support that population. He assumes then, without reason, that a circumstance tending apparently to diminish those wages, will leave unaffected the wants of the society, which are measured by those wages, and that therefore the wages of labour will remain as before. Mr. Ricardo's opinion is, that a tax upon wages falls entirely upon profits. I have shewn that a moderate tax upon wages would be sufficient to absorb profits if it fell upon them, and therefore a tax a little greater must *partially* fall upon wages, even if the capitalist were altogether to surrender his profit. The concluding paragraph which I have quoted from Mr. Ricardo, expresses clearly the great error respecting the nature of the operation of the cost of production, which pervades his entire work—"It is only by raising the price that the supply is not checked." The true statement would be—It is only by checking or limiting the supply that the price is raised up to the cost of production. In a note upon tithes, I have shewn an instance of the operation of this error of Mr. Ricardo.

The next writer who has pushed to an extreme length the

principle against which I am contending in this note, is Mr. Sadlier, one of the first of political economists, if he will permit himself to be ranked among them. He has the following passage: "I understand it to be a universally acknowledged axiom, that the wages of labour have a constant tendency to accommodate themselves to the actual average expenses of those rendering it. If there be the least truth in this, the proposal to the working classes that they should diminish their expenditure in order to save money, would only have the effect, if attended to universally, of decreasing the remuneration of their labour precisely in the same proportion as they had diminished their comforts." Mr. Sadlier is not so inconsistent as to think that such a reduction would be brought about by an increase of population; but he thinks such economy would produce idleness, as men will only labour up to their necessity. I believe, however, that it is universally found to be true, that the principle of saving, when once it has taken possession of the mind, is a much stronger motive to exertion than the desire to spend.

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Mr. Ricardo frequently asserts that wages and profits together are always of the same value, and that nothing but a rise in one can produce a fall in the other. He uses the term "*wages*," sometimes to signify the absolute wages which the labourer receives, and sometimes as the proportional wages. This did not arise from an abuse of words or a confusion of ideas, it was the natural and necessary consequence of a hypothesis, which for simplicity of illustration, he laid down at the commencement of his work. He assumes that any given quantity of gold, or the metal of which money is made, is always produced by the same quantity of labour, with the same quantity of fixed and circulating capital employed at the same interval of time before its

its production. On this hypothesis, if gold is raised from mines within the kingdom, absolute money wages will be identical with, and be measured by, proportional wages, and a rise of wages, that is of money wages, will always be accompanied by a fall of profits.

THE END.