Popular Political Economy

Four Lectures Delivered at the London Mechanics' Institution

Thomas Hodgskin

1827

Contents

TO GEORGE BIRKBECK, ESQ. M.D., F.C.S., M.A.S.

President of the London Mechanics Institution, of the Meteorological and Chemical Societies, and of the Medical and Chirurgical Society of London; Honorary Member of the Literary and Philosophical Society of Bristol, &c. &c.

MY DEAR SIR,

IN requesting you to accept the dedication of this little work I am actuated by no mean ambition. I wish to bear in this public manner my humble but sincere testimony to the great importance of your services in promoting the advancement of sound knowledge, and to the generous zeal which leads you to devote much of your time, and I am afraid, to sacrifice your health, to the accomplishment of this great object; and I wish at the same time, thus publicly to express the pride I feel at being numbered among your acquaintance and fellow-labourers in this field of true honour.

From the beginning of the London Mechanics' Institution, which it is, I believe, our common pride to have originated and supported, though with very unequal powers and unequal efficacy, I have witnessed the unwearied diligence, the never sparing exertions, with which you have laboured through good and through evil report, sometimes publicly misrepresented, but always esteemed and honoured by those who knew you best, to enlighten and improve its members. I have frequently heard with delight the choicest truths of science explained by you in the happiest language and most engaging manner, and I have marked with deep interest how the taste of your audience has been gradually refined by your example, while their understandings have been enlarged by your acquirements.

The Members of the Institution are already indebted to you for numberless lectures on some of the most interesting branches of experimental science, always recommended by beautiful illustrations, and always made the means of enforcing some moral truths. Never wearied with well doing, after having explained the mechanism of the larger masses of inorganic matter, you are now about to begin a course of lectures on the more refined mechanism of organised beings. You mean probably to unfold to the members the wonders of our physical existence, and by convincing them that the structure and functions of our body cannot be understood, nor, if disordered, restored to health, unless we are minutely acquainted with all its parts, you will prepare the way for the extinction of that prejudice which still, unfortunately, attaches to scientific dissection. Nobody can wish that the respect and affection we all naturally entertain for the hallowed remains of dear relatives should be lessened, or that dissection should become here, as it is in some parts of the Continent, the mere butchery of a carcase; but we are all interested that no useless impediments should be laid in the way of prosecuting this arduous and important study, and that those to whose care and tenderness we must trust our lives and our health, should not have to begin their medical education by violating the sanctity of the grave. They are not made

more humane by being compelled, as at present, to have recourse to some unlawful means of procuring the dead, in order that they may relieve the living.

The success of your former exertions is a fair augury for your promised undertaking. Not only has the parent Institution in London given rise to numerous similar institutions in the suburbs of the metropolis, and in the greater number of our manufacturing towns; but it has been the exciting cause for establishing similar institutions in France, Belgium, and Germany: not only has the extension of demand for scientific information called into existence in this country several cheap and useful treatises, it has also induced several clever men to publish such works on the Continent, some of which have been wisely added to our own stock. It has been said of Newton and La Place, and very probably may be said of every man who zealously devotes himself to accomplish some great and useful object, as for example, Mr. Watt, and Mr. Wilberforce, that they enjoyed their reputation. Their celebrity was not altogether posthumous. And you, my dear Sir, having kept a good object zealously in view, are also honoured and imitated; you have the satisfaction of seeing your exertions crowned with success, and of knowing, that the respect and admiration of your auditors spring, in part, from the improved, the kind, and endearing moral feelings you have excited in their minds, while you have imparted to them scientific instruction.

Like many other persons, I felt a wish to imitate your conduct, but I also felt, as I expressed in my first discourse, a great difficulty in addressing an audience whose taste had been refined by your lectures, and who had been almost spoiled for any less gifted teacher. I felt that it was a perilous undertaking to speak to them on a subject, generally considered dry and repulsive, and unsusceptible of illustration by experiment; but being honoured on each occasion by your attendance, the Members of the Institution were attracted to the theatre by your presence; they seemed to transfer to me a portion of that deep respect they always entertain for you, and I had the satisfaction of delivering my lectures to numerous and attentive audiences.

I had, moreover, the satisfaction of observing, that there was nothing in the subject which the audience could not comprehend; and there was much in which they took a lively interest. That it is one in which sound information is more especially necessary, the proceedings of every day, and in every part of our country, testify. That the laws which regulate the production of wealth form a part of the system of the universe, is now generally admitted; that I have successfully explained them, it is not becoming in me to assert, but that we are all deeply interested in ascertaining them, no man can deny. You will, I trust, my dear Sir, remember, that in my lectures I only explained the phenomena of social production, as far as they form part of a natural science; I took no notice of the effects of political regulations; nor have I departed from this principle in my book. But when we learn from this science to extend our admiration of Nature from the phenomena of the material to those of the moral world, it is impossible that we should on all occasions curb our indignation and prevent our tongues or our pens from over-flowing with maledictions against those political systems and institutions which seem to have turned the bounties and blessings of nature into the direst curses.

The natural science of wealth relates only to man, and knows nothing of the distinctions between nobles and peasants, kings and slaves, legislators and subjects; and if we are led to conclude at every step of our investigations, that the fundamental principles of political society as well as the administrative acts of most governments are hostile to the principles of this science, must we wilfully suppress our conclusions,—must we turn aside from the light of truth, that the *wisdom of our ancestors,* or the peculiar wisdom of the few hundred beings in whose hands the different governments of the world are lodged, may remain for ever the only objects of human adoration? I

think not: and therefore, in endeavouring to unfold the natural laws which regulate the progress of nations in wealth, I have never hesitated in my book to affirm, that we are indebted for all civilization to that desire of providing for our wants or of bettering our condition, which arises naturally in all human beings, and which political systems have only degraded into low cupidity, or inflamed into mad ambition. In this book I have ventured to contrast in stronger colours than might have been proper when addressing a large meeting of the working classes, the boundless reverence due to the Author of our natural affections and instincts, which, unwilled by us, lead to the present beautiful and comprehensive system of social production, with the little respect due to human institutions, which appear to me little, if at all, calculated to promote the general welfare.

I need not remind you, my dear Sir, that the wisest of mankind were for ages ignorant or unobserving of those natural laws which Dr. Smith first remarked as determining the prosperity of our race; nor need I call your attention to the obvious fact, that the wisest of all existing men are quite incompetent to guess from the few of these laws yet known to us what will be the future condition of mankind. It is, however, quite plain, that the course in which our race is carried forward by natural passions and affections is so opposed to all human institutions, that they must be changed or abolished day after day in order to adapt them to a state of things they are intended by the lawgiver, but vainly intended, to prescribe. Society continually outgrows and casts off the swaddling bands with which the wisdom of our ancestors swathed its infancy. Those persons who stand at the helm of affairs are continually made sensible that the human race is hurried along by a rapid current which they cannot stem, and can scarcely divert from its course. Their view of the past is limited by the acts of their predecessors, of the future by the probable results of their own enactments. In the mean time, that civilization of which they take no note, and one great branch of which you have been so instrumental in promoting, proceeds onward in a steady course, under the influence of general laws; and no class of men live in such a state of perpetual amazement and alarm at the occurrence of events which they did not foresee, and being quite unprepared to meet, attempt to check by violence, as those statesmen who pretend to direct the march of nations. Notwithstanding, they continue to look on human society as a machine put together and regulated in all its movements by the politician; and they endeavour to make us believe that it would fall in pieces if it were not for the preserving power of his master hand.

The view I take is totally different. Man being placed on the earth by a power greater than himself, and society being founded in natural laws, is regulated by them in every minute part, and at every period of its existence. To provide for *general* social welfare seems to me an object much more beyond the power of man than to estimate the bulk and density of the planets. However admirably the faculties of each individual are adapted to provide for his own wants, they are quite incompetent to grasp, much less to regulate the complicated relations of society; and these relations, growing more complicated as our race multiplies on the earth, make the puny ambition of lawgivers appear every day more and more contemptible. If this be novel doctrine, it is dictated by the altered circumstances of mankind. Events, which continually, but more especially of late, have set at nought the anticipations and wisdom of legislators, must be responsible for it. Mankind naturally multiply on the earth, and naturally extend their wants; the produce of manufacturing and commercial industry, which springs from these two sources, naturally increases in value and in quantity much faster than the produce of agriculture; the manufacturing and commercial classes of society, consequently, come naturally to out-number and to surpass

in wealth those whose support is derived from agricultural labour; and this has necessarily altered, and is continually altering, in the natural progress of society, the basis of power in all governments, founded, as those of Europe originally were, on the principle of giving all political power to the owners of land, because they were then the owners of all wealth. This circumstance sets in a clear light the opposition between the natural progress of civilization and all existing governments; and this circumstance, my dear Sir, I need not inform you, has been made more evident in our times than formerly, by those beautiful and ingenious mechanical contrivances, the structure and movements of which I have heard you so eloquently describe, and which in our time have multiplied to an astonishing extent the products of manufacturing and commercial industry.

But I must stop. I have less occasion indeed to dwell at present on this circumstance, because some farther observations on it will be found in the following pages; and I only advert to it now as a justification of some of the sentiments contained in them. I wish to inform you, that I have a settled and sincere conviction, whether right or wrong is another question, that governments generally are founded on principles directly in opposition with the natural progress of civilization. I trust our countrymen are now much too liberal and enlightened to be offended with the honest expression of such an opinion: I do not court either persecution or martyrdom for my political faith, if there be now any men so attached to existing systems, as to think that he who does not believe in their efficacy ought to be hanged or burned; and it is only under the confident assurance that no man by our liberal countrymen, and under a *soi-disant* liberal government, will be persecuted on account of opinions, that I venture to place your respected and honoured name at the head of some that are at variance, I am afraid, with the political creed of the great majority of men.

I am, my Dear Sir,
With the most unfeigned respect,
Your obliged and obedient Servant,
THOMAS HODGSKIN.
Pentonville, April 19, 1827.

PREFACE.

THIS book not being exactly a transcript of the Lectures delivered by the author at the London Mechanics Institution in 1826, he thinks it is right to point out in what respects it resembles or differs from them. The first lecture, on THE INFLUENCE OF KNOWLEDGE, consisted of the second, and part of the third chapters of the present work, with one or two passages of the Introduction. The second lecture, on DIVISION OF LABOUR, is here transformed into the fourth, fifth, and sixth chapters. The seventh chapter, on TRADE, formed the third lecture; and the chapters on MONEY and PRICES contain the substance of the fourth lecture. The greater part of the Introduction, and of the third chapter, with the first and tenth chapters, formed no part of the Lectures. Some few passages, alluding to events connected with the Institution, have been suppressed, though with some pain to the author, because they were appropriate only when mentioned in the presence of those who could judge of their correctness. Many passages also have been added, even in those chapters which are most literally a transcript of the Lectures. To those who did not hear them, the view here taken of PRODUCTION will probably appear to have some little novelty in it; and those who did, should they look into the book from the expectation of finding something to read more than they heard, will not be disappointed.

Some of the added passages may appear unsuitable to the mixed and popular assembly in which the Lectures were delivered; and on account of them, those persons who have assumed the guardianship of the national intellect, carefully shielding it from the contamination of philosophy, and drilling it into servile obedience to human institutions, the only proper objects, in their opinions, of worship and veneration, will be prone to condemn the managers of the Institution for allowing the Lectures to be delivered. The author being willing to bear all the blame that may belong to such passages, and being anxious to guard the Institution against the possibility of its being misrepresented, regrets very much that he is unable to designate them,—they have become by revision so blended with the original matter,—or he should have thought it due to those gentlemen, to mark in the following pages, as is done by plays, the passages omitted in the representation.

The term POPULAR is not used in the Title from a notion that the thorny discussions of Political Economy are made amusing, and that its abstract doctrines have been reduced to light reading; but from a notion that the principles here expounded are more agreeable to popular prejudices than those which have been made prevalent, though still unpopular, by the writings of Mr. Malthus. Our feelings are hostile to his theory; and without pretending to controvert it, the Author has endeavoured to show, that the true principles of production justify the prejudices of mankind, and strengthen that confidence the most enlightened of our species were most disposed, prior to the unhappy celebrity obtained by THE ESSAY ON THE PRINCIPLE OF POPULATION, to place in the wisdom and goodness of that Power, which sustains, informs, and regulates the moral as well as the material world.

Though popular in this sense, the book makes no pretensions to be what is called practical. The author is even afraid that its principles may be regarded as more remote from the business

of life than those of most treatises on Political Economy. He discusses none of the subjects on which the people are in the habit of petitioning Parliament; and, as far as legislation is concerned, the book contains no practical applications whatever. But if the view of the science here adopted be correct, there already exists a *code* of natural laws, regulating and determining the production of wealth; and although they influence the conduct of individuals, in a national point of view, they are only susceptible of being known. To know is to apply them. Though they dictate no immediate and positive enactments, they may, nevertheless, be as worthy of the attention of mankind, as the vain and ignorance-begotten schemes of human legislators.

It will be found moreover, on a close examination, that the human lawgiver only attempts to influence the production of wealth by altering its distribution. The reason urged in favour of our corn laws, for example, is, that they encourage agriculture, and increase the production of corn: but they do this by raising its price to the consumer, and thus compelling him to give more of his own produce than he otherwise would to corn growers. In the same manner, bounties, monopolies, commercial prohibitions, alterations in the currency, taxes, and, in short, the greater number of all those social regulations which influence production, whether they promote or retard it, only operate on it by first altering distribution. Accordingly, all legislative measures relative to the production of wealth, all the petitions of different classes in the community, have no other immediate object, like the petitions of the agriculturists for the continuance of the corn laws, or like the petitions of the manufacturers for the abolition of them, but to take or keep from one class and give to some other; or, in other words, to alter the distribution of wealth. As the present Volume is strictly confined to developing the *natural* laws which regulate production only, and as the author purposely avoids discussing legislative measures, the reader will see that he does not touch on those subjects which are supposed to constitute the practical part of the science. It is his intention, however, should his efforts meet any encouragement, to examine, in a subsequent volume, the natural laws which regulate the distribution of wealth. But, even should he succeed in developing these laws, he may still, perhaps, be liable to the reproach of not being a practical man; for it is strictly consistent with his views of social phenomena, not to dictate or recommend any legislative measures whatever, but to leave mankind at large, free from the restraint of positive institutions, and clear from the disturbance of view caused by them, to find out and to follow the laws which Nature has dictated.

It was his intention also to have noticed some of the errors of the great Masters of the science, which would have enabled him, as moral feeling and scientific truth must always be in harmony with each other, to trace to its source the repugnance now felt to some of the doctrines of Political Economy. Men turn away disgusted, not from truth, but from errors dogmatically enforced. Being obliged, however, for the conveniency of publication to choose between pointing out errors and displaying truth, he has preferred the latter, and has contented himself in general with giving what appears to him, as far as it goes, a correct view of production, to controverting the opinions of others. On this branch of the science, the writings of Dr. Smith's successors are chiefly defective;—they are erroneous chiefly on the subject of distribution. That great man carefully distinguished the natural distribution of wealth from the distribution which is derived from our artificial right of property. His successors, on the contrary, make no such distinction, and in their writings the consequences of this right are stated to be the laws of Nature. The falsity of their doctrines relating chiefly to distribution, the author has the less reason to regret that he has been obliged to alter his intended plan; for should his book be received with only a small part of

the favour shown to his Lectures, he may have a future opportunity of explaining the cause of the general aversion from this not unpleasing and very important science.

A knowledge of the natural laws which regulate the production of wealth, and consequently the progress of civilization, is equally, if not more, essential to the welfare of man, than a knowledge of any other part of the wide creation. All other sciences and every art are only subsidiary parts of that great whole, the master principles of which it is the object of Political Economy to discover and describe. That the science is incomplete, and as yet in its infancy—those who profess it differing among themselves as to its first principles—is generally admitted; and supposing it be of great importance to our welfare, the author concludes that any work which either familiarizes the knowledge already possessed, or adds to it in the smallest degree, does not require to be ushered into the world by an apology. His book may not accomplish either of these objects; but having aimed at both, he commits his labours to the judgement of the reader, without making any apologies for adding one more to the many books already published on what is generally considered an unreadable subject.

INTRODUCTION. OBJECT AND SCOPE OF POLITICAL ECONOMY.

TWO very different opinions prevail in society regarding political economy. On the one hand it is described as the most important of all the sciences, and indispensable to the welfare of society. It is said to explain the laws which regulate our condition, and teach us how it may be improved. "Its object," we are told, "is to point out the means by which the industry of man may be rendered most productive of necessaries, comforts, and enjoyments." "There are few branches of human knowledge," says Mr. Malthus, "in which false views may do more harm, or just views more good." Persons who entertain these opinions, would have the principles of political economy, inculcated at school, like the most common branches of education, and made the basis of all legislation. So far do they carry their respect for its doctrines, that by them they would regulate the intercourse of the sexes, and all the relations of social life.

On the other hand, there is a large class of persons who never mention political economy without a sneer. They deny that any such science does or can exist; and deride those who undertake to teach it. "Some of its doctrines," it is stated by Mrs. Marcet, one of its most distinguished ornaments, "are repugnant to the impulse of the heart, and the feelings of uninformed benevolence;" and all the class of mere sentimentalists cannot bear to hear them enunciated. They say it degrades the labourer to a machine, and calculates the price of his bones and thews, as if they were parts of a steam engine; that it takes no account of man, "the head, the heart, and tongue of all," but as he is a portion or "doze" of capital; and all his noble faculties are only noticed, in this science, as they convert him into a more powerful instrument for producing wealth. They turn with disdain from political economy, because it makes individuals selfish, and corrupts our national councils. No calamity falls on the country, no alteration takes place in the course of trade, no struggle ensues among workmen to obtain higher wages, no discontent breaks into open day, no distress overwhelms the manufacturer, no affliction falls on the peasantry, which is not or has not been attributed to the influence of political economy, over the minds of the legislature.

It is impossible to reconcile these contradictory views; but as both are prevalent, being repeatedly met with in the public journals, and continually reproduced in Parliament, as well as among all classes of the people, it seems desirable to make the reader thoroughly aware of the object and scope of that *natural* science, which has received the erroneous name of *Political* Economy;—demonstrating its possible existence; describing, in the course of the work, its present boundaries; and showing briefly, but distinctly, in what manner it has been confined far within its legitimate range, or perverted from its peculiar object. If, on the one hand, there be a natural science of national wealth, there can be no more wisdom in despising it, than in despising the natural science of astronomy or botany; if on the other, it be incomplete and imperfectly known, we shall understand why the presumption of those who have undertaken to regulate society by their opinions, should excite both indignation and contempt. Whether the aim of disarming mockery, and exposing presumption, be accomplished or not, I may at least hope to prevent the reader from

indulging an exaggerated notion of what the science can perform, or encourage him to conquer his prejudices, and seek for extended information in more elaborate works.

"Political Economy," is defined by Mr. M'Culloch, to be "the science of the laws which regulate the production, distribution, and consumption of those articles or products which have exchangeable value, and are either necessary, useful, or agreeable to man.[1] Many very useful *articles,* such as air, light, and water, under some circumstances, have no exchangeable value, and are not included in the term wealth. Whenever labour is required to produce a commodity it receives, and most commodities, which are the product of labour, possess the quality of exchangeable value, and are included under the term wealth; commodities not produced by labour, and which no labour is required to obtain, do not possess exchangeable value. To this doctrine, *land* forms a remarkable exception. Labour improves and fertilizes it; but it possesses, in most cases, exchangeable value independent of the labour vested in it; and in all cases more exchangeable value than is measured by that labour. How land comes to form this exception, will be hereafter explained; but as all consideration of land, with its varied degrees of fertility, will be expressly excluded from this Work; as exchangeable value is, in all other cases, given by labour, the science of which I am to treat, is strictly and exclusively confined to labour and its products.

The distribution of wealth contemplated by political economists is, according to the same author, "the proportions in which the various products of labour are distributed among the different classes in society;" or it is the appropriation of the products of labour, and is quite distinct from the actual distribution of commodities made by trade. Those to whom much is distributed, or who have the power of appropriating much, will consume or use much; or they may give it to others to consume, with a view to subsequent profit, or for the pleasure of giving. The particular manner in which they dispose of what they receive, may ultimately affect production; but their consumption or use will be co-equal with what they receive. Landlords and opulent capitalists will fare sumptuously every day themselves; they will keep a number of servants to minister to their luxuries, or they will set labourers to work for the sake of obtaining a profit on their labour. On the contrary, those who receive or own little, cannot consume much. Labourers have a bare subsistence. The mode in which wealth is distributed, has a vast influence on subsequent production; but for all practical and scientific purposes, distribution and consumption are precisely the same. In consuming wealth, the object is to support life, or give a zest to existence; and the most agreeable methods of consumption must be settled by the taste of each individual. If they be in any respect the subject of scientific consideration, they do not fall in the department of the economist, but in that of the cook, the physician, or the moral philosopher. Consumption may, therefore, be discarded from political economy, and we thus arrive at a more simple, and equally comprehensive definition. It is the science of ALL the circumstances or laws which influence the productive power of labour, and which regulate and determine the distribution of all the products of labour.

This limitation agrees with the writings of Dr. Smith. He has no where accurately defined or described that science which is now called political economy; but it is generally admitted that all the scientific part of his great Work, "The Wealth of Nations," is comprised in the first book,

[1] "Principles of Political Economy," page 1. This definition seems, in one respect, to be rather at variance with the tenor and spirit of Mr. M'Culloch's writings. In many parts of them he carefully distinguishes between natural circumstances and social regulations; but the definition confounds under the one term *laws,* those eternal and invariable laws which he elsewhere says are the same, both in republics and monarchies; and those varying enactments which forbid during *one,* what is enjoined in the subsequent session of Parliament.

which relates exclusively to the "Productive Powers of Labour," and to "the order according to which its produce is naturally distributed among the different ranks of the people." Not one word is said in the title of this book of consumption; nor is there one chapter of the "Wealth of Nations" dedicated to this subject. Consumption, therefore, has been needlessly fastened on the science by Dr. Smith's commentators and disciples; and by discarding it we return to his more simple, and equally comprehensive arrangement.

Perhaps the reader may form a more distinct notion of the interesting sort of phenomena to which political economy relates, and certainly the importance of the science will not be diminished in his estimation, by briefly adverting, in the first instance, to some historical events. I allude more particularly to the progress made, almost within our own recollection, by North America and New Holland, in population and wealth,—the nearly stationary state of some nations, and the decay and ruin of others.

More than three centuries have now elapsed since the discovery of America; but it was only at the commencement of the seventeenth century that the first English colony was permanently established in the northern part of that continent; the only inhabitants of which, prior to that period, were a few tribes of Indians, who wandered over the whole country, and obtained, by hunting and fishing, a precarious subsistence. Their descendants have continued ever since their wandering mode of life, and seem to have decreased in numbers as they have been narrowed in their hunting limits by the children of the first colonists. The Europeans, on the contrary, after they had overcome the immense difficulties attendant on a settlement in a foreign and new country, rapidly increased in numbers; they occupied and used all the land in the immediate neighbourhood of their first establishments, and have since gradually spread themselves over a large part of that continent. The present dominions of the United States, east of the Mississippi, contain about 900,000 square miles; and the Government claims a still larger territory west of this river. But though they claim, they do not occupy all this territory. Before the colonies separated from the Mother Country, they contained nearly 2,000,000 souls.[2] By the census of 1820, the population of the United States amounted very nearly to 10,000,000; and at present, in the year 1827, it will probably be upwards of 12,000,000. A small part only therefore of that immense continent, which formerly supplied, and scarcely supplied, a few wandering Indians with the necessaries of life, now maintains, in unprecedented general opulence, this mighty people. In the history of the whole world there is no other well authenticated instance of such a powerful nation being formed in so short a time, without conquest or usurpation. It has not subdued and incorporated with it contending tribes, and nations already populous; it has grown up *naturally* to its present strength. Under the benignant influence of European knowledge and arts, its people have increased so rapidly, and have advanced with such giant strides in the career of national power and prosperity, that they have put to shame those old, and now, thank God, almost superannuated schemes for adding to national prosperity by fraud and violence; and even those more modern, but perhaps not much less absurd plans for accomplishing the same object, by numerous restrictive regulations.

Towards the close of the last century convicts were first sent from Great Britain to New South Wales; and at the beginning of the present century, free settlers first went to that colony in considerable numbers. Already, however, two or three flourishing towns have been built; and a very small nook of that island, which is so large as to have been called, by some geographers,

[2] Warden's United States of America.

a fifth quarter of the globe, and which, when first discovered by Europeans, only supplied the means of subsistence to a few straggling state of degradation and destitution, who dragged on a miserable existence, subject to numerous privations, being hardly able to perpetuate their race, now supplies an abundance of food for several thousand persons, and is capable of enabling many millions to subsist. The only want there is of human beings, who know how to make use of the rich bounties of nature.

In Europe, most of the continental nations make a very slow progress in wealth, and are nearly stationary in opulence and population. With the exception of the neighbourhood of their respective capitals, and some few spots in France, there is hardly a country on the continent of Europe where new buildings are met with. The revenue of the monarch, who takes to himself all the disposable produce of his subjects, being spent in adorning his own residence, creates a demand for more habitations in his immediate neighbourhood; but, in general, and the fact is so well known, as not to require proof, the greater part of the continental nations increase very slowly in wealth and population.

The whole of Europe is supposed, by the author of the article Europe, in the Supplement to the Encyclopædia Britannica, to double its population once in about 90 years; Dr. Smith says once in 500 years; while, in the United States, the population is doubled once in every 25 years. In Britain, Russia, Silesia, and some other countries, says the author of the same article, the increase has been more rapid than in the rest of Europe. This increase, slow as it is, the reader must be made aware, has no relation whatever, as is generally supposed, to extent of country, or fertility of soil; for the increase has been much more rapid in Britain within the last fifty years, where the people amount to 158 on every square mile, than in Poland,—if, in fact, the population of that country have increased at all, which is doubtful,—where the number of persons to each square mile is only 59; and it has been probably, on the whole, as rapid as in Russia, where the number of persons to each square mile is only 21.

As some nations have risen, and are rising to opulence and power, and as some are nearly stationary, so others which have received the fairest portions of the earth for an inheritance, are fast sinking, or have sunk, from the possession of wealth and splendour, into poverty, weakness, and decay. None of my readers can require to be reminded of the ancient empires of Assyria, Persia, and Egypt, of ancient Greece and Rome, or of Italy and Turkey; the once populous and flourishing condition of these parts of the earth being attested in many places, even to this day, by the ruins of several vast cities, by splendid monuments of ancient art, and by the mouldering parts of gigantic works, which the most powerful of modern nations would shrink from undertaking. Man has, in one age, exhibited his wonderful prolific and creative powers, apparently, only to prove in the next, that they were not more than equalled by his power to destroy. His hand fertilizes and adorns the face of the earth, which *he* also reduces to a melancholy ruin. In the eastern and most anciently-known part of the world, we find unerring proofs of the power of labour to improve, and of ambition to devastate. If we could not account, and satisfactorily account for this alternation of prosperity and misery, by the prevalence of one conspicuous error—the reverence of man for the very authority which works his ruin,—we might be tempted to believe, that there was no permanent desire of happiness implanted in his bosom, or that the world was not adapted to his capacities. But the governments of the Sultan in the east, and of the Pope in the west, which are more honoured by their subjects even than the Divinity, have converted the once blooming parts of Asia and Italy into deserted wastes. Rome, it is conjectured by Gibbon, formerly contained not less than twelve hundred thousand inhabitants, but at present, they scarcely exceed a tenth

part of that number. "In the ancient registers of imposts," we are told by Volney, "3200 villages were reckoned in the district of Aleppo; but at present, the collector can scarcely find 400." All history convinces us, that the devastations of war, the effects of plagues, of inundations, and of all natural calamities, are soon cleared away by the hand of industry, whenever man is not brutally ignorant, and government not desperately oppressive. Domestic oppression is a more certain source of national ruin than foreign conquest. It is not a change of tyrants, but continual, even though legitimate, tyranny, which extinguishes a people. The sultan, with his pachas, muftis, cadies, and janissaries, are the only instruments capable, by appropriating the produce of the labourer, and destroying the hope of enjoyment, of putting an end to production, and of stifling or exterminating his subjects. If there be, therefore, as America and New Holland testify, *natural* sources of national greatness, there are, as the whole of the eastern and most parts of the western world prove, social causes of depopulation and national decay.

Not only do nations increase rapidly under some circumstances, while under others they fall into decay; but they differ very much as to the comfort and opulence enjoyed by the individuals who compose them. It is distinctly ascertained, for example, that in the United States of America, the great majority of the people are abundantly supplied with the means of subsistence, they are well fed, comfortably clothed, active, enterprising, intelligent, and moral; while, in those eastern countries, the great mass of the people obtain only a meagre and wretched subsistence; they are the victims of continually recurring plagues and want; and are ignorant, slothful, revengeful, blood-thirsty, and barbarous. Individuals must be able to obtain with tolerable facility the means of subsistence to increase in numbers; so that the natural growth of national greatness, such as we witness in America, and the prevalence of individual comfort and morality, are strictly coincident. On the other hand, when nations cease to increase in numbers, when they begin to decay, we may be quite sure the power of the natural principle of population is so great, that in them the mass of the people cannot easily obtain the means of subsistence. Individual poverty, a scanty population, its slow growth, or national decay, also accompany one another.

It may be easily anticipated, that the increase of a nation, or its stationary state, will be accompanied by different degrees of productive power. "Among the savage nations of hunters and fishers," such as were the only inhabitants of America and New Holland, before the Europeans went to those countries, "Every individual," says Dr. Smith, "who is able to work, is more or less employed in useful labour, and endeavours to provide, as well as he can, the necessaries and conveniences of life for himself and such of his family or tribe as are either too old or too young, or too infirm, to go a hunting and fishing. Such nations, however, are so miserably poor, that from mere want, they are frequently reduced, or at least think themselves reduced, to the necessity of sometimes directly destroying, and sometimes abandoning their infants, their old people, and those afflicted with lingering diseases, to perish with hunger, or to be devoured by wild beasts. Among civilised and thriving nations, on the contrary, *though a great number of the people do not labour at all, many of whom consume the produce of ten times, frequently of a hundred times, more labour than the greater part of those who work; yet the produce of the whole labour of the society is so great, that all are often abundantly supplied;* and a workman, even of the lowest and poorest order, if he be frugal and industrious, may enjoy a greater share of the necessaries and conveniences of life than it is possible for any savage to acquire."[3]

[3] Wealth of Nations, book i. chap. i.

Taking our own country as an example and illustration, only a part of the females, of the children, and youth, though this part is much too large, labour for the support of society. There are, moreover, all the officers of government, all the persons connected with the administration of justice, the army and navy, the clergy, the landlords, with all those who live on their property, together with a long list of professional men, who in no wise directly contribute to the subsistence, the clothing, or the comfort of the community.

From the population returns of 1820, it appears, that the number of families employed in agriculture in Great Britain was 798,656, the number of families engaged in trade and handicrafts was 1,350,239, and the number of families engaged in neither of these two occupations was 612,488. This account does not include, I believe, the army and navy, and a large class of professional men, not being housekeepers. According to this enumeration, however, Mr. Rickman states, that 333 families out of every 1000 are employed in raising subsistence for the whole society.[4] It is difficult to ascertain what proportion of the society actually provides all the food and clothing we consume, because many of the families described as engaged in handicrafts serve only to minister to the luxuries of a few; and because there are no means of knowing what number of persons in each family actually labour. In some trades, that of the cotton spinner for example, both the parents and some of the children are constantly employed; while, in other trades, such as those of the carpenter and the smith, only the man labours. There are also a large number of persons who do not labour, on account of age or infirmity. To conjecture what number of individuals actually provide for the comfortable subsistence of the whole, we must add to the families engaged in agriculture those engaged in trade and handicrafts; and we must subtract those members of each family, such as the extremely young, and the extremely aged, the sick and the imbecile, in short, all those who are either incapable of labouring, or are excused from labour by the customs of the society. If we suppose that two persons in each family do not labour, which is a low estimate, we shall conclude that less than one-sixth of the people are engaged in agricultural pursuits, and that not above one-fourth of our whole population provides every thing which is consumed by us all. Among savages all the men and women labour; their labour barely supplies the necessaries of life, and they increase very slowly, if at all, in numbers; while in civilized society the labour of only a small part of the people supplies numerous conveniencies and luxuries, and the society grows in population and power.

These passages have, I hope, placed distinctly before the reader two remarkable contrasts, in both of which the comfort and opulence of individuals is closely connected with increasing national greatness. Under the *same* circumstances of climate, soil, and situation, we see, on the one hand, that nations increase rapidly in wealth and power, and in them the mass of the people are comparatively opulent; on the other, that they do not increase or actually decay, and the people are comparatively poor. In the two states of society there is a prodigious difference in the productive power of individuals: the labour of each, in one state, subsisting a great number of persons; in the other, barely procuring food for himself. Now we want to know all the circumstances which influence the productive power of labour, the prosperity or decay of nations, and, in a general sense, the opulence and poverty of individuals; and to ascertain all these circumstances is the great OBJECT of political economy.

It is, however, not a little remarkable that we may at once reject from our inquiries all the physical circumstances, and all material things not inherent in man himself, and not created by

[4] Introduction to Population Returns. Vide Parl. Papers.

labour, which are supposed in general to influence most strongly the prosperity of our race. Climate and situation, however apparently influential, have in reality so slight a degree of power, and their peculiar effects depend on causes so little known to us, that at present they are inappreciable. They were the *same,* we have every reason to believe, in the eastern world three or four thousand years ago, as at present; and certainly they were the same for the American Indians, and for the savages of New Holland, as for the Europeans; and they are the same in modern as in ancient Italy; except, indeed, that it seems to be satisfactorily proved, that the climate of all countries is improved by the multiplication of people, and deteriorated by their decrease and decay.

The land falls not within the limits of the science any more than the sea or the air. It was as extensive for the Indians in America as for the Europeans; and the dimensions of Asia have not been curtailed since the days of its splendour. There is no reason to believe that it is less fertile now than when it nourished the inhabitants of the vast empires already mentioned. Little as the continent of America yielded to the savage, it yielded even that little only to his labour; and excluding from our view the different kind and degree of labour exercised by the two races, it now yields as much to him as to the civilized European. In fact, the spontaneous productions of the most fertile districts, do not amount to the ten thousandth part of what civilized man can obtain from the soil. Labour, enlightened, well-directed labour, converts the sterile rock into a fertile field; and it is no exaggeration to say that it gathers bread from the salt wave.

To show more distinctly the inefficiency of fertility, and the immense power of labour, let me remind the reader of the wealth and comfort formerly enjoyed by the inhabitants of the *marshès* of Holland, and of the poverty and destitution suffered by the people, generally, of the South of Europe, but particularly of Italy and Spain. The soil, and the ships, and the houses; the villas, the gardens, the mills, of the industrious and once mighty people of the former, may all be said to have been won from the bosom of the ocean; while the possession of a large tract of the most fertile land of Europe cannot give comfort, power, or splendour to the latter. The dominions of the Sultan would make several Englands; they are traversed by some of the finest rivers of the old world; they contain many admirable situations for commerce; they easily communicate with Europe and India; they are placed in a temperate climate; and if mere fertility could give wealth, all their inhabitants might be delightfully opulent: but the great mass of them are poor and wretched, and the nation is impotent and degraded.

Perhaps, however, the different progress made by the United States of America, and the Spanish colonies in the Southern part of that continent, afford the best illustration of the total inefficacy of a boundless territory and of inexhaustible fertility, in making individuals wealthy and nations powerful. The Spanish colonies were established in America nearly a century before the British colonies were settled in the North of that continent; they found there two extensive and populous nations, whom they conquered and employed as slaves to add to their own wealth. The fertility of that country is such, that we are told by Humboldt,[5] "A spot of ground in New Spain cultivated with bananas, is sufficient for the subsistence of more than fifty persons; while an equal space in Europe cultivated with wheat, would not nourish above two." "The labour (and it is rude, untutored labour) of one individual, two days in the week, is there sufficient to support a numerous family. In Mexico, maize yields on an average one hundred and fifty fold, while in Europe, the farmer thinks his crop excellent if he obtain eight bushels of wheat for the one he sows."

[5] Humboldt's Travels in Equinoctial America.

But it is well known that the Spanish colonies in this favoured situation, have not increased in wealth, power, and population, equally with the British colonies, now the United States. I have already mentioned the number of their people; but to enable the reader to form a more accurate comparison, I shall add, that when Humboldt wrote he estimated the number of Whites inhabiting them to be 8,575,000, while the whole number of Whites in all Spanish America was only 3,276,000.[6] All the supposed advantages of fertility, and of an open country, belong to the Spaniards; but the enlightened *industry* of the Anglo-Americans has far more than compensated for these advantages, and has enabled them to multiply much faster than the Spaniards.

Nor does the vast fertility of Mexico save the people from famine: "The streets of the capital," says Humboldt, "are crowded with between twenty and thirty thousand unfortunate wretches, who pass the night without any shelter, and lounge in the sun by day, *entirely naked,* or only covered with a blanket. They never ask charity, and if they labour one or two days in the week, they earn as much as they require to purchase maize, or some of the ducks which abound on the lakes of Mexico, and which are roasted in their own fat." "Famines," he adds, "are very common in almost all these regions, and occur whenever a great drought, or any other local cause, injures the harvest of maize." With an almost boundless extent of good fertile land, a people may suffer from famine, which is never experienced in countries less favoured by these physical circumstances. Land, therefore, however fertile, does not create wealth, any more than sunshine and rain; and as well as these, it may, both as to dimensions and fertility, be entirely overlooked without the chance of falling into an error.

I beg the reader to recollect that I do not assert, that what we call fertility in soils, which is in all cases, however, a quality relative to our knowledge at the moment we speak, has no influence whatever on the quantity of labour necessary to procure subsistence; but that influence is so unimportant, compared to the effects of knowledge-guided labour, that it may be neglected. Thus, rejecting situation, land, and fertility, the most important physical circumstances which are supposed to influence the prosperity of our race, we may reject from the science all other physical circumstances, except the powers and faculties of man, and what he creates.

It must always be remembered, though it seems hardly necessary to state it, that all wealth is *created* by labour, and there is no wealth which is not the produce of labour. "The *annual labour,*" says Dr. Smith, "of every nation, is the fund which originally, and at all times, supplies it with all the necessaries and conveniencies of life." "What is bought by money or with goods is purchased by labour, (i.e. the labour of obtaining the money, or manufacturing the goods) as much as what we acquire by the toil of our own bodies." "Labour was the first price, the original purchase money that was paid for all things. It is not by gold, or by silver, but by labour that all the wealth of the world was orginally purchased."[7] Such language appears much at variance with the commonly received opinion, that land is the great source of all wealth; which makes it, in this country, be erroneously regarded as pre-eminently deserving the name of property. But the reader may be satisfied, by Dr. Smith's authority, as well as my arguments, that land, like atmospheric air and sunshine, is only one of the material elements indispensable to the production of food. With them, it gives us food as labour directs the fructifying power that is the result of their combined operation. Even its wild and spontaneous productions, which alone give it the characteristic of

[6] For these extracts from Humboldt, the reader may see "Principles of Political Economy," by Mr. Malthus, p. 382, et sub.; or the original work, *"Essai Politique sur la Nouvelle Espagne."*

[7] Wealth of Nations, book i.

wealth, must be gathered and appropriated by *labour.* "Place us," says Mr. M'Culloch, "on the banks of a river, or in an orchard, and we shall infallibly perish of thirst or hunger, if we do not, by an effort of industry, raise the water to our lips, or pluck the fruit from the parent-tree."[8]

Familiar and correct as the principle, that all wealth is the produce of labour, may appear, the opinion just referred to, that *land* is the source of wealth—which is the fountain of much injustice towards individuals, and much national animosity, it having been the occasion of several wars, and the excuse for much usurpation—shows that this principle is not universally recognized. As it is the only safe basis, however, on which the legislator can establish a right of property—if he be at all called on to establish what exists naturally; as it is not only the source of all wealth, but the guide to just distribution, serving at all times to set straight the consciences of individuals when led astray by self-interest, and to rectify the policy of legislators when perverted by false views of expediency; the reader may not be displeased at my quoting the following accurate and striking illustration of it:—

> "If I abstract from my watch," says M. Canard, "by means of reflection, all the labour which has been successively applied to it, there will remain nothing but some grains of mineral placed in the interior of the earth, whence they have been extracted, and where they had no value whatever. If I decompose in the same manner the bread which I eat, and separate successively all the labour which it has received, there remains only a few stalks of a gramineous herb scattered in the uncultivated desert, and destitute of value."[9]

Perhaps as striking an illustration may be drawn from what is at this moment taking place before my eyes. Opposite to me are some bricklayers and carpenters building houses, and the chief materials they employ are bricks, mortar, and wood. The instruments, tools, and nails they use, being chiefly made of iron, may be referred, like the materials of M. Canard's watch, to their primitive situation in the bowels of the earth. The bricks are made of refuse ashes, that were an incumbrance before they were used for this purpose;—of clay, that was removed to make a road, and which, in like manner, till its conversion into bricks, was an impediment to performing other operations, and was worse than valueless. The fuel used to burn them was originally hidden some fathoms beneath the surface of the earth, and even to get at it required a great deal of labour. The mortar is composed of sand dug up to make a foundation for the houses, and must have been removed, whether put to this use or not; and of lime, which previous to being converted by the hand of labour into this substance, was hungry barren chalk, the object of the farmer's maledictions. A few months back, the wood, encumbered the ground in Norway or in America; and, if in the latter, was probably thought such a nuisance, that the people were thankful to any body who removed it. Till the ground was cleared of trees, it was of no use to them. But out of these valueless and worthless materials, the combined labour of the brickmaker, the bricklayer, the sawyer, the carpenter, the tool-makers, &c. &c. constructs valuable dwellings, which shelter their owners from all the inclemencies of the seasons; or, if other persons use them, add to their annual revenue. That mighty mass of wealth, therefore, which stands around Saint Paul's, constituting this great and splendid Metropolis, has been made by labour, and by nothing else than labour, from common clay, from barren chalk, and from trees that men were obliged to

[8] Article, "Political Economy." Supplement to the Encyclopædia Britannica.

[9] Principes d'Economie Politique, p. 6.

root out, before they could obtain a head of cabbage or an ear of grain, from the soil. Beautiful as they are, trees only encumber the ground which the agriculturist must cultivate.

Mr. M'Culloch, from whose writings I extracted the passage quoted above, may well say, therefore, "labour is the talisman that has raised man from the condition of the savage—that has changed the desert and the forest into cultivated fields—that has covered the earth with *cities,* and the ocean with ships—that has given us plenty, comfort, and elegance, instead of want, misery, and barbarism."

To me it is always pleasant to find the language of science confirmed by the authority of the poets, who, obtaining popularity only by describing or appealing to the general feelings and sentiments of mankind, may be supposed to be their most accurate representatives. Supporting the scientific view just taken, Thomson says—

> "ALL is the gift of industry; whate'er
>
> Exalts, embellishes, and renders life
>
> Delightful."

Having thus established the principle, that all wealth is created by labour, it follows that the whole difference between the productive power of a tribe of savages and of a civilized society, between a community in which every individual is opulent, and one in which all are in a state of destitution, between a nation rising into power and one stationary or sinking to decay, must be referred to the different modes in which labour is applied and its produce distributed. And thus the whole science of political economy is comprised, as already stated, within the circumstances which influence the productive power of labour, and determine the distribution of its products.

The whole of these circumstances may be divided into two classes; *first,* NATURAL CIRCUMSTANCES, or laws not dependent on, or derived from government,—such as the passions and faculties of man, the laws of his animal existence,—and the relations between him and the external world; and, *secondly,* SOCIAL REGULATIONS, depending on, or originating with governments,—such as those permanent laws which appropriate the soil of a country, or which bestow on it a constitution, establishing a diversity of ranks among its inhabitants; as well as the laws for the regulation of trade and the acts of the Administration, many of which are expressly intended to add to the wealth of society, or determine its distribution.

It was customary, not many years ago, with philosophers, and with the people generally, to ascribe national prosperity and individual opulence exclusively to forms of government and modes of administration. Every social blessing was then supposed to flow from wise laws well administered.

> "To scatter plenty o'er a smiling land,
>
> And read their history in a nation's eyes,"

was flatteringly said to be the attribute of statesmen; and, in general, they received credit with the world for being able, not only to confer abundance, but to promote virtue and secure happiness. But when the colonies of North America, consisting of grubbers and back-woodsmen, with a scorn of all regulations except those the people hewed out for themselves,—with a complete individual liberty, and few or none of the shackles of a paternal or politico-economical

government, became the mighty people of the United States, increasing still more in prosperity and power as they got rid of the protection of a European government,—men plainly saw that the pretended wisdom of legislation had no effect in producing national prosperity whatever might be its influence over national decay; and they were obliged to seek for the causes of general welfare in the benevolent provisions of nature. About the same period there arose in France a sect of philosophers, called the Economists, "who proceeded," says Mr. Dugald Stewart, "on the supposition that *social order* is, in the most essential respects, the result of the wisdom of nature, and not of human contrivance." Dr. Adam Smith seems to have embraced the same opinion. Having examined numerous social regulations, but particularly the laws which regulated the trade between Britain and its colonies, and having found that these laws had injured the prosperity of both countries, he was compelled to seek other causes for the growth of that opulence, which could not be denied, than the wisdom of government; and he found them in the interests, passions, instincts, and affections of mankind. He taught, that *the division of labour* among individuals, and the wonderful co-operation of different classes of labourers to produce a common result, by which the productive power of the whole is amazingly increased, are not the result of human or legislative wisdom, foreseeing and willing the sublime, and for us most important, effect of general opulence, but of an instinct in man, by which he takes to this peculiar practice, as a duck takes to the water and a fox to his cave. It is with these natural interests, passions, instincts, and affections, and with their consequences,—they not being suspended at any moment, and continuing to operate as powerfully when society is in its most advanced state as at its commencement,—that political economy principally deals. To them *this book* will be almost exclusively confined; on them, and on their permanency, together with the permanency of those laws by which the material world excites similar sensations in us, at all times and places, is founded the natural science of national wealth. In every subsequent page they will find a prominent place. At present, therefore, I shall confine myself to giving the reader one or two examples of them, pointing out the principle on which they are assumed as the basis of the science.

The foundation of all national greatness is the increase of the people: but unless there existed, at all times and places, a natural and almost irrepressible tendency in the human species to increase, and a natural capability of providing for their wants, how could they have spread themselves over so large a portion of the globe,—founding, in times past, those mighty empires already alluded to; which, though they may have been aggrandised by conquests, must have found human beings to subdue as well as soil to appropriate, and must have contained human beings as the agents of appropriation and conquest? Or how could the forests of Germany have been cleared, and the marshes of Britain drained, had not the people outgrown the spontaneous means of subsistence which adorned the ground, sparkled on the hedges, or dropped from the stately tree? when they,

> —"Sad barbarians, roving, mixed
> With beasts of prey; or for their acorn meal
> Fought the fierce tusky boar."—

Or how could the forests of America be now cleared, and European manners and civilization spread from the Atlantic to the Pacific, did Europe not pour out its superabundant people on America; and did not the industrious inhabitants of the existing United States multiply so fast, that their paternal acres will not conveniently supply them with the means of subsistence? Unless

there was in the human heart a natural love of life, and an instinctive love of offspring, which no privations can subdue, no labour extinguish;—unless *individual* industry, the only source of national opulence, had in general exceeded *social* oppression, and been at all times greater than was necessary to supply the individual's wants—how could any race of people have multiplied and improved; seeing that in no country, and at no time, not even in the United States of America, far less in New Holland, have the labourers ever enjoyed or been suffered to consume the whole of their own produce? At all times and places labourers have had a number of persons to maintain more than themselves and their own families. Thus, originally and naturally, man is endowed with a productive power commensurate to his wants; and that power enables individuals to rear up families, and maintain in idleness and opulence a number of persons more than themselves. This natural productive power—the gift, not of governments, but of our Creator—is the great source of individual opulence and of national greatness.

But this power must be exerted; and are there natural motives, independent of the stimuli derived from governments, for the exertion? There are. Man is doomed to eat bread by the sweat of his brow; and naturally those who do not work can have nothing to eat. If we do not labour, we can have no food, and must inevitably perish. This is as certain as any axiom of mathematics; and the stimulus to labour involved in it, comprehending our existence, is as great as possible. "Industry," says Mr. M'Cullock, "does not require to be stimulated by extrinsic advantages;" nor, I shall add, by punishments or penalties. The necessity for man to labour, existing and operating among the rudest as well as among the most civilized people, in Europe and in America, in past as well as in present times—in short, in all countries and ages, and among all tribes and races of men, is a law of the universe, like the principle of gravity. It permanently and constantly influences and regulates the conduct of all mankind, just as gravity influences all bodies, even those which, like the water of a fountain, seem for a period to bid defiance to its power.

But is there no law regulating the external world corresponding to this necessity? Or has nature imposed the necessity on us, without making the material world answer to our hunger-driven labour? Quite the contrary. It is a law of our being, that we must eat bread by the sweat of our brow; but it is reciprocally a law of the external world, that it shall give bread for our labour, and give it only for labour. Thus we see that the world, every part of which is regulated by unalterable laws, is adapted to man, and man to the world. This reciprocity, or rather uniformity of the laws, regulating the conduct of man and the material world, connects him at all times, however high may be his bearings, and exalted his hopes, with the clod from which he sprang, and with the vast universe which he has intelligence to scan, and a soul to reverence. He is a part of the wisely regulated creation.

When nature stamped this law on us, and on the external world, she undoubtedly regulated and determined, through the endless succession of time, all its possible consequences. She left us to choose between starvation and labour; between holding the plough ourselves, and carrying a whip to make another hold it for us; between subsisting ourselves by our honest exertions, or basely or violently plundering some other persons; but she fixed beyond our control the consequences of our choice. There is ample reason to suppose, therefore, that all the minute branches of the production and distribution of wealth, are regulated and controlled by circumstances flowing from the necessity to labour; just as every part of the material world is regulated and controlled by natural laws. As gravity determines the stability of bodies on the globe, their motion towards the centre of the earth, and even the motion of those which seem to resist its power—they being forced upwards by the superior gravity of some other bodies—and regulates also the motion of

the globe itself, as well as the motions of all the heavenly orbs; so the necessity to labour makes its influence felt, even in those cases, such as the steam-engine, in which man seems almost to have subdued Nature, making her perform the task she imposed on him. In such cases, the powerful instruments are made by labour; they require continual repair, which is done by labour; and they must always be directed and set in motion, which is also labour, by the hand of man.

But certain classes, it may be said, do not labour. The aged, the sick, the imbecile, and children, are supported by the labour of their friends. The receivers of rent and profit subsist on the produce of other men's labour; so do those who live on taxes. One individual may plunder another, or he may persuade him to give him subsistence. Social laws may compel some classes to labour for other classes, or may even give the whole annual produce to those who never labour. If we admit that the members of the government, and the ministers of the church, are labourers, who secure by their exertions the rights of other men, we cannot say the same for the slave-owners of the West Indies, or the mortgagees of their then property in London: we cannot say the same for the landlords and the fund holders of England, and for other similar classes. They are all subsisted and supported, supplied with all their wealth, by the labour of the slaves in the West Indies, or of the toil-worn and half-starved slave-descended labourers of Europe. Admitting that men have, to a certain degree, the power of throwing the necessity to labour off their own shoulders; as they may alter the direction of the influence of gravity, in making a fountain rise from the earth into the atmosphere; the question occurs, will throwing off this necessity, by the appropriation of other men's produce, not be followed by certain and inevitable consequences?

Now we know from all history, that unjust appropriation, that every long-continued attempt in one class of men to escape from the necessity of labour imposed on our race, that every infringment of a man's right to use, consume, and enjoy his own produce, has ever been attended with disastrous consequences. It is a violation of a natural law which never passes unpunished. Domestic slavery, combined with systems of foreign conquest and usurpation, ruined the empires of antiquity. The exactions of all the emissaries of the Turkish government, the total and forced disconnexion in that country between labour and its reward, are there the causes of national decay. The population of the West Indies does not increase. The almost unconquerable love of life—and the almost irrepressible power in our species to multiply and increase, are there subdued by oppression, or by the slave-owner's appropriation of the labourer and his produce. Such appear to me to be some of the natural and necessary consequences, for I have said nothing of the vast moral influence on the idlers themselves, of their attempts to escape from the necessity to labour. Let it be remarked, however, that notwithstanding their wish, and the evil consequences known to result from their conduct, they cannot, in fact, escape from this necessity. They only change the cheerful, healthy exertions of honest wealth-creating industry, for the irksome task of compelling slaves to toil. Slave-owners and rich men, among a crowd of slave-descended famishing labourers, lead probably a more anxious and toilsome life in protecting their property, and in enforcing obedience to their orders, than the slaves whose labour they extort.

Should it be said, that this statement is erroneous, that unjust appropriation does not invariably check production and ruin nations; yet there is a principle in our nature—a law of our mind, by which we at all times believe in the invariability of the order of the universe. This law applies to the moral as well as the material part of creation. By it we believe, for example, that the same circumstances which led in times past to the destruction of the ancient empires of Asia, and that are now leading to the ruin of modern Turkey, would, were they called into existence, effect the ruin of the flourishing states of North America; as, in fact, some such circumstances have checked

the prosperity of South America; and by it believe that the principles of our animal constitution, which now spread people and civilization over the vast continent of America, are exactly the same as those which, three or four thousand years ago, carried the ancient empires of the world to the height of their splendour. But both the principles which lead to the ruin of empires, and those which impel them onward in the career of power and civilization, operate through man himself, affecting individual prosperity, and being only known by the influence they exercise over his conduct. Be they what they may, be their consequences what they may, their permanent, their immutable influence, cannot be denied. They have lived through all the known ages of the world; they have operated, and we have a conviction that they will operate, at all times and places. They may be extremely numerous; it may be difficult for us to discover them; they may be complicated and intricate; they may modify one another to an almost inconceivable extent; we may yet know very few of them: but we know they exist; they regulate or punish the conduct of man; they are co-extensive both in time and space with the existence of our species; and on their felt and acknowledged invariability is founded that natural science which has discovered some of them, which has for its object to discover them all, as far as they influence wealth, and which is known under the incorrect name of *political* economy.

I had intended to have shown at some length the close connexion between wealth and civilization, but my work is of too brief a description to allow me to do so; one single observation, however, will satisfy the reader, that an inquiry into the laws which regulate the production of wealth, is, in fact, an inquiry into the laws which regulate national prosperity and national decay, civilization and barbarism. It is now thoroughly established, that mankind multiply at all times as fast as they can obtain the means of subsistence; nothing can add to the number of people which does not augment the means of subsistence; nothing can check the natural tendency to increase which does not check the increase of the means of subsistence. But the means of subsistence, and the material instruments by which we facilitate the production of the means of subsistence, are all included under the term wealth. Thus an inquiry into the laws which regulate the production of wealth, is an inquiry into the laws which regulate the increase or the decrease of the people, and by their increase or decrease we judge of national prosperity.

Without entering into any detailed examination of the natural laws regulating production and distribution, for the developement of them belongs to the body of the work, I have pointed out the natural principle of national increase, and the natural law which is the basis of all production; and seeing that these are permanent and immutable, believing also that all their consequences are at all times as much regulated and controlled by natural laws as any part of the universe,—admitting that they may be complicated and numerous,—I contend, as our welfare depends on a knowledge of them, that we are as capable of discovering and arranging them into a science, as we are of discovering and arranging the laws, almost as complicated, which regulate the various affinities of the material world; many of which are at present known and acted on with singular advantage; and our knowledge of which constitutes the science of chemistry.

But social regulations, as well as natural laws, also influence the production and distribution of wealth. Both the permanent institutions of society, the form of its government—as is illustrated by Spain and England, by Turkey and the United States of America—and the varying laws for the regulation of trade, the acts of administration intended to add to the wealth of society, or to regulate its distribution, have a manifest influence, both on the quantity produced, and the manner in which it is disposed of. Taxes, when levied, as is generally the case, to maintain in idleness useless, or even worse than useless, individuals—their labour being more pernicious

than total idleness—lessen the natural rewards of industry, prevent production, and alter the distribution of what is produced. Commercial prohibitions compel us to employ more labour than is necessary to obtain the prohibited commodity. They also curb the spirit of enterprise, and impede production, by checking the progress of knowledge and the acquirement of skill.

The corn laws of this country—to take an example of a social regulation influencing both production and distribution—compel all those who eat bread to give a greater quantity of labour to obtain it than nature requires; or they make us pay from fifteen to twenty shillings more for a quarter of wheat, than would otherwise be necessary; and they alter distribution, by putting, (through the medium of exchange, it must be remarked,) a part of the sum thus abstracted from the consumers into the pockets of the landlords.

These examples have been stated only to prove that there are two distinct classes of circumstances,—or natural circumstances, independent of all governments, and social circumstances, derived from governments,—which influence both the production and the distribution of wealth. The science of political economy, when complete, embraces both these classes of circumstances, and has no other limit than the WHOLE of them. But with the latter I shall not concern myself. The regulations resulting from government, which influence the wealth of society, are so numerous—there being, perhaps, not one which has not this effect, that I must necessarily act on the principle of excluding all notice of them from this work, except as they may incidentally illustrate the natural circumstances, to the consideration of which it will be chiefly confined.

It is necessary, however, to remark, that each of these two classes of circumstances must be treated in a perfectly distinct manner. "The *natural* laws," says M. Say, "which determine the prosperity of nations, their wealth, and civilization," are not the work of man; by analysis and observation we discover, we do not establish them.[10] We have first, therefore, to *discover* all the natural circumstances which influence production and distribution at all times and places; and by them, as a test, we *examine* the effects of social regulations. Before we can possibly tell what influence is exercised by the latter, we must ascertain all the former. "They domineer," says M. Say, "over the men who domineer over others, and never are they violated with impunity." They ought to be the rule of our conduct, and we must first ascertain the rule, before we can discover in what respect and degree it has been followed or forsaken. We ought always to remember, that all inquiries into the production and distribution of wealth, according to some present or pre-existing state of society; or as both may be limited and influenced by regulations emanating from governments, or constitutions of society, the offspring, perhaps, of some palpable violation of the natural laws of distribution, if not of production; though not wholly vain and unprofitable, must be shallow and imperfect.

We must make a distinction also, as to whether there can be, or not, a science of these different classes of circumstances. Of the natural laws and circumstances which regulate the production and distribution of wealth—they being as permanent and ascertainable as any other of the laws regulating the material world—there may be a science; but there can be no science of the regulations of any one government, or of all governments, for they vary, according to no discoverable rule, both of themselves and in relation to the ever altering circumstances of the people, for whom they are made. There may be a science of the natural principles by which legislators ought to regulate their conduct, but there can be no science of their decrees.

[10] M. Say, Traité d'Econ. Polit. 2 ed. tome l. p. 99.

Both natural circumstances and social laws have, at present, a mingled and a varied influence on every political economical question. For example: a bad season, which destroys the crops, and the increase of population, which obliges men to plough up heaths, to cultivate moors, and to pulverise rocks into soil, are both natural circumstances, which have a tendency to enhance the price of the necessaries of life. But a law forbidding the importation of grain from countries where the season may have been more favourable, where the land is more fertile, or corn from any circumstances not so dear, has, it is plain, precisely the same tendency as a bad season or an increase of population. It requires, therefore, at all times, great care to distinguish between the effects of natural and unalterable circumstances, and of social regulations. Unless we do so, it is not possible for any man to tell how much of the misery we suffer, or the prosperity we enjoy, results from the laws of nature, and how much from the institutions of the lawgiver. Unfortunately, this distinction is seldom made with accuracy even by philosophers, and it never is made at all by the great mass of mankind. We are, therefore, perpetually liable to praise or censure our rulers without just reason, and to call on them to interfere where they cannot possibly do any good. They always profit by such calls to extend their power; and in the great majority of cases men are doomed to servitude by their own ignorance and their own impatience.

It is from not carefully distinguishing, which is necessary at all times, between these two classes of circumstances, that most of the disputes, and many of the mistakes relative to political economical questions arise. Men attribute to nature the evil which is caused by social institutions, and are led by their reverence, or rather their idolatry of the wisdom of their ancestors, to doubt the wisdom of the Deity. It is the mingled influence, also, of these two classes of circumstances, they modifying, correcting, and controlling one another, in modes more numerous than observation has yet discovered and classified, which makes political economy—independent of the passions and powerful interests which are wounded by its discussions—the most complicated, perhaps, and difficult of all the natural sciences. Whatever may be the operation and effects of natural laws and circumstances, which is what we are principally interested in knowing,—whether beneficial or otherwise,—it is almost impossible to discover them, because they have never been permitted fully and fairly to operate. In truth, their plain, straight-forward effects, by which alone we can discover them, have not been called into existence. Kings and lawmakers, thinking themselves wiser than Nature, have disdained to consult her decrees; and without inquiring into them, have checked, limited, controlled, and perverted them. To distinguish, therefore, between the effects of the natural laws regulating the progress of wealth, which are at no time easily discovered, requires now, when they are blended with the effects of legislative enactments, the most diligent and careful scrutiny. The former, like a deep and mighty river, flow, when uninterrupted, so smoothly onward, that we are not apt to notice their progress, and must set up marks, or cast something on their surface, to be sensible of their course. The latter, like the giant rocks which hem the river's fertilizing flow, inform us, terribly indeed, by poverty, misery, and social convulsions, of the interruptions to the course of nature; but whatever comes into collision with the two elements is destroyed by their conflict, and we cannot distinguish whether the cause of the mischief is the impetuosity of nature's stream, or the stubborn resistance of the legislative rocks.

To have established the fact that two classes of circumstances influence the production and distribution of wealth; and to have pointed out two different modes of treating them; proving the possibility of forming a science of the natural circumstance, and the impossibility of constructing a science of human laws, enables us to relieve political economy from some of the odium cast

on it of late. It is not, as is generally supposed, a meddling, factious, ambitious science,—not a *political* science, prescribing regulations for society, or dictating duties to men; it only examines such regulations as have an influence on wealth, and it speaks no condemnation but what nature commands, leaving men to obey or not, as they list. It does not pretend to say what men will do, but it says the consequences of their actions, some of which it endeavours to trace, are inevitable. It aims at ascertaining the natural circumstances which regulate the production of wealth, and it records some of those instincts which lead man, like other animals, to seek happiness by means appropriate and peculiar to his condition. It presumes not to direct these instincts, but expressly declares that this is a matter for private judgment, and must be left to private men. It takes no notice of the arts of life; it does not pretend to explain the principles of mechanics, agriculture, or chemistry; it does not therefore point out, as is said by some authors, *the means* by which the industry of man may be rendered most productive. To find these means is the great object of all the arts of life, which all united, cannot, in fact, accomplish. No man can say how industry may be rendered *most* productive; for this is the continually varying result of the practical knowledge of all mankind. Rejecting all notice of the arts, political economy can never inform us how the hand may be made skilful. The science observes the close connexion between individual gain and the general welfare; but *it* does not pretend to direct the operations of the merchant, the trader, or the farmer, any more than those of the engineer; nor the labour of the ship-owner, any more than those of the shipwright and smith. The utmost extent of its utility in promoting opulence is, that statesmen may learn from it, if they, being among the most bigoted, ignorant, and presumptuous of mankind, are capable of learning any thing, how they may cease to check that production, which they, like the science itself, cannot possibly promote.

I take leave also to say distinctly, in opposition to the conduct of those who, of late, have carried political economy into Parliament, and endeavoured to substitute, as the basis of legislation, their imperfect knowledge, for the much more imperfect knowledge, I am ready to admit, of previous legislators, that this view of the science corresponds strictly with the writings and views of Dr. Smith. The *Wealth of Nations* may be considered as consisting of two parts: in the first, the author expounds, as far as he had discovered them, the natural laws which influence the prosperity of individuals and nations; and, in the other, he examines the effects of a great number of social regulations. He begins, by describing the effects of division of labour, which, he says, springs from a " *natural propensity* to truck or barter, peculiar to the human animal."[11] He insists, in various places, on the love of saving and accumulation; and on the general desire for happiness and comfort, as correcting the errors of the legislator. "Men," he lays it down as a principle, " *naturally* exert their industry, when they are secure of enjoying its fruits, to better their condition, and to acquire, not only the necessaries, but the conveniences and elegances, of life." In other parts of his work he examines the laws of primogeniture and entail, corporations, bounties, colonial regulations, the navigation acts, &c. &c.; and we find him censuring such laws and systems, as oppose the *"natural course of opulence,"* but he never once takes on himself the functions of a legislator, and prescribes laws for the regulation of society. Having discovered in the division of labour, at least one *natural source for* CONTINUALLY *increasing productive power,* for he says, "all things would gradually have become cheaper,"—"with all those improvements of productive power to which the division of labour gives occasion," had it not been *"for*

[11] Wealth of Nations, Book I. Chap. I. and II.

the appropriation of land, and the accumulation of stock,"[12] he inferred the existence of natural laws, regulating, prescribing, and controlling, in the most minute detail, the vast subject of the production and distribution of wealth; to which the principles adopted by the human legislator, except that they may cause infinite mischief, bear the same relation as the astronomical theories of Ptolemy and Descartes bear to the laws which regulate, also in minute detail, the motions of the planets. His book treats imperfectly. I readily admit, of an important part of the natural history of the animal man. It describes some of his social *habitudes* and instincts, and their beneficial effects, as other natural philosophers describe the gregarious habitudes and instincts of the bee and the beaver. He never thought of correcting or controlling these, but only of discovering and recording them. He laboured philosophically to show, that individual and national prosperity have their source in the natural wants, passions, and affections of individuals; and assuming that nature willed the happiness of our species, he endeavoured to prove, that in contriving the means, she did not wait for the doubtful help of Kings and Parliaments. Nay, more, he demonstrated, of every one of their laws and regulations which he examined, that they had impeded, and in some cases, ruined the prosperity, they benevolently or ambitiously pretended to promote.

Thus the *object* of political economy is to discover ALL the natural laws and circumstances, which influence and regulate the production of wealth. It has no other limit or scope than *all* these laws. Having discovered them, it *examines* by them the consequences of social regulations as far as they influence wealth; but warned by the experience of the injury already inflicted on our race by the regulations of the best and wisest lawgivers, it presumes not to dictate laws for the government of society. It looks on man as a part of the great system of the universe, and supposes that his conduct is influenced, regulated, and controlled or punished, in every minute particular, by permanent and invariable laws, in the same manner as the growth of plants, the chemical combinations of matter, and the motions of the heavenly bodies. This supposition may be erroneous, and, if true, it may not be possible for us to discover these laws; which is what I understand to be maintained by those, if they have any meaning in their words, who assert, that there can be no such science as political economy. A difference of opinion, teeming with more important and numerous consequences, including, in fact, every question which can ever be mooted concerning the organization of society, does not exist. I trust, however, that I have already satisfied the reader of the possible existence of the science; and I hope, therefore, he will feel no reluctance to follow me in my future endeavours to develope the natural laws regulating production and distribution; some of which are universally known, others are acknowledged and acted on, and of all, the existence is implied in every attempt to show, that the regulations of government, the granting of monopolies and bounties, the imposing heavy duties and prohibitions, interfere with and disturb the *natural* course of national prosperity.

It would be wrong, perhaps, were I to conclude the introduction without informing the reader, that the view here given of the foundations of the science differs very much from that of late adopted in this country. Here it is now generally called after foreign authors the *science of values;* a most limited, and, perhaps, even useless definition; confining the science, were the definition followed, to only a small part of it, and affording no explanation whatever of its most interesting phenomena. This view originated, I believe, in France; and it is not a little curious, that both the name and the arrangement given to the science by Dr. Smith, should have been superseded in his own country, and even among those persons who are proud to call him their master and the

[12] Wealth of Nations, Book I. Chap. VIII.

founder of the science, by the name and arrangement of his French commentators. It appears still more curious when it is recollected, that Dr. Smith has endeavoured, in one part of his great work, to combat the then existing systems of political economy;—showing, in fact, that the science which pretended, under this name, to add to the wealth of the people through the instrumentality of government, had and could have no existence.

Of the vast importance of political economy, as I have explained its object, I shall not at present say one word. If in the course of developing its truths, as far as they are known, I cannot make it appear of importance to the reader; if I do not bring before him circumstances in which he finds himself personally interested; if I cannot rouse in him a conviction, that it relates to facts with which his duty towards himself and his fellow men require him to be acquainted; I, for one, shall be content to believe, that the science is of less consequence to mankind than good novels, and not half so amusing.

Chapter I. MENTAL AND BODILY LABOUR.—PRODUCTIVE LABOUR.

IT has been shown in the Introduction, that labour creates all wealth; and also, that the law which condemns us to eat bread by the sweat of our brow, is in so far imprinted on the material world, that it gives wealth and bread to labour, and to labour only. Thus we have at once two species of labour to which it behoves us to attend; viz. the labour of observing and ascertaining by what means the material world will give us most wealth, and the labour of carrying those means, when ascertained, into execution. For the sake of distinction, I shall call the former mental, the latter bodily, or muscular labour. Unless we keep this distinction in view, and are at all times aware of the equal necessity for observing the laws of the material world, and for carrying observation into practice, we shall not comprehend the complicated phenomena of production. Those also who work chiefly with their hands, may be apt to over-estimate their share in producing wealth; and those whose business it is chiefly to observe, may look down, as, in fact, they now do, with somewhat of disdain on those who execute what observation dictates. But beyond observing the laws which regulate the material world, and carrying those observations into execution by manual labour, there is no other element necessary to produce wealth.

The folly of exalting either of these species of labour at the expense of the other, as is done by literary people, and patronising governments, may be made evident, by remarking, that both of them are equally necessary to production, and are practised by almost every individual. The most familiar and, perhaps, useful example of mental labour, which leads to the production of wealth, is the continued attention required for months or years, to learn any manual art, but for which there would be neither skill nor dexterity. Mental labour frequently terminates in muscular adroitness; as for example, in the case of a silk-weaver, who, after a long apprenticeship and considerable practice, becomes able to weave all kinds of patterns: or it may terminate in adding to the powers of the mind itself; it may give, for example a capacity to invent machines, after a man has laboriously studied the laws of mechanics, observed the powers of external nature, or diligently ascertained the properties of different bodies. Unless there be mental labour, there can be no manual dexterity; and no capability of inventing machines. It therefore is essential to production.

After the weaver has acquired his skill, has ascertained the tenacity of silk, and best modes of weaving it, he sits down at his loom, and by muscular labour, combined with continued observation and attention, he produces a portion of that beautiful manufacture. The machinist, in like manner, makes the instrument he has before only thought of; or makes a model of it; repeated essays and multiplied observations being required before he can realize his theoretical conceptions in solid materials. These are examples of bodily labour: and it is unquestionably as necessary to complete the production of a piece of silk, or any other commodity, or a machine of any description, as mental labour.

As the facility or difficulty of acquiring the power to exercise different species of labour is sometimes mentioned as a reason why there should be different rates of wages; it is of some consequence to remark, that both mental and bodily labour are practised by almost every individual. Thus the statesman, the lawyer, or the physician, each of whom derives his salary principally from his mental exertions or mental skill, also labours with his body, though in a less degree than a ploughman or a shoemaker. One writes his orders, another his opinion, or he goes into court and speaks; and the third, after feeling his patient's pulse, writes a prescription. Thus also the ploughman, the cotton-spinner, or even the man who breaks stones on the road, each of whom derives his salary principally from his bodily exertions, labours, though in a much less degree, with his mind. The ploughman must note that his furrows be straight; the cotton-spinner must watch his pirns, and tack the broken thread together by his mind guided hands; the stone-breaker must exert a considerable degree of skill and dexterity in breaking all the stones of nearly the same size, and he must carefully observe that they are spread equally over every part of the road.

The meanest labourer must use some mental exertion, and much of the most common labour is now rendered easy of acquisition by the transmitted habits, knowledge, and skill of former generations; or it appears easy because acquired in youth. There is, therefore, much less reason than is sometimes imagined for different species of labour being differently rewarded. Easy labour is only transmitted skill. The parents and ancestors of common labourers served an apprenticeship for them, and handed down to them their dexterity as an inheritance. For this they are as much entitled to a remuneration as other men are for transmitted property; or for the time they employ in learning an art, which, from its comparative newness, is not so easy of acquisition.

We find, in the progress of society, that men confine themselves to different species of mental and bodily labour. One man, for example, attends only to chemistry, and another to mathematics; a third does nothing but guide the plough, and a fourth busies himself only in making perfumery. In consequence of this separation of employments, a question has been raised, as to what species of labour is productive; and long before any rational solution was offered of the question, governments, with that pre-eminently ignorant presumption for which they have ever been distinguished, began to encourage, or repress, different species of labour. Under some circumstances they have given bounties to promote the cultivation of the ground; under others, to stimulate the bringing commodities from abroad, or to the exportation of those made at home; under others again, they have endeavoured with all their power, to make their subjects manufacture the raw produce of their own or of foreign countries. The monstrous folly of this interference is fully proved, by its having been shown, that all labour, in which individuals voluntarily engage, is productive to them and the state.

"All wealth," says a French writer,[1] "is at present the result of two or more different species of industry. Without mutual assistance there could be no complete production, and the respective products of each labourer cannot be compared, because neither is complete without the other. Bread is the result of the industry of the reaper, the thresher, the miller, and of the baker, as well as of the industry of the ploughman and of the sower. Without the mutual labour of the flax-dresser, the spinner, and the weaver, the flax, which also costs the farmer much and diversified trouble to produce it, could not be converted into linen, and it would be thrown aside as a noisome pestilential weed. The inquiry to ascertain which of these species of labour is most productive

[1] The Marquis Garnier.

or most advantageous, is like an inquiry to ascertain which of our two legs is of most service in walking."

It is impossible, therefore, to distinguish which of the various species of industry practised in a well-peopled country is most productive, or most useful. All of them seem equally necessary, and every species of labour, whether mental or bodily, must equally be called productive, if it procure a subsistence for him who practises it.

Of such labour as is intended for the labourer's own immediate gratification, which constitutes, in an advanced state of society, a very small part of the whole, nothing can be said in a political-economical point of view. It may be wicked or it may be wise; it may be frivolous or it may be important; but it has its beginning and its termination with the individual; and though the moralist may think it worthy of remark, the economist rejects it from his science. In general, however, labour is directed towards the production of some commodity for sale, and whenever it procures the individual his subsistence, it is productive to him: it supplies his wants, and it must supply some of the wants, or afford some gratification to others, or they would not buy its products. Whenever labour is voluntarily paid for, or its products are freely purchased, and the labourer can live by his labour, we must presume that it is productive both to him and the buyers. No industry is unproductive but that, the produce of which no person will buy, and which does not contribute to the individual's subsistence or gratification. This description includes nations as well as individuals. If a nation reward any species of industry, it is plainly productive to those who exercise it; and what better criterion can we possibly have of its being productive to the nation, than that the nation thus rewards it?

It will be found of importance to establish the principle of all labour being productive, which enables the labourer to subsist. The object in labouring is to supply the individual's wants. Nature gave him his faculties and powers for this purpose; for this purpose only, and not for the purpose of supplying the wants of other men whom she equally endowed. If his labour, IN ADDITION to supplying his own wants, will supply the wants of other persons, will enable him to rear up a family, and pay taxes, rent, and profit, so much the better; the society may increase the faster; but if his labour is not so productive, if it only enable him to subsist, replacing whatever tools, seed, corn, &c. he may use in the preparation of his subsistence, including, of course, his clothing, house, furniture, &c., so that his condition is not gradually deteriorated, his labour is productive. More than comfortable subsistence is not required, and Nature probably intended that each individual should subsist himself and his family. As long as his labour produces his subsistence, he may live on, and may enjoy life till the natural period of its dissolution. Fortunately, indeed, productive power is seldom so limited, and never when men labour in conjunction. Each labourer, in all civilized societies, maintains many persons. The importance of establishing the principle that all labour is productive which subsists the labourer, arises from the prevalent theories relative to capital, and the universal practice of capitalists.

It is maintained, for example, that labour is not productive, and, in fact, the labourer is not allowed to work, unless, in addition to replacing whatever he uses or consumes, and comfortably subsisting himself, his labour also gives a profit to the capitalist on all the capital which he uses or consumes, while engaged in producing; or unless his labour produces a great deal more in the present state of society, than will suffice for his own comfortable subsistence. Capitalists becoming the proprietors of all the wealth of the society, as it is produced, act on this principle, and never—as the rule—will they suffer labourers to have the means of subsistence, unless they have a confident expectation that their labour will produce a profit over and above their own sub-

sistence. This is so palpable a violation of the natural principle above stated,—it is so completely the principle of slavery, to starve the labourer, unless his labour will feed his master as well as himself, that we must not be surprised if we should find it one of the chief causes, wherever it exists, and it exists almost universally, of the poverty and wretchedness of the labouring classes. To develope this truth belongs to another part of this book; but it was impossible to speak of productive labour without pointing out its extreme limit, and without adverting, as well to the opposite theory, as to the social practice, which condemns men to starvation, unless their labour will produce much more than they require for their own use or consumption.

Having brought before the reader the equal utility of mental and muscular exertion; and having established the fact, that all labour is productive which subsists the labourer; I shall proceed to point out the important effects which, in the progress of society, are produced by mental labour or observation; and endeavour to explain the natural law by which it increases productive power, and by which knowledge is continually augmented in society.

Chapter II. INFLUENCE OF OBSERVATION AND KNOWLEDGE.

IN *The Wealth of Nations* there are numberless scattered remarks, which show that Dr. Smith was aware of the influence of knowledge in adding to productive power; yet he has not dedicated any part of his book expressly to this subject. He has made no attempt whatever to explain the natural laws which regulate the increase of knowledge; and he has not examined the enactments of the legislator, with a view to ascertain in what respect or degree they promote or retard our acquaintance with the laws which regulate the material world. His successors in this country have humbly imitated his example. Some brief observations may be found in their writings, particularly in Mr. M'Culloch's last work, *"The Principles of Political Economy,"* on the influence of knowledge, but they have never treated of it as a distinct and leading principle. The single circumstance which Dr. Smith brought prominently forward, as adding to productive power, was *division of labour,* to which his successors have added, *accumulation of capital,* and no farther progress was made up to a late period, in explaining the natural laws which influence and regulate production.

Monsieur Say, a well known and deservedly celebrated political economist, has at length placed the effects of observation and knowledge in a proper point of view, and claimed for them that pre-eminence they justly deserve, as the great elements of augmenting productive power. In one of his latest publications, he says, "I do not pretend to dispute the great importance which Mr. Storch, following Adam Smith, attributes to the division of labour. Its advantages in satisfying the wants of man are immense. But there is another and a more efficient cause of the fruitfulness of production, viz., the art of profiting by the powers of nature,—by that gratuitous action which is lost in most cases, but which is so fruitful in results when we know how to employ it.[1]

It is obvious, that till some knowledge has been obtained of the laws which govern the material world, it must be difficult to preserve existence, and impossible to augment wealth. Men must have observed the *habitudes* of plants, and the qualities of different soils, before they could successfully have cultivated the ground. They must have carefully noted the natural return of seed-time and harvest, and have become sensible of the probable effects of casting grain into the earth, before they could anticipate, from what at first appears to be only waste, a rich return at the end of a few months. Possessing a knowledge, however, of the course of the seasons, of the nature of plants, and of the properties of the soil, as well as of the processes by which the effects of the sun, of light, and of air, may be made most efficacious in promoting vegetation, we can, with comparatively little muscular exertion, procure a great abundance and variety of vegetable food. As all the animals which we consume live on vegetables, we are able by this same knowledge, knowing also their instincts and properties, to obtain a great quantity of animal food. A people acquainted with the art of agriculture, must, it is plain, be better able to nourish themselves with ease, and to obtain the raw materials of several most important manufactures, than

[1] Notes to M. Say's edition of *Cours d'Economie Politique,* by Henri Storch, vol. i. p. 167.

a people ignorant of this art. On account of its great utility, the discoverer of a new and useful plant, the inventor of an improved agricultural process, the importer of some better and cheaper method of cultivation, or of some before unknown vegetable, has, in all ages of the world, been regarded as a general benefactor. Though agriculture does not supply us with the most striking examples of observation adding to productive power, yet even in this neglected and generally speaking, slave-practised art, we may find numerous examples of the hand of the labourer having been rendered productive by the observations of the philosopher.

To say nothing of those improved means invented within the last fifty years, for procuring, smelting, and forging iron; the results of our progress in chemical knowledge, which have diminished to a great extent the labour necessary to make all agricultural instruments, of which iron is one of the materials; and to say nothing of those machines, the fruit of observation, such as improved ploughs, threshing-machines, drills, *etc.,* by which the labour necessary to grow and *prepare* corn for the market, has been abridged,—though it seems that many useful processes, such as drilling, by which much seed corn is saved, and horse-hoeing, by which the ground is kept clean, and only those plants suffered to vegetate which are of use to us, could not be practised except in a country where the *art of the smith* had attained a singular degree of perfection,—to say nothing of these circumstances, though it is at all times worthy of observation, that improvement in arts, apparently the most remote from each other, tend materially to lighten labour in both; let us only consider what has been effected in modern times by the introduction of new crops and new methods of tillage.

"An intelligent agriculturist," says M. Say, "after having for many years allowed his fields to remain idle every third year, took it into his head, that the land might, during that year, give him a supply of green crops, which without exhausting the soil, would enable him, to fatten sheep to manure his land, and to have both wool and mutton for sale. He was indebted for this improvement to his *conception* of a better method of employing the *powers* of the soil, which supplies different nourishment for wheat and for beet-root, or turnips; so that the nourishment for the wheat is restored and augmented at the same time that the soil is producing green crops. The result of this conception is, that the whole produce of the land, under this species of management, has been increased one third."[2]

M. Say is wrong, perhaps, in ascribing this improvement to a chance conception. It was the result of continued observation; and its advantages had to be shown by repeated experiments, before it was adopted on those soils where fallows can be dispensed with. He also estimates much too high the advantages of the conception: for farther experience has shown, that fallows cannot always be advantageously dispensed with on all soils. But there can be no doubt, by the agriculturist having recourse to them much less frequently than formerly, together with the introduction into husbandry of several different green crops, by which a greater number of cattle can be kept at all times, and subsistence secured for them through the winter, ensuring the agriculturist against the loss of them; by which, therefore, not only the quantity of animal food, but also the quantity of manure, and ultimately the quantity of corn are increased,—that the produce of what is sometimes ridiculously called our old worn-out soil, has been augmented, without adding to labour, fully one-third within the last century.

The introduction of potatoes into European husbandry is another example of improvement effected in agriculture by observation and knowledge. They were brought from America to Eu-

[2] Notes to Cours d'Economie, vol. i. p. 167.

rope, either by Sir Walter Raleigh or under his influence, it is generally supposed, about the year 1586.[3] An acre of land cultivated with this root, will yield, it is stated by competent authority,[4]rather more than twice as much food as when cultivated with wheat. We are indebted, therefore, to the observation, that potatoes were good food, and to the consequent introduction of them into Europe, for a capability of doubling the quantity of subsistence, raised from a given space, with about an equal quantity of labour. This comparison, be it remarked also, is not made with the spontaneous productions of the ground, but with its produce, under a species of cultivation, which is itself the result of numberless observations, and ages of practice; and of knowledge handed down, increasing as it descended, from generation to generation, and transmitted from country to country.

But this view does not show all the advantages of introducing potatoes into European husbandry. They are supposed to be better than either turnips or cabbages for fattening cattle, and they can be secured against the severities of winter, which are apt to destroy both the others. The nourishment they contain for man can also be easily extracted, preserved in a dry state, and if necessary, be transmitted, like flour, from one place to another. Moreover, they are very useful as a first crop for land, which has not before been cultivated; and but for them, much of that which has been brought under tillage in this country, within the last century, would, from not affording a profit, have remained a neglected waste.

The introduction of this root into husbandry has had no inconsiderable effects, therefore, on the power and resources of this empire. By its use, which is now general nearly throughout Europe, population has been everywhere increased: but in Ireland, which possesses a climate and soil peculiarly favourable to potatoes, it has been astonishingly multiplied. In 1672, the population of that country was estimated at 1,320,000; in 1821, it was very little short of 7,000,000; a rate of increase hardly anywhere met with except in the United States of America. The greater number of these people live almost exclusively on potatoes; so that they are indebted for their nourishment, and even for their existence, to a root originally brought from the other side of the Atlantic Ocean.[5]

I say nothing of the effects, both moral and commercial, of the great majority of a nation consenting to subsist, without seeking greater comforts and enjoyments, on the smallest possible quantity of the cheapest possible food, to which the misery of the Irish peasantry is attributed; though to suppose that the great majority of any people, do or will *voluntarily* consent to any such degradation, is directly at variance with the desire inherent in the human heart of obtaining more and more enjoyment; I only quote the increased return for labour, the result of some voyager bringing potatoes from America, as an example of the influence of observation and knowledge in adding to productive power. To guard against being misunderstood, I must remark, however, that the unhappy situation of the Irish peasantry has no connection whatever with the food they

[3] History of Cultivated Vegetables, by Henry Phillips. Art Potatoe.

[4] Encyclopædia of Agriculture, by J. C. London, p. 784.

[5] Should I hereafter satisfy the reader that the increase of population is the chief *natural* circumstance which promotes the increase of knowledge, and which extends division of labour; thus augmenting productive power, not merely in the simple ratio of the increase in the number of labourers, but in the compound ratio of this increase, multiplied by the effects of knowledge, and division of labour, whatever they may be, he will then perceive, that every improvement, which, like the introduction of potatoes into husbandry, augments the means of subsistence, is a cause, by increasing the number of people, of multiplying to an astonishing degree the productive power of our species. Consequently, the view given in the text of the advantages of such improvements, as add to our means of subsistence, is essentially incomplete, and falls far short of what actually occurs.

subsist on. The peasantry and the labourers of every country of Europe, whether their productive power be great like that of the labourers of England, or small like that of the peasantry of Poland; and whether they have been accustomed to subsist on wheaten bread as in France, or on potatoes as in Ireland, are all in a nearly equally destitute condition. The poverty of the Irish labourer, therefore, is not caused by his living on potatoes.

To obtain food at the least possible cost, is the great object of all agricultural improvements; and in this respect, potatoes, as a crop, are to be preferred to wheat, as agriculture itself is to be preferred to fishing and hunting. That this general natural principle should seem not to hold good as to Ireland, is not a reason for condemning it; but for our setting ourselves diligently to work, to find out those social causes, which, in that country, turn what are in every other country the bounties and the blessings of Nature into curses. I shall not enter farther into this subject than to quote a passage of which I approve; and I should not have adverted to it, had I not been anxious to guard against the supposition that a natural principle can, under any circumstances, lead to misery, unless its consequences be misdirected by ambitious legislation. "Under the *government* and *political institutions of Ireland,"* it has been remarked, "the population of that country would have been *equally redundant,* though much smaller than it now is, if they had lived on *oats or wheaten bread.* The introduction of the *potatoe* may be the cause why the population is now *six* in place of *three* millions, but it is not the cause why, *during the whole period of the increase,* the numbers of the people have been greater than under the existing circumstances could be comfortably maintained."[6] In fact, the poverty and misery of individuals in Ireland, was as great before as since the general use of potatoes.

Most of the roots and grasses lately or formerly introduced into our husbandry, such as turnips, potatoes, and clover, are not originally the produce of our country. Before any person could think of removing a root like the potatoe, from one country to another, or of recommending turnips or clover as an agricultural crop, he must have known, or conjectured from what he had previously learned, that the root, or the seed, would keep so long as to permit its transport; he must have ascertained some of its properties, and have formed hopes from some similarity of climate or soil, that it would flourish in his own country; and he must have been aware of some utility or agreeableness in adding a foreign vegetable to the thousands which teem from almost every soil, before the thought of importing it from a remote corner of the globe could have been rationally entertained. Accordingly, we find that learned travellers like Sir Walter Raleigh, and Sir Richard Weston,[7] in former times, were the means of introducing potatoes, turnips, and clover, into England from foreign countries: and such men as Lord Kaimes, Arthur Young, Mr. Dawson, Mr. Coke, and other intelligent gentlemen, have been in our day the means either of introducing improvements into agriculture, or of spreading a knowledge of them through all parts of the country. But for their observation, the potatoe might now, like so many other vegetables, only have added to the perennial waste of America; and our Flemish neighbours might have been the only people on the globe who knew the utility of clover as an agricultural crop. Had such improvements been blundered on by chance, they might have been confined to the spots and individuals with whom they originated; but the knowledge of them being conveyed over Europe and America, now tends, and will for ever tend, to multiply the produce of more millions of acres than my arithmetic can calculate.

[6] Encyclopædia Britannica, article Ireland.

[7] Afterwards Lord Treasurer, created Earl of Portland in the reign of Charles I.

If the reader should imagine that knowledge informing skill only multiplies the means of subsistence, he will have a very inadequate idea of what it actually performs. It may be almost said to create both the animals and vegetables on which we subsist. We can, indeed, trace out the parent stock of our oxen and sheep, but so different in their wild state from the large flesh and wool-bearing and milk-giving animals that are nourished by the art of the grazier, into almost gigantic magnitude, that it may be doubted if the natural historians of antiquity, could they now see our oxen and sheep, would recognize in them the animals which in their time bore corresponding names. But the origin of our most useful vegetables is not so well known.

"There is scarcely," says Dr. Paris, "a vegetable that we at present employ that can be found growing naturally. Buffon states that our wheat is a factitious production, raised to its present condition by the art of agriculture. Rice, rye, barley, or even oats, are not to be found wild; that is to say, growing naturally in any part of the earth; but have been altered by the industry of mankind, from plants not now resembling them even in such a degree as to enable us to recognise their relatives. The acrid and disagreeable *apium graveolens,* has thus been transformed into delicious celery; and the *colervort,* a plant of scanty leaves, not weighing altogether half an ounce, has been improved into cabbage, the leaves of which weigh many pounds, or into a cauliflower of considerable dimensions, being only the embryo of a few buds, which, in their natural state, would not have weighed many grains. The potatoe again, the introduction of which has added many millions to our population, derives its origin from a small acrid bitter root, which grows wild in Chili and Monte Video."[8]

Fishing being, like agriculture, one of the arts earliest learnt by man, we may proceed to draw our next illustration from it. "The resources which this art offers,' says M. Storch, "are limited by the necessity of consuming near the coast the greater part of its products. If every species of fish could be transported to a distance without spoiling, fishing would be more favourable than it is to the increase of population. Beukels having taught the Dutch the art of packing herrings, and thus of preserving and sending to a distance this abundant supply of food, the means of subsistence has been augmented wherever they have been carried, and profits wherever they have been caught and prepared. Several *millions of men are indebted to Beukels for their existence;* and we, therefore, have no reason to be surprised at the honours the Dutch have bestowed on his memory."[9]

But it must be well known to the reader, that the resources with which the observation and knowledge of Beukels endowed Holland, though they for many years contributed to her maritime ascendency, were not limited to that country. Curing herrings, and salting cod, ling, tusk, and other fish, have long added to the food and wealth of Great Britain, and of several other countries; and it appears by a late parliamentary paper, that the former branch of industry exceeded in this country in 1826, its greatest amount in Holland, when the fisheries of that country excited envy in every other maritime state of Europe.

If we turn to some other arts, we shall find in them, perhaps, even more striking examples of improvement effected in productive power, than in agriculture and fishing. A ship derives all her vast utility, all that power which she possesses of distributing equally the gifts of nature, to recorded knowledge. By means of this valuable instrument, the supposed fertility of different spots, or rather their produce, belongs, in fact, or may belong, to the whole globe: every region

[8] A Treatise on Diet, etc., by J. A. Paris, M. D., F. R. S. page 8.

[9] Cours d'Economie Politique, vol. 3, page 319.

being tributary to those persons who are skilful and industrious. To say nothing of that transmitted skill which must be possessed by so many hundred different labourers, before a ship can be built, equipped, and sent to sea,—but for the observation first made by so obscure an individual, that his name and country are almost unknown, that a magnetised piece of iron, when freely suspended, always pointed due North, and but for the recorded observations of geographers, astronomers, and travellers,—the fruit of many years close attention,—by which the mariner is enabled to shape his course straight across the pathless ocean, the utility of this most magnificent of all the time-improved inventions of our race, would have been very limited. Even after much of this knowledge was acquired, or one hundred and fifty years ago, two and even three years were consumed in going to and returning from India; since the year 1800, that voyage has been completed within seven months, and may be performed with ease in less than one year. The effects of this more rapid navigation, on the productive power of labour, may perhaps be best illustrated by the alteration which has taken place in the price of tea, since it became in Europe one of the luxuries, if not one of the necessaries, of life. The price of any commodity, the reader will remember, may in general be taken, in a rough way, as an index both to the quantity of labour required to bring it to market, and to the quantity of labour those who want it must give to obtain it.

When tea was first brought to Europe, about the year 1610, the price—the chief cost consisting in the expense of bringing it—was from 6 *l.* to 10 *l.* sterling, the pound weight. It continued to sell in this country for 60 *s.* per pound, the price at Batavia being then 2 *s.* 6 *d* or 3 *s.,* till towards the year 1700;[10] and at present the retail price in the shops is between 5 *s.* and 16 *s.* This includes a heavy duty on tea; it includes the retailers' and merchants' profit, and it includes a still heavier tax even than that paid to the government, levied on us by the East India Company's monopoly. At New York, in North America, and in Amsterdam, the wholesale price of tea is from 1 *s.* 3 *d.* to 3 *s.* 1 *d.* per pound, or one half less than here; so that we may really take the reduction of freight on tea, since the year 1700, to have been at least fifteen fold. This reduction in price has been caused by improvements in the knowledge and skill of the navigator, and of the numberless artisans who prepare all the materials for ship-building, and who build ships and make them ready for sea, and by the recorded observations of the geographer and astronomer. I give it only as an example; but the *real* price of other articles has suffered a similar reduction. It is probably not too much to say, owing to an increase of knowledge, that the labour necessary for obtaining nearly all commodities has been diminished, like the price of tea, fifteen fold since the route to India round the Cape of Good Hope was discovered, by those adventurous Europeans, who had the honour and the danger, leaving the benefits of the discovery to posterity.

It is a well known principle, that the average profits in all trades and occupations must compensate for losses and risks; and in al money prices such a compensation is included. Whatever lessens risk, therefore, like an actual reduction in the quantity of labour necessary to produce commodities, lessens price. When the ship-owner or merchant is liable on an average to lose both vessel and cargo every tenth voyage, the price at which he sells his goods must cover the expense of an insurance calculated on this probability. In consequence, however, of increased knowledge and improved skill, the premiums on the insurance of vessels have been gradually decreased. In some cases, when the knowledge of the seas is very accurate, as for example, in the trade between London and Leith, the chances of loss are very small, and the premium of

[10] Phillips's History of Cultivated Vegetables. Art. Tea.

insurance almost nothing. But even this premium will be lessened, probably, by the improved knowledge of the properties of the magnet acquired in our times. Mr. Bain, Mr. Barlow, and some other gentlemen, have lately discovered in the attraction of the iron fastenings of ships, a cause before unobserved, for variations in the compass, which very often led to disastrous consequences. The latter gentleman has pointed out a simple and admirable remedy for the evil; and henceforth the chances of shipwreck being diminished by this discovery and invention, though in what degree it is not possible to say, the labour and cost of bringing the required supply of any commodities from a distance by sea will be lessened.

The economical advantages of the *safety-lamp,* one of the most happy applications of a scientific discovery to a useful purpose ever made, must be estimated on the same principle. It is not for me to expatiate on its glorious results for humanity, I have only to inform the reader of its commercial advantages. The probability of calamities occurring in mines, compels the consumer of coals to pay a premium of insurance equal to the risk; but this premium has been already lessened, and will be so hereafter in a still greater degree, by the invention of the safety-lamp. Every accident which occurs in mines causes an addition to the quantity of labour necessary to bring the whole requisite supply of coal or other mineral to market; and whatever diminishes these accidents, diminishes the quantity of labour by which we obtain coals. Such an increase in the productive power of labour, and such a lessening of cost, are the results of the observations and discoveries of Sir Humphry Davy on the nature and properties of flame.

Steam-engines must be considered as the result of a close and attentive examination of the properties of steam, and of the effects, first, of applying heat to water, and then condensing its product;—of the weight of the atmosphere, and of the tenacity of certain metals,—as these various properties had been made known to us by several generations of inquirers. The expansive power of steam has been known almost as long as history can trace back the existence of our race; but an immense reach of intellect, numberless observations, a prodigious quantity of knowledge, gathered in all the ages of the world, and a vast variety of experiments, were necessary to devise this engine in its present admirable, but not yet perfect form. Of the addition it has made to our power I can give no illustration equal to that contained in the following passage:—

> "All the world," says a writer in the Quarterly Review, "is more or less acquainted with those immense masses, the pyramids of Egypt, which were considered among the wonders of antiquity. The materials of which the largest of them is constructed, were dug out of the earth at a considerable depth; and at no small distance from their present situation. They cover more than eleven English acres; and are piled up to the height of about 700 feet. According to M. Dupin's calculation, their volume is equal to about 4,000,000 of cubic metres; their weight is 10,400,000 tons; which raised to the height of eleven metres from the bottom of the quarries to the surface of the earth, and of forty-nine more as their mean elevation above the basis; in all sixty metres above the original level—give 624,000,000 tons raised to the height of one metre. Now the steam-engines employed in England are equal to the force of 320,000 horses (1820), and can raise 862,800,000 tons to the height of one metre in twenty-four hours. But 624,000,000 tons being less than than three-fourths of this quantity, it follows, that the steam-engines of England could have raised the materials of which the great pyramid is constructed out of the quarries, could have conveyed them to their present place, and heaped them up in their present form, in less than three-

> fourths of one day, that is to say, in less than eighteen hours. According to Diodorus Siculus, this building employed 360,000 workmen; according to Herodotus, 100,000 workmen, during twenty years. Whichever of these estimates be nearest the truth, it is certain that one of the most powerful monarchies of remote antiquity applied its whole disposable resources in the construction. Therefore the mechanical power of British steam-engines was, in 1820—and it has much increased since that time—to that of the Egyptian monarch Cheops, inversely as the times necessary to each to perform the same task; that is to say, as twenty years to eighteen hours, or about 10,000 times as great.[11]
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> "It is more than probable," adds the Reviewer, "that the (productive) *power* of England is at this moment (June 1826) 2500 times as great as was that of Egypt at the period when the pyramid was constructed."—"By the power of steam every machine to which it is applied receives, not an addition, but a multiplication of force. The power thus produced in 1820 was computed to be equal to 320,000 horses, or about 2,240,000 men. At this moment steam, on account of its many new applications, and the improvements made in the manner of employing it, may perform the work of near three millions of men, in the United Kingdom."

Perhaps, however, the effects of knowledge in increasing productive power, may be still more strikingly displayed by referring to the cotton manufacture of this country. The raw material of every species of cotton, from the finest net lace or flowered muslin, to the canvass which, when it forms the sails of a ship, resists the most violent storms, is the downy nest provided by Nature for the seeds of a plant which grows to advantage only in tropical climates. At present it is chiefly cultivated in the East and West Indies, and in the southern parts of the United States of America. The people who cultivate the plant, and pick and sort the wool, must be acquainted with a branch of agriculture quite distinct from any of the common practices of Europe, and they must have learned one part of the manufacture. To bring it hither from those distant countries the whole art of navigation must lend its assistance, and it is impossible for me to describe the vast variety of knowledge in numberless workmen, and the innumerable discoveries, which have contributed to the present perfection of this art. Again, to clean and pick the cotton, to spin it into yarn, and weave it into cloth, to bleach, dye, print, and embroider it, a vast variety of knowledge is necessary, which, if lost or forgotten in any one branch of the manufacture, would extinguish the whole.

Before men could apply and regulate the first moving power, whether it be wind, water, or steam, which sets in motion the various and complicated machinery for cleansing, carding, spinning, and weaving cotton, the knowledge acquired by centuries of experience was necessary. To construct all this machinery men must know the properties of metals, the methods of softening, melting, and fashioning them; and they must have an intimate acquaintance with the mechanic powers before these materials can be put together. So admirable, however, is this knowledge-made machinery, that the fibre of the cotton is not bruised nor rent, though it be spun as fine as a gossamer-thread, and wove into a web as delicate as the curious production of the spider. To bleach, dye, and print it, other sets of machines are used, requiring different knowledge to

[11] Quarterly Review, No. lxvii, for June 1826.

construct them; and to perform these operations, the whole science of chemistry is summoned to the aid of the workman.

In 1765, cotton, as an article of trade, was scarcely known in this country, and the whole manufacture, which was very limited, was confined to the supply of the home market. *Cotton cloth then cost considerably more than linen, and cotton stockings were then nearly as dear as silk.* In 1767, Richard Hargreaves invented the spinning jenny, and in 1769, Mr. Arkwright invented his power-spinning frame. In 1779, the mule, a still more efficacious spinning instrument, was invented; and from that time to the present, improvements in cotton-spinning and weaving machinery have been continually and successively made.

To illustrate the effects of these improvements, I can do no better than quote another passage from the article in the Quarterly Review, from which I have already largely borrowed. "The various machinery now used in manufacturing cotton has enabled one man to perform the work of one hundred and fifty. Now the lowest computation supposes 280,000 men—some say 350,000 men—to be employed in it. Hence the work now performed in this single branch, would-half a century ago—have required 42,000,000 of men—according to some 53 000,000; that is to say, at the lowest computation, more than twice as many men, women, and children, as now people the British islands. Now supposing the labour of each of these men to cost, at this hour, the very moderate sum of one shilling per day, or 18 *l.* per annum, the pay of 42,000,000 of labourers would be 756,000,000 *l.* per annum, or a little more than thirteen times the annual revenue of England. Deducting from this sum the pay of the labourers now really employed at the above annual rate, (280,000 × 18 *l.*=5,040,000 *l.*) and allowing the enormous sum of 50,000,000 *l.* sterling for the wear and tear of machinery, buildings, and incidental expenses; the result is, that the machinery employed in the cotton manufactories saves 700,000,000 *l.* sterling to the British nation; or, in other words, that, without machinery and steam, the prodigy of British industry and civilization would still have been wanting to honour mankind."

The conclusion drawn by the author of this article from these statements, which is well worthy of every man's attention, is, that the manufacturing industry of England may be fairly computed as four times greater than that of all the other continents, except Europe, taken collectively;—"and *that the average productive power of our people may be estimated as one thousand to one over the average productive power of mankind at large.*"[12] This most wonderful increase, by which the productive power of England is 2500 times as great as was that of Egypt, and by which one man here may do the average work of a thousand labourers in the world at large, is the magnificent result of that beautiful machinery, which the skilful hand of our artizans has been taught to fashion by the combined observations and experience of ages. In the particular case of the cotton manufacture, being of comparatively recent origin, and hardly known above sixty years, though now of the annual value of thirty millions sterling, we can trace every step and every cause of its improvement;—and that cotton is now so much cheaper than silk or linen—they also, being at present made at a much less expense of labour than formerly—that the productive power of all those engaged in manufacturing cotton has been so astonishingly increased, is entirely owing to the knowledge and inventions of Richard Hargreave, James Watt, and their fellow labourers, and successors.

The advantages and cheapness of illumination by *gas* are well known, but these advantages never could have been realized without considerable knowledge. Long before we had gas lights,

[12] Quarterly Review. No. 67. p. 93.

it was ascertained that coal supplied an inflammable substance; but till Priestley had invented pneumatic chemistry, this gaseous matter could not be confined, and was only regarded as a *noxious vapour.* As produced from coal, it is contaminated by various substances, and to chemistry we are indebted for the means of purifying it. The properties of the gas itself, and of the metallic conduits through which it has to pass, the pressure of the atmosphere, and the greater expansive power of the gas, must have all been known, and a great deal of skill in adapting this knowledge to this particular purpose must have been in existence, before this beautiful invention could have been brought to its present state. The effects of this contrivance are not limited to supplying light at a less cost than before. The great brilliancy, almost equal to day-light, protects the peaceable and industrious citizen from the nightly burglar; and gives all classes a degree of security, not to be attained even by the most vigilant police. Persons otherwise disposed are obliged to have recourse to honest industry; and gas lights—a result of modern chemistry—augment the national wealth, not only by the labour they save, but by what they compel men to perform.

I might expatiate on many such subjects as these, but it would be an unwarrantable waste of the reader's time. He has only to cast his eyes around him, and he will find that every skilful operation he performs, or which is performed by others, has at some time or other depended for its success on a close observation of the laws of nature and the properties of matter. The most simple instrument in use, such as a common spade, a carpenter's gimlet, or a sewing needle, by the help of which labour is not merely facilitated, but without which several most useful and necessary daily operations could not possibly be performed, were at one time unknown; and probably required as close observation of the properties of iron and steel—of the form and powers of the human body, so as to adapt the digging and sewing instruments to its capabilities—and the gimlet to the purpose of boring rapidly through wood, and bringing to the surface the little pieces it cuts away,—as the invention of the steam-engine at a later period required of the properties of caloric, and of the weight of the atmosphere. We have been *taught* the arts which our ancestors *learnt* by observation, and are apt to forget that they, like the new discoveries of our own times, which are to be the means hereafter of facilitating the labour of our descendants, were the result of a close and attentive examination of the external world.

Chapter III. NATURAL LAWS WHICH REGULATE THE PROGRESS OF SOCIETY IN KNOWLEDGE.

I QUOTED in the last chapter more instances of knowledge and observation adding to productive power, than would have been necessary, had not the vast effects of mental labour been in general either overlooked in works treating of political economy, or ascribed to some other causes. Its influence, in fact, is so obvious and familiar, that it seems on this account to have been thought not worthy of philosophic investigation. Numberless observations are scattered through the pages of the economists on the subject; but by no one of them has it been treated of with a view to explain or discover the general laws which influence, regulate, and limit the progress of knowledge. "In the means of increasing our subsistence," says an author whose book is written to express his doubts of the prevailing political-economical theories, "as in every thing else, knowledge is, in the strictest sense of the word, power. It introduces new modes of cultivation; it converts the barren soil into a garden; and calls forth the hidden powers of nature, which might otherwise have slumbered on for ever useless and unknown."[1] But the author seems to have been satisfied with stating this truth, as one objection to the completeness of certain prevalent theories, and he has not traced out its consequences; not supposing, apparently, that the increase of knowledge was as much regulated by general natural laws, as that increase of the means of subsistence which it so efficaciously promotes.

Dr. Smith was not ignorant, I admit, of the effects of knowledge and observation in adding to productive power; for he has remarked, "that one of the circumstances which distinguished the colonists of North America from its former inhabitants was, that they carried with them a *knowledge of agriculture* and other useful arts superior to what can grow up of its own accord in the course of many centuries among savage and barbarous nations."[2] But he seems not to have been thoroughly sensible of their importance; and to have supposed, I think erroneously, as mental labourers subdivide their employments in the progress of society, as well as bodily labourers, that the effects of observation and knowledge might all be referred to his favourite principle. "The invention," he says, "of all those machines by which labour is so much facilitated and abridged, seems to have been originally owing to the division of labour."[3] In consequence of this opinion, while Dr. Smith has developed at great length the influence of the latter principle, he has done little or nothing towards explaining the more important laws which regulate the increase of knowledge, and its influence over productive power. Whenever his successors mention the subject, and few of them ever think it worthy of notice, they treat of it under the

[1] A Few Doubts as to the Correctness of some Opinions generally entertained on the Subjects of Population and Political Economy. By Piercy Ravenstone. London, 1821.

[2] Wealth of Nations.

[3] Wealth of Nations, book 1, chap. i.

head of accumulation and employment of capital. But I have no doubt I shall be able to show, that the laws which regulate the accumulation and employment of capital are quite dissimilar to and unconnected with the laws regulating the progress of knowledge.

This general neglect adds much to the difficulty I feel in endeavouring to develope the natural laws which regulate this progress,—which stimulate observation, and lead to the numberless happy inventions that continually arise in the progress of society; and that seem, by recurring at unequal periods, by differing in degree as to utility, and by being again occasionally lost or forgotten, not to be under the influence of permanent natural laws. The supposition that these improvements may all be traced to division of labour, imposes on me, on the other hand, the task of contending against it. I shall clear my way by beginning with the latter subject; and, in order to make the reader thoroughly sensible of the necessity for inquiring into the laws which regulate the progress of knowledge, I shall first show that it does not depend, as stated by Dr. Smith, and tacitly adopted by his successors, exclusively on division of labour.

The question at issue between Dr. Smith and his followers and myself, is, whether a knowledge of the material world, and inventions in the arts, including the invention of machines, are, or are not, originally owing to the division of labour. I maintain they are not. I admit, that a progress in knowledge, and division of labour, mutually promote each other; that observation, introducing new practices, leads to extended division of labour; and extended division of labour, allowing those, whose principal business it is to make observations, to confine their attention to some small part of the material world, enables them, and of course enables society at large, more speedily to become acquainted with it: but I contend, that observation must have preceded division of labour, and some progress must have been made in a knowledge of the external world, before men could have thought of devoting themselves to different employments. Undoubtedly they had learned to make bows and arrows, to catch animals and fish, to cultivate the ground and weave cloth, before some of them dedicated themselves exclusively to making these instruments, to hunting, fishing, agriculture, and weaving. I take this to be strictly consistent with Dr. Smith's own principles; for had men laid themselves out for particular employments, before those employments were invented, it would prove that division of labour was the fore-planned result of human wisdom to lighten labour, which he expressly denies.

In the savage state all men learn some of or all these arts, before they begin to devote themselves exclusively to one or two of them. Between savages and the most civilized people there is no difference as to this progress. Inventions always precede division of labour, and extend it, both by introducing new arts and by making commodities at a less cost. The art of working in metals, leather, or wood, was unquestionably known to a certain extent, before there were smiths, shoemakers, and carpenters. In very modern times, steam-engines and spinning mules were invented, before some men made it their chief or only business to manufacture mules and steam-engines. That numerous class of men called engineers (journeymen,) together with those who practise several other modern callings of a novel description, who are rising into notice in every part of the country,—such as those, for example, who make or who work only with *power* looms,—breaking up some other trades, and giving a death blow to corporation and apprentice laws, which do not apply to them—have been separated from other workmen by those numerous modern inventions which have called into existence the new arts they practise. Mr. Windsor introduced the practice of lighting our streets with gas, to give one additional illustration, before a set of men dedicated themselves to the business of making gasometers and fitting up gas-apparatus. Although division of labour promotes art and skill, it is not the parent of those

species which are most important. Invention and knowledge precede it to a certain extent in all cases, and are to be considered, rather than it, the chief causes of those new arts which add so much to productive power.

That division of labour is not the cause of inventions may be illustrated by experience. In Hindostan, for example, and in some other parts of Asia, it is, in some arts, carried to as great an extent as in Britain, and has been longer established. But the inhabitants of those countries are said to make at present little or no progress in wealth, and none in knowledge; and they invent few or no machines. The Indian weaver makes the finest muslin by stretching his warp along over two rough stakes under the shade of a tree; he digs a hole in the ground for his feet, and all his weaving apparatus does not exceed in value a few shillings. Man is there the only machine; and although he acquires exquisite tact and skill in his particular calling, he is incapable of inventing any thing new. There is good reason to believe, that the weavers in India have continued to use the same sort of loom, without any improvement, since the days of Alexander the Great.

Some countries nearer home will exemplify the same principle. There can be no doubt but division of labour began much sooner on the neighbouring continent, and was carried much farther at a former period, particularly in Italy, France, and Germany, than in Britain. At this time division of labour is as extensive in some of these countries as in England. For example, literature, as a business, is probably more subdivided in Germany than here; as are also, or were up to a late period, probably, all the professions considered as businesses or trades, of music, painting, and sculpture, in Italy and France. But those countries have not made a progress equal to this country, during the last century, in a knowledge of the arts which create wealth. They have endeavoured, and often, I believe, in vain, to import the inventions and the arts which have originated in Britain; but, except some improvements made in France since the peace—such, for example, as a better loom for silk-weaving, which has however, it is said, been equalled or surpassed by one invented in Britain—these countries have of late had comparatively few inventions or discoveries of their own to send us in exchange.

I must contend, therefore, and it will be found that the principle is of great importance, inasmuch as it removes far off the supposed natural limits to division of labour, that the invention of useful machines and discoveries in the material world, facilitating production and abridging labour, are not the exclusive result of Dr. Smith's grand principle.

"Another person," says Mr. Say, "observes, that water expanded into steam is capable of raising an enormous piston; and this steam, condensed by a jet of cold water, leaves a vacuum which causes the piston to descend with a force equal to that of twenty, thirty, or forty horses;—whence results a power which may be applied to every purpose, and hence the employment of steam-engines. Is this improvement to be attributed to the division of labour? No. The weight of the atmosphere, which causes the piston to descend, has existed since the commencement of the world, and been allowed to lie idle for sixty centuries. The progress of knowledge, the art of observing, led to the discovery; and the human race has been enriched by all the wealth this power has enabled them to create during the last forty years."[4]

To develope the natural laws which regulate the progress of our race in knowledge, (the subject being one not much explored,) is more difficult than to show, as I think I have done, that it does not depend exclusively on division of labour. I am afraid it is too generally, and I am sure it is idly supposed, that this progress is not regulated by any general and permanent law. All

[4] Notes to Storch.

such phenomena are closely connected with the will of man; and whatever is connected with or depends on it, we imagine to be given up to boundless caprice. This is not the place to enter into a metaphysical argument, to show that the will, or rather the desires of men, are as much regulated by general natural laws—though the circumstances which influence these desires are so numerous that they have not yet been classified by us—as any other part of the creation; nor even to advert to those general social phenomena, such as the number of births, marriages, letters daily transmitted by the post, etc. etc. which, though they depend on individual will, are plainly regulated by some general laws,—for we find, by extending our observations to long periods, that the average number of births and marriages in a given district, either does not vary, or varies according to some rule and under the influence of some natural circumstances which are easily ascertained: I say, this is not the place to enter into a metaphysical argument of this nature; and I shall therefore content myself with briefly referring to the uniform progress of our race, to satisfy the reader, capricious and unregulated as the will or desires of individuals may appear, that the will and conduct of masses of men—and the more numerous they are, the more evident and certain is the truth—are regulated by permanent natural laws.

Thus, when we call to mind the uniformity of the progress of civilization in its early stages—man having everywhere, as far as history reaches, gradually passed successively through the state of a naked savage living on wild fruits, of a hunter feeding on flesh, almost as wild and ferocious as the wild beasts with which he contended for prey, of a shepherd domesticating and rearing the animals he found it difficult to catch by hunting, and ultimately of an agriculturist, raising vegetable food for himself, and for the animals he destines for his own use,—acquiring therefore successively, in all places, *the knowledge* which enables him first to hunt and ensnare wild animals, next to domesticate them, and finally to cultivate the ground; when we recollect this *uniformity* in the progress of our race, we can hardly fail to suppose that it must be regulated by some general natural law. When we advance farther in the scale of civilization, and observe in almost all countries, whatever may be their form of government and whatever their situation, manufacturing industry, and of course the varied knowledge which is necessary to it, succeeding to agriculture; and commerce, with a knowledge of the art of navigation and constructing ships, whenever a people live near the borders of that ocean which washes the whole habitable globe, succeeding to manufactures; and when we observe, that wherever this natural progress is not arrested by the violent hand of lawless ambition, the growth of manufactures and the increase of commerce *necessarily* beget extended cultivation, stimulating to new discoveries in agriculture and introducing new crops, calling also in turn some new manufacturing skill into existence, and increasing the commerce of the world; we are compelled to believe, though the belief belongs, I admit, rather to wonder and admiration than to accurate detailed knowledge, that this uniform progress is the result of some permanent natural law.

Although it is not possible to point out in detail the circumstances which in every case led to the important inventions briefly alluded to, there can be no doubt that they are the result of that necessity to labour, which is the law of our being, and of the natural increase of population. Thus, the spontaneous productions of the earth being exhausted, hunger stimulated the ingenuity of man, and he became a hunter or a fisherman, as his lot was cast amidst boundless plains, or near waters which he saw teemed with fish. As the number of men multiplied, these resources also were insufficient, and the same want led to farther improvements—led first to a rude species of agriculture, then to a rude species of manufacture, and subsequently to a refined cultivation, and to the wonderful inventions of our own times. This principle operates now as well as formerly,

and the natural progress of our race is ever in the same direction. Thus the increase of people in this country within the last century, by creating a great demand for agricultural produce, has led not merely to extended cultivation, to inclosing commons and breaking up heaths, but also to those improved agricultural processes to which I have alluded. The stimulus most generally present to the mind of every inventor, and which may be said to be the immediate cause of the invention, is the natural but insatiable desire of providing for his wants or bettering his condition. But, were population not to increase, there could be no additional wants to provide for. The labour of the past year would be more than sufficient to supply the wants of the next; and but for the continual increase of people, there would not now be, there never would have been, a stimulus to invention and to the increase of knowledge. Wherever they stop increasing, a stop seems also to be put to the increase of knowledge. Thus, although we may fail to observe how the law operates in each particular case, we may be certain that the cause of that progress in knowledge, which is in its turn the cause of a perpetual increase in our productive power, is the natural law which dooms us to labour, and which is kept perpetually in operation, at its greatest extent, by the active principle of population. Necessity is the mother of invention; and the continual existence of necessity can only be explained by the continual increase of people.

Modern agricultural improvements offer an illustration of this principle. They have in general tended to augment the quantity of our food, by increasing the number of cattle. The green crops cultivated are intended for fodder, and by cultivating them an increased number of animals has been reared and fed; their flesh has added to our means of subsistence, and the manure obtained by keeping them has increased to a great extent the quantity of corn. Dr. Smith has remarked that "till the *price of cattle* has got to such a height as to render it profitable to cultivate land for the sake of feeding them, it seems scarcely possible that the greater part even of those lands which are capable of the highest cultivation, can be *completely cultivated.*"[5] But the price of cattle can only rise permanently from an increase in the number of people; and they having wherewithal the produce of their own labour to give for cattle. Thus, the rise in the price of cattle is caused by an increase of people and by an increase in their manufacturing or other produce. Again, the rise in the price of cattle leads to cultivating food for them, augmenting manure, and occasioning that increased quantity of produce which has been stated to amount, in this country, to nearly one third of the whole. But for the increase of people, therefore, all that fruit-fulness of the soil which has been made manifest in our day and generation, by cultivating food for cattle, would have remained dormant and unknown.

The endeavour to trace the discoveries and inventions of individuals to general natural laws, is not flattering, I am aware, to that vanity which loves to think itself, by the possession of some peculiar genius, distinguished from the common herd of mankind. But let us not injure society and vilify nature, that we may set up some palpable objects for reverence. It is plain that every individual, be his singularities and his intellectual powers what they may, has his character, his sentiments, his thoughts, his passions,—yea, even his intellect itself,—fashioned by the time at which he lives, and by the society of which he is a member; so that any thing which is peculiar to himself forms but the smallest part of the whole man. Whatever may be his natural endowments, and some philosophers have doubted if there be originally any difference among men, every man is chiefly indebted for whatever he possesses of knowledge, of skill, of inventive power, to the knowledge and skill of other men, either living or dead. The influence of

[5] Wealth of Nations.

society over every individual mind, is paramount to all other things. Perhaps, of the last century, there is no man who stands higher as a philosopher and a mechanic than James Watt; but *he* was indebted for most of his scientific and mechanical knowledge, for every thing, indeed, which constituted his talents, and which contributed to his glorious success, to his having been born in Britain in the 18th century. Were it possible, which it evidently is not, for a mind richly stored like his, to be nourished into such inventive maturity amidst the rude peasantry of Ireland, or the still ruder Guachos of South America, he could never have invented so sublime a machine as the steam-engine. No possible motive could there have existed for the invention; it being of no utility except in crowded countries, in which fuel is plentiful and manufactures established; or having invented it, if it were possible, there would be no body to make or use it, no purpose to which it could be applied, and the invention could only be realised by the patient labour of the inventor himself, and in the shape of a model in his own hut. Under such or any similar circumstances, instead of adding immensely to the power of our race, it would have been a mere philosophical toy, contributing, perhaps, to the amusement of the ingenious individual, but of no use to mankind.

It is quite clear, also, that Mr. Watt could not have invented the steam-engine to any purpose a century before: society was not prepared to adopt such an invention, had it been made; nor could he then have possessed the requisite knowledge, nor found the means for putting his invention into practice. He might have made some random conjectures, and have been the author, perhaps, of another "Century of Inventions," but he could not have invented and made steam-engines. At the very time when he began to think and to plan, a vast flood of light, proceeding in scattered rays from every capital and almost every town of note in Europe, its generality proving that it depended on some general law, was spreading itself over the hitherto unknown world of chemistry. Bergman, and Scheele, in a remote town in Sweden, Klaproth, at Berlin, Rouelle, Lavoisier, and Berthollet, in France, and Black, Cavendish, and Priestley, in England, are a few only of the very eminent individuals who had, just as Mr. Watt came to maturity, contributed, by a series of splendid discoveries, to fix the attention of all the observing part of mankind on their favourite science. "When Dr. Cullen," says Dr. T. Thomson, "became professor of chemistry in Edinburgh, in 1765, he kindled a flame of enthusiasm among the students, which was soon spread far and wide by the subsequent discoveries of Black, Cavendish, and Priestley, and meeting with the kindred fires which were already burning in France, Germany, Sweden, and Italy, the science of chemistry burst forth at once with unexampled lustre."[6] Mr. Watt, therefore, ought, I think, to be considered like Columbus, like Bacon, like Newton, like Luther, and like the inventor of printing, as one of those master-spirits who gather and concentrate within themselves some great but scattered truths, the consequences of numberless previous discoveries which, fortunately for them, are just dawning on society as they arrive at the age of reflection. They have the happy art to connect, by some little additional discovery of their own, the various truths lately brought into day; and they apply them to elucidate some unexplained phenonema, to establish some general law, or to bring forth some invention that is to add to the wealth, the power, or the reputation of that society, to the previous progress of which they are indebted for their knowledge, their genius, and their intellect. Their acquirements, their schemes, and their thoughts are closely and inseparably linked with the acquirements, the projects, and the thoughts of their predecessors, and of all around them; and their inventions and discoveries are the necessary consequences of

[6] A System of Chemistry, Introduction, page 9, 6th edit.

preceding inventions and discoveries. They are only parts of the general system. Such minds and such men arise naturally and necessarily from the general progress in knowledge; as a Borgia, a Cromwell, and a Napoleon, are sure to spring up whenever great mistrust of existing authority, in conjunction with a general disposition to obey, and a reverence for whoever is most impudent and assumes the most, furnishes an opportunity for the gratification of unbridled, bloody, and ferocious ambition.

The circumstance just mentioned, of chemical science having, about the period of Mr. Watt's inventions, made as great a progress on the continent of Europe as in this country, without having led to any invention similar to that of the steam-engine, shows that what is called learning, is comparatively of little advantage unless it be connected with other things. Among the numberless persons of undoubted eminence who then cultivated knowledge, there were probably many as well acquainted as Mr. Watt with mechanics, and with the laws of heat and vapour. It is not enough, therefore, for an individual to be endowed with genius and talents, if the circumstances of society do not offer the means of applying them. On the continent there was not the same commercial demand for means of abridging labour as in this country; nor were there the same mechanical means previously prepared for carrying such inventions into execution. Even at present, when our continental neighbours have all the advantages of our previous experience, when they are just as well acquainted as we are with the theory of steam-engines, and possess all the information on the subject which description can convey, they are nearly incapable of erecting a steam-engine without the assistance of English workmen. Although Mr. Watt may have found it necessary, as it is said he did, to instruct workmen for his particular views, yet he must have met with a vast deal of practical manual skill ready formed to his hands, which needed only some peculiar direction, or he could not have succeeded in manufacturing his own inventions. In addition, therefore, to the commercial demand for means of abridging labour, which was felt in this country, there also existed a great degree of manual dexterity among workmen; or a considerable number of skilful millwrights, founders, smiths, and carpenters, were ready formed, by whose assistance Mr. Watt was enabled to realize his conceptions. This is one of the circumstances, arising from the time and place of his birth, to which he is indebted for his celebrity. It shows, I admit, how ignorant we yet are of all the causes which promote wealth-creating knowledge; but it also shows, that without practical manual skill, the most elaborate learning may be of no use, and that without dexterous workmen, the most ingenious contrivances must be classed merely as visionary dreams. There is an absolute necessity for observation and practice, for mental and bodily labour to go hand-in-hand, neither preceding nor staying behind the other. All encouragement consequently, given to one species of labour, all bounties on a particular art or particular kind of learning, may be highly delightful to royal and noble patrons, but on society at large they inflict injury, by promoting one kind of knowledge at the expense of some other.

It is impossible for me to take notice of all the natural circumstances which influence the progress of our race in knowledge, or which determine its kind and degree; such, for example, as *diversity of organization among tribes and races of men,* for there can, I think, be no doubt that such a diversity exists, and influences both the species and the degree of knowledge acquired;—as *peculiarities in geographical position,* for it is evident that as a people inhabit an inland or maritime country, the sort of knowledge they acquire will be different;[7] as *language,* for this is

[7] It may be as well just to remind the reader, that all our vast maritime knowledge and maritime power, which have in general been most absurdly attributed to some misbegotten, ill-tempered regulations of Oliver Cromwell and

the instrument of thought, and as it is perfect, the acquisition and diffusion of knowledge will be easy and correct;—but there is one natural circumstance to which I have already alluded, of such paramount importance, when viewed in connexion with some prevalent theories, that I cannot pass it by without farther illustration. It has of late been so much the fashion to look only at one side of the great question of population,—and to look at it with reference only to its operation under the perverting control of human institutions and an unjust distribution of the products of labour; and so much have the leading men of society delighted to find in this natural principle, an excuse for the consequences of their own rapacity, it supplying a plea on the one hand for the continuance of usurpation, and on the other for unenquiring submission, that the doctrines ascribing all the miseries of our species to their too great power of increase have been widely adopted, weakening and even destroying in these latter times the confidence of man in the wisdom of God. That principle, I have already shown, is the source of all national greatness worthy of the name, and of much individual exertion; it is probably also the source of those improvements which are said to spring from necessity; and I think I shall now satisfy the reader that it is the chief source of that increase in knowledge which gives man power and dominion over the external world.

No one doubts that the rapid communication which may now be had from every part of this country to every other part, contributes both to the increase of knowledge and of wealth. The discoveries made in London, Manchester, or Glasgow, are known in either of these other towns, and are spread over the whole island, in a few days. *Numbers* of minds are instantly set to work even by a hint; and every discovery is instantly appreciated, and almost as instantaneously improved. The chances of improvement, it is plain, are great in proportion as the *persons are multiplied* whose attention is devoted to any particular subject. It appears to me, therefore, that an increase in the number of persons produces the same effect as communication; for the latter only operates by bringing numbers to think on the same subject.

To illustrate this by one example: Mr. Scheele, a celebrated Swedish chemist, first remarked the *bleaching power of chlorine;* Berthollet, in France, first applied it as a manufacturing agent, and first suggested its probable utility in the arts. Mr. Watt, I believe, introduced the practice into England; and Mr. Tennant, some time afterwards, first suggested a mode of uniting chlorine with pulverulent lime; "one of the greatest improvements," says Dr. Ure, "in practical bleaching which has ever been made." The united experience and knowledge of at least these four persons, and, in fact, of the experience and knowledge of a great number of others, was necessary before *chloride* of *lime* could be advantageously employed as a bleaching agent. The proverb says that two heads are wiser than one, and in this case four heads completed what one did not. On the same principle, each one of four thousand heads, and of four million heads, will necessarily have still more wisdom and still more knowledge than when there is only one head in existence.

One generation is wiser and possesses more knowledge than the generation which preceded it. This is not merely from being later in the world. Time is a mere personification, and adds

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Charles II. (which have been more often suspended than enforced,) may all be very easily traced to the geographical nature of our country. Exclusive of colonies, we have four times as much sea coast as France, and four times as large a maritime population. This is the natural and simple source of our maritime power, which our celebrated navigation laws, commercial restrictions, and most abominable naval regulations, have done much to weaken. It is most gratifying to trace our national prosperity and greatness to a higher point than the wisdom of our lawgivers; and in the unalterable circumstances of our geographical position, we have the strongest possible guarantee for our future prosperity and greatness.

nothing to wisdom. The last generation is wiser than the generation which preceded it, because it adds, where language is in use, and particularly where writing and printing are known, all its own observations to the knowledge of the generation which went before. There have been *more* eyes to see, *more* hands to practise, and *more* minds to treasure up and record observations and practices. *As the world grows older, and as men increase and multiply, there is a constant, natural, and necessary tendency to an increase in their knowledge, and consequently in their productive power.*

This principle seems to be amply confirmed by experience. Almost all discoveries and improvements have been made in crowded cities and in densely peopled countries. It was amidst the populous cities of ancient Greece, and not among the few wandering tribes of the desert, that the arts, both for creating wealth and adorning existence, were in the old world cultivated with such singular success. It was in the populous cities of modern Italy, of Holland, and of Germany, that the arts again sprang up in the middle ages. The discovery of America, by supplying Europe with many desirable commodities, and by providing it with a large market, has probably added on the whole upwards of fifty millions of people to the mass of human beings communicating with each other. Since that event, there can be no doubt that the inhabitants, both of Europe and America, have made a very great progress in a knowledge of all the useful arts. At no period of our history was Great Britain ever so populous as at present; and it has been within these last fifty years that some of those most useful and surprising improvements, in agriculture, in practical chemistry, and in the mechanic arts, to which I have alluded, have been made. Finally, it was not till the year 1823, when England alone numbered eleven *millions* of people, and this metropolis and its environs contained upwards of a tenth of this number, that Mechanics' Institutions were established. Unless there had been a great many persons to profit by such establishments, they could not have succeeded. In whatever light other persons may regard such societies, I can but look on them as the germs of greater improvements in the arts than the world has ever yet seen.

"More discoveries," says Mr. M'Culloch, speaking of them, "will be made, according to the degree in which *more* individuals are placed in a situation to make them. And it is neither impossible nor at all improbable, that the lustre which now attaches to the names of Arkwright and Watt, may be dimmed, though it can never be wholly effaced, by the more numerous, and it may be more important discoveries, that will at no distant period be made by those who would have passed from the cradle to the tomb in the same obscure and beaten track that had been trodden by their unambitious ancestors, had not the education now so generally diffused, served to elicit and ripen the seeds of genius implanted in them for the general advantage of mankind."[8]

The principal object, I must here remind the reader, which I have in view, though I am sensible it must be very imperfectly executed, is to develope the *natural* laws which determine the progress of our race in opulence. Accordingly, I have first attempted to show from facts the influence of knowledge on productive power, and next to point out the natural circumstances which determine the increase of knowledge. The conclusion I come to, and I wish to state it plainly, that whether true or false, right or wrong, it may not be misunderstood, is, that independent of all governments and of all their regulations, there is in the universa necessity to labour a universal stimulus for all men to exert those natural faculties with which all are endowed; that this stimulus is at all times the cause of observation, and that observation brings knowledge; and that there is a natural and necessary tendency, independent of all and every sort of social regulations, to a

[8] Principles of Political Economy, page 118.

gradual increase of knowledge as the world grows older, as generation follows generation, and as mankind are multiplied on the face of the earth. Our natural faculties, under the influence of this stimulus and this influence of increasing population, lead, without our willing it beforehand, without our ever conjecturing what will be the result, to all those grand and sublime and beneficial consequences—which we call in one comprehensive word, civilization. To complete the subject, it would be necessary to enquire into the effects of social regulations—and to ascertain distinctly, not only what their effects have been, but also, if it be possible, by any and what social regulations to promote knowledge, and thus add to productive power. Into such an inquiry I do not mean to enter, but the subject demands it, and we cannot know, till it be gone into and finished, what are the laws which regulate the progress of opulence. Those books, therefore, called Elements, Principles, or Systems of Political Economy, which do not embrace and fully develope, as not one of them does, the whole influence of knowledge on productive power, and do not explain the natural laws which regulate the progress of society in knowledge, are and must, as treatises on Political Economy, be essentially incomplete.

Without departing from the principle I have laid down, of confining myself to the natural laws which regulate production, and of not taking any notice of the influence of governments; I must, however, observe, that unless we take into the account the vast influence of the adopted religion and the constitution of society, of every form of government comprised between perfect freedom and abject slavery, whether it be to living men or parchment statutes,—the worst species of slavery,—as well as the influence of temporary laws on the increase of wealth-creating knowledge, it is impossible for us to explain the different progress of different nations in opulence. Division of labour, security of property, and most of the other circumstances usually supposed to be the chief means of promoting national opulence, are, or were a few years back, nearly equal in all the countries of Europe. The religion, the government, the commercial regulations of all, were in principle so similar, that the influence they exercised over the production of wealth, must have been nearly equal. In that European country, however, which of late has made the most rapid progress in wealth, the people have been the freest to inquire. The press, and with that the mind, has been less shackled in Britain than in any other great country of Europe. This probably is the sole source of her superior opulence. Every part of knowledge is intimately and closely connected with every other, and men cannot be impeded or restrained from inquiring into one branch without their progress being ultimately checked in every other. Governments may, in their pretended wisdom, think, by what they call wholesome restraints, that they are only lopping off sedition or pruning heresy, but experience convinces us, that without meaning it, they at the same time, like unskilful gardeners, cut away fruit-bearing branches, and stint in every direction, the growth of wealth-creating knowledge. The restrictions imposed by governments on commercial enterprize and individual exertion, have been, it is now generally admitted, greatly injurious to the welfare of man; but this seems as nothing when compared to the extensive mischief, caused by that frightful mental debility which has ensued, whenever a few men, as ignorant as the meanest of their fellows, have been suffered to set bounds to inquiry, and to say, when its consequences cannot by any possibility be known beforehand, this species of knowledge will be injurious, you shall not taste of it; that will be healthful, and the mind of man shall have no other nourishment. So gross an absurdity can have none but fatal consequences; and whenever the rulers of a society have dictated what their subjects shall not study, they have, against their own wishes, rendered the slaves whom they only prize as tax-paying machines, incapable of making that progress in knowledge which is the dictate of nature, which takes place in less governed and

restrained countries, and which is the chief means of adding to the productive power and wealth of man.

Chapter IV. INFLUENCE OF THE DIVISION OF LABOUR.

IN the Introduction, the reader was made aware of the great difference between the productive power of individuals living in civilized society, and of savages. One cause of this, and one distinguishing characteristic of the former state of society, is that in it no man makes for himself all the commodities which he requires or consumes. The carpenter and the bricklayer go to the smith or the tool-maker for their tools; and the smith, never attempting to build a house for himself, dwells in one built by the combined labours of the carpenter and bricklayer. A tailor never makes shoes for his own use, he buys them of the shoemaker; and the shoemaker buys all the clothes he requires from the tailor. All these labourers find that they can most easily and readily procure whatever they want by each one labouring only at his own trade. The people who went from Europe to North America and New Holland, and there, in contact with the savages whom they supplanted, proved the superior productive power of civilized man, carried with them the arts and practices of Europe, and were of different trades. Among these savages, however, they found few or no persons having distinct occupations. Each provided as well as he could for his own wants, and practised all the arts known among this rude people. In all uncivilized societies each individual provides himself with food, and makes most of the inefficient instruments he uses. He builds his own hut, and hews out his own canoe, with the stone hatchet he has previously made; he makes the line or net—or perhaps it is made by his wife—with which he ensnares fish; and he kills the wild animal which will form probably his only food, by means of a bow and arrow fashioned by his own hand. The appropriation of men to distinct and separate occupations, the establishment of different trades, the exclusive businesses pursued by individuals which takes place in civilized society, is called, in the language of Political Economy, DIVISION OF LABOUR.

In almost all countries it seems to bear a close relation to their wealth. Savages, among whom there is no division of labour, are wretchedly poor: on the contrary, the inhabitants of this densely-peopled empire, amounting to twenty-two millions, produce, it is said, as much wealth annually as the eighty-eight millions of people who are, comparatively, sparingly scattered over the United States of America, the empire of Russia and the kingdom of France; and there can be no doubt that in these three countries, particularly the two former, division of labour is not carried to such an extent as in Great Britain. This statement rests on public documents published in each country, though probably it is somewhat too favourable for Britain, from the valuations having been made from custom-house returns, and perhaps in a depreciated currency. It is particularly deserving of attention as far as the United States of America and Russia are concerned, because they are comparatively new or lately-peopled countries, while Great Britain is an old country; and because it is generally said that productive power decreases as the land is used, and as people are crowded together. Such an opinion is quite erroneous, from its not taking into account the effects of division of labour, and of the progress of knowledge. It looks only at the

land; of the capabilities of which, as an instrument aiding production, we know as little as we did of the productive powers of the atmosphere before the steam-engine was invented.

To show in detail, the effects of division of labour, I shall prefer extracting a passage from the writings of Mr. M'Culloch and Adam Smith, to offering any illustrations of my own. The latter has explained these effects so ably, that all subsequent writers have done little more than copy his remarks: something has been added by Mr. M'Culloch, and I therefore take a passage from his book, in which his own observations are embodied with those of Dr. Smith.

"Dr. Smith," says Mr. M'Culloch, "who has treated this subject in the most masterly manner, has classed the circumstances which conspire to increase the productive powers of industry, when labour is divided, under the following heads:— *First,* to the increase of the skill and dexterity of every particular workman; *second,* to the saving of time, which is commonly lost in passing from one particular employment to another; and, *third,* to the circumstance of the division of employments having a tendency to facilitate the invention of machines, and of processes for abridging and saving labour.

"1 *st. Respecting the improvement of the skill and dexterity of the labourer.* It is sufficiently plain that when a person's whole attention is devoted to one branch of business, when all the energies of his mind and the powers of his body are made to converge, as it were, to a single point, he must attain a degree of proficiency in that particular branch, to which no individual engaged in a variety of occupations can be expected to reach. A peculiar play of the muscles, or *sleight of hand,* is necessary to perform the simplest operation in the best and most expeditious manner; and this can only be acquired by habitual and constant practice.

"To take an example therefore, from a very trifling manufacture, but one in which the division of labour has been very often taken notice of, the trade of a pin-maker: a workman not educated to this business, (which the division of labour has rendered a distinct trade,) nor acquainted with the use of the machinery employed in it, (to the invention of which the same division of labour has probably given occasion,) could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire; another straights it; a third cuts it; a fourth points it; a fifth grinds it at the top for receiving the head: to make the head requires two or three distinct operations; to put it on is a peculiar business; to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind, where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently accommodated with the necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size. Those ten persons therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is, certainly, not the two hundred and fortieth, perhaps not the four thousand eight

hundredth, part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations."

So far Dr. Smith:—I have been informed, that in the metropolis each pin-maker can make nearly double four thousand pins a day; and also, that the attempts hitherto made to manufacture pins by machinery have all failed. For this purpose no machine has yet been invented which equals the dexterity and despatch of the workman: and in general, those machines which have been used, form the head of the pin by compressing a small portion of the metal, which renders the tiny instrument brittle, and, when complete, less fit for the many purposes to which pins are put.

"The effect," continues Mr. M'Culloch, "of the division of labour, in preventing that *waste of time in moving from one employment to another,* which must always take place when an individual is engaged in different occupations, is even more obvious than the advantage derived from the improvement of the skill and dexterity of the labourer. When the same individual carries on different employments, in different and perhaps distant places, and with different sets of tools, it is plainly impossible he can avoid losing a considerable portion of time in passing between them. If the different businesses in which a labourer is to be engaged could be carried on in the same workshop, the loss of time would be less, but even in that case it would be considerable. 'A man,' as Dr. Smith has justly observed, 'commonly saunters a little in changing from one business to another. When he first begins his work, he is seldom keen or hearty; his mind is said not to go along with it, and for some time he rather trifles than applies himself in good earnest. The habit of sauntering, and of indolent and 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 working different ways almost every day of his life, renders him almost always slothful and lazy, and incapable of any rigorous application, even on the most pressing occasion. 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.'[1]

"3d. With regard to the effect of the division of employment *in facilitating the invention of machines and processes for abridging and saving labour,* it is obvious that those engaged in any branch of industry, must be more likely to discover easier and readier methods for carrying it on, when the whole attention of their minds is devoted exclusively to it, than if it were dissipated among a variety of objects. But it is a mistake to suppose, as has been sometimes done, that it is only the inventive genius of workmen and artificers that is whetted and improved by the division of labour. As *society advances,* the study of particular branches of science and of philosophy becomes the principle or sole occupation of the most ingenious men. Chemistry becomes a distinct science from natural philosophy; the physical astronomer separates himself from the astronomical observer, the political economist from the politician, and each meditating exclusively, or principally, on his peculiar department of science, attains to a degree of proficiency and expertness to which the general scholar seldom or never reaches."[2]

I have already mentioned the reservation with which the statement, that division of labour promotes the invention of machines ought to be adopted. It contributes to the progress of knowledge as society advances; but knowledge and invention, to a certain extent, in every age, precede and give occasion to division of labour. Great part, indeed, of the beneficial effects of the latter arise

[1] Wealth of Nations, i. p. 14.

[2] Article, Political Economy, Supp. Encyclop. Britt.

from its promoting our knowledge of particular objects; but that manual skill or sleight of hand which it bestows, seems, in general, not equal in its effects to mental labour. "A machine," says Mrs. Marcet, "has been invented in the United States of America, for the purpose of cutting nails out of iron, the operation of which is so rapid, that it forms two hundred and fifty perfect nails in the space of one minute, or fifteen thousand in an hour."[3]

The accuracy of Dr. Smith's remarks on the beneficial effects of division of labour, must be perceptible to every man, and some of my readers are probably acquainted with more striking examples of these beneficial effects than those I have quoted. All men seem fully aware of the advantages of one person being a farmer, another a carpenter, and a third a weaver; and in daily practice, the division of labour is extended beyond the limit at which it is settled by rule. When two or more men of the same trade are employed about the same job, each undertakes some separate part: in house-building, for example, one carpenter planes up and prepares the wood, while another mortices the parts of the window-frames together, instead of each completing a window-frame by himself, though to do the whole of such a job is only a part of the business of a carpenter. This division of labour, which individuals find enables them to complete a given task in less time, or with greater ease, must be proportionably beneficial, when acted on in all trades and in society at large.

It is however indispensable to remark, that all the benefits of this practice *naturally* centre in the labourer; belong to him, and contribute to his ease or add to his opulence. It increases *his* skill, by allowing his attention to be uninterruptedly fixed on a single operation; it saves *his* time, by making no change of tools or of employment necessary; and it facilitates *his* invention of those machines that are adapted to the single and simple operations, which, in consequence of division of labour, constitute the whole task of each individual. By no single machine, perhaps, except man himself, could we perform the whole process of manufacturing a piece of cloth out of the raw material; but when the complicated process of shearing the sheep, cleansing the wool, carding, spinning, weaving, dressing, and dyeing it, has been separated into distinct operations, performed by different individuals,—machines can be, and are, made to execute most of them, even with more precision than can be done by the unaided hand. Why *labourers* actually reap no benefit from division of labour, why their tasks seem rather to augment than lessen, with all those improvements which add to their skill and productive power, in such a degree even as to have given rise to an opinion, that division of labour inflicts on them a serious injury, cannot, in this part of the book, be explained. But as all the advantages derived from division of labour naturally centre in, and naturally belong to the labourers, if they are deprived of them, and in the progress of society those only are enriched by their improved skill who never labour,—this must arise from unjust appropriation; from usurpation and plunder in the party enriched, and from consenting submission in the party impoverished.

If we could not learn from an inquiry into the origin of this practice, and into its limits, in what manner numberless social regulations check division of labour,—and how much more benevolent and kind to man is the Author of his instincts and passions than the legislator who pretends to protect and save him from their consequences,—the mere statement of its advantages, outweighing the benefits conferred on our race even by the wisest lawgivers, must kindle in us a lively curiosity to know whence it arises and where it ends. Though it is not equal in all countries, yet it takes place among all the tribes of men, and all the nations of the earth, whatever may

[3] Conversations on Political Economy.

be their religious creed or the form of their government; in whatever state of society they may exist; and whoever may have been their legislators. It has no connexion, therefore, with positive institutions, and is in no respect the offspring of legislation. In the free republic of the United States of America, and in despotic Russia, in enterprising England, and in retrograding Turkey, among the careful and industrious Dutchmen, and the proud and indolent Spaniards, under the varying laws of Europe, and the almost invariable institutions of Asia, in Africa, where life is held on the insecure tenure of some miscreant emperor or king's caprice, and in countries where it is sacrificed according to some misnamed regular, but not less revolting because cold-blooded, proceedings of what is called law,—in all countries, and under all kinds of political institutions, *division of labour* takes place; and men, unbidden by their rulers, follow the beneficial custom of each confining his attention and exertions to some particular department of industry. "The practice," says Dr. Smith, "is *common to all men,* and to be found in no other *race of animals*. It is not the result of any human wisdom, which foresees and intends that general opulence to which it gives occasion:"[4] it must therefore arise from some universal and natural principle, like that which compels man in every climate, and on every soil, to eat bread by the sweat of his brow. He ascribes it to an *instinctive* propensity to barter; but it has, I think, a more obvious source; in which, when rightly understood, we may find one example of the many beautiful and simple contrivances by which nature seems to have provided for the continued prosperity of our species,—proving, to use the language of Mrs. Marcet, "that the hand of Providence, which we are chiefly accustomed to trace in the natural (material) world, is no less conspicuous in moral life."

[4] Wealth of Nations, book I, chap. i.

Chapter V. CAUSES WHICH GIVE RISE TO, AND LIMIT, DIVISION OF LABOUR.

ALTHOUGH we find in some stages of society, that each individual makes for himself nearly all that he requires or consumes; being, as circumstances dictate, a fisherman, or a hunter, building his own hut, constructing his own canoe, or making the rude tools he is afterwards to use, yet there is no state of society, probably, in which division of labour between the sexes does not take place. It is and *must* be practised the instant *a family* exists. Among even the most barbarous tribes, *war* is the exclusive business of the males; and they are in general, the principal hunters and fishers. The man takes to himself the perils and pleasures of the chase, and the woman labours in and about the hut. Different employments for the *sexes* may be traced in all communities, in every age of the world, and in every history, whether fabulous or true. In modern as well as ancient times, in the most civilized as well as in the most barbarous societies, we find the men, as the rule, taking the out-door work to themselves, and leaving to the women most of the domestic occupations. This primary division of labour springs from sexual difference of organization, it has its foundation in the difference of our physical constitution, in the different parental duties required of the sexes, and is co-extensive with the existence of our race.

The aptitude of the sexes for different employments, is only an example of the more general principle, that every human being, by the circumstances of age, health, bodily or mental powers, is better adapted than another to some particular occupation. In the present state of society, it often happens that a man is compelled by the circumstances of his situation, and principally from a regard to the pecuniary advantage of his children, to breed them up to his own trade; but whenever there is a liberty of choice, a predilection for certain occupations is recognized, and the liking of a youth is consulted before he is bound for life. Children are never tasked like grown persons, and the aged and the feeble perform services disdained by the youthful and robust. Among those who differ neither in sex, nor in age, nor in strength, we find peculiarities of constitution which makes each select in preference, some particular occupation. "The talents and tastes of men," says M. Storch, who also dissents from the doctrine of barter giving occasion to the division of labour, "vary so much, that no society is known, however small, in which this diversity is not observable. Each man devotes himself by preference, to that occupation for which he has a taste, and if each follow his *natural disposition,* the division of labour is established."[1]

"In a tribe of hunters or shepherds," says Dr. Smith, himself recognizing this principle, "a particular person makes *bows and arrows, for example, with more readiness and dexterity than any other.* He frequently exchanges them for cattle or for venison with his companions; and he finds at last, that he can in this manner *get more cattle and venison* than if he himself went to the field to catch them. From a regard to his *own interest,* therefore, the making of bows and arrows grows to be his chief business, and he becomes a sort of armourer. Another *excels* in making the frames and covers of their little huts or moveable houses. He is accustomed to be of use in this

[1] Cours d'Economie Politique, tom. 1.

way to his neighbours, who reward him in the same manner with cattle and venison, till at last he finds it his interest to dedicate himself entirely to this employment, and to become a sort of house carpenter. In the same manner a third becomes a smith or a brazier, a fourth a tanner or dresser of hides or skins."[2]

This principle operates in an advanced state of society, as well as at its commencement, and is made palpable to us by its results every day. A Mr. Le Mann for example, finds that he has some superior skill in making biscuits, and he confines his business to this branch of baking. In this metropolis there are a great number of persons who have been brought up smiths, carpenters, or cabinet-makers, and who, finding they can make some particular kind of instruments, tools, or furniture, better than other men, employ themselves exclusively in making this one article. Some surgeons, though they go through the long course of study required to follow their profession in all its branches, attend only to the teeth; others attend only to the eyes, and others again apply all their skill to the organ of hearing. The difference of sex, of age, of bodily and mental power, or difference of organization, is the chief source of division of labour, and it is continually extended in the progress of society by the different tastes, dispositions, and talents of individuals, and their different aptitudes for different employments. The numberless advantages of the practice, sanction and confirm it. In these circumstances it has a more obvious origin than is supplied by the supposition of an occult propensity to barter. In fact, barter is the *consequence* not the *cause* of division of labour; and the latter must have been introduced before the instinctive propensity, if it exist, could have been called into exercise.

If there were, however, an aversion to barter, if men could not supply all their wants more easily by dedicating themselves, each to one occupation, than if each were to make every thing he requires,—if they could not exchange the products of their different species of industry for one another, division of labour could not be carried beyond the appropriation of the different members of a single family, to those different employments by which they provide and prepare the subsistence and comforts of the whole. If, for example, the nail-maker, or the pin-maker, found nobody to give him bread and meat for nails and pins, he must either starve, or, giving up his exclusive business, take to producing bread and meat. Barter, therefore, or a mutual exchange among all the different classes of labourers, of what each produces, is necessary to division of labour; and must be equally advantageous.

THE LIMITS TO DIVISION OF LABOUR are defined, according to most political economists, by two circumstances, viz., the extent of the market, and the nature of different employments. As this is one natural source for the increase of productive power, it is of importance for us to be thoroughly sensible of its natural limits. I propose, therefore, to say a few words on each of these circumstances.

Extent of market is, I take it, to most people an ambiguous phrase, meaning in reality, nothing more than a greater or less number of persons desiring the commodity for which there is said to be a market, and having something, the produce of their own labour or of the labour of other men, to give in exchange for the commodity they desire. A market does not consist in mouths to be fed or backs to be covered; not, therefore, in consumers merely, but in the circumstance that each labourer shall be able to sell the produce of his own labour, and thereby obtain what he himself desires, of the produce of other men's labour. The shoemaker, for example, exchanges shoes for money, and with the money he buys bread, meat, beer and clothing. In the same manner,

[2] Wealth of Nations, book I. chap. II.

the baker, the butcher, the brewer, and the tailor, each sells his respective produce for money, and with the money he buys the produce of these other labourers, including the shoemaker. If the shoemaker, the baker, the butcher, the brewer, or the tailor, could not obtain the produce of the other labourers by the sale of his own, either there could be no possible motive for men making shoes, bread, beer, and clothes, or each labourer must make them all for himself. The desire to obtain the produce of other men's labour, money being only the intervening instrument for making the exchange, and the certainty that by procuring it, other things may be obtained, constitutes in each of these labourers the motive for his confining his exertions to his own business. Thus the commodity produced by one labourer, the shoes for example, constitutes in reality and ultimately, the market for the commodities produced by other labourers; and they and their productions are mutually the market for one another. But all commodities being the produce of labour, must be plentiful as labourers are multiplied, or as their productive power increases. The extent of the market, therefore, means the number of labourers, or their productive power; and rather the former than the latter, because the wants of each one are circumscribed, and unless they were to increase in number, there would be neither motive nor means for augmenting production. If this be a correct view of the phrase "extent of the market," we remove at once to an indefinite distance, this limit to the division of labour. It is co-extensive with the number of labourers communicating with each other, and to that number it is impossible for us to foresee or to state any conceivable bounds.

To avoid misconception, it must here be noticed, that in the present state of society, the *rich* who do not labour, are the actual and immediate customers of most tradesmen, and are generally considered as constituting the market for the commodities of the labourer. But how do those who do not labour pay for what they consume? All wealth, including gold and silver, is the produce of labour; and those who do not labour cannot have any thing to pay their tradesmen with, which is not the produce of labour. They therefore obtain, having, in fact, a legal right to receive, the produce of some labourers, and this is what they give their tradesmen. But if they had no claim over this produce, the labourers would have so much the more; and each of any two classes, the butcher and the baker for example, would obtain the produce of the other class at a cheaper rate. There would be more to be mutually exchanged by and amongst labourers, and a proportionate extension of the market and division of labour.

According to this explanation of the phrase, division of labour may be extended as labourers or people generally are multiplied; which is a cause for its perpetual and indefinite extension. Were there only one person in existence, he would be obliged, like Robinson Crusoe, to provide for all his wants himself, and there could be no division of labour. Were two persons in existence, however, division of labour might begin; it might be extended as more grew up to maturity, and it could not be extended unless men did multiply. Different tastes in individuals, their different aptitudes for different employments, even, inventions and discoveries, were population stationary, would only cause a change of employment and no further division of labour. These circumstances exist in Asia as well as in Europe, but there population and division of labour seem both alike stationary.

In the following passage, Dr. Smith has distinctly pointed out the increase in the number of labourers, as the cause for extended division of labour. "The number of workmen in every

branch of business, generally increases with the division of labour, *or rather it is the increase of their number which enables them to class and subdivide themselves in this manner.*"[3]

To illustrate this principle, I may remark that division of labour is always most extended in densely-peopled countries, like England; in manufactures, the produce of which being of a durable nature, of general utility, and of easy conveyance, commands an extensive market, whether many persons live or not on the spot where it is made. At the beginning of the last chapter it was mentioned that the produce of England was greater or more valuable than that of Russia and the United States of America, and it is well known that in those countries division of labour is not carried nearly so far as in this. For this fact as to Russia, we have the testimony of M. Storch, who resided long in that country.[4] In some parts of America every man must be a jack of all trades. He must send *his corn* twenty miles to be ground, he must go as far to obtain medical assistance, or find a carpenter to repair his house,—or he must be farmer, miller, doctor, and carpenter him.

In a somewhat similar manner in the remote villages of England or Scotland, one man does all the work which is to be done in wood, and another every thing that is to be done in iron, while the trade of carpenters and smiths are divided in the populous districts, and in our large towns into numerous branches. In country places, one shopkeeper sells every commodity that the people require, and can hardly obtain a living, while in this metropolis princely fortunes have been made by dealing in the single article of ham or shoe-blacking. The manufacture of pins, which are easily transported, nearly indestructible and of frequent use, has been selected to show the extent to which division of labour can be carried. Knives, watches, and other metallic articles, being, like pins, of general utility and easily transported, command an extensive market, and in the manufacture of them division of labour is almost unlimited; the tempering and burnishing watch-springs, and the annealing knife-blades being the exclusive business of some individuals.

Improved methods of conveyance, such as rail-roads, steam-vessels, canals, and indeed, all the means of facilitating intercourse between distant countries,[5] have, as far as division of labour is concerned, the same effects as an actual increase in the number of people; they bring more labourers into communication with each other, and more produce to be exchanged. In this point of view, the discovery of America and the modern application of steam to the purposes of navigation have had important effects. "A cotton-mill," says Mr. M'Culloch, "could not be constructed in a *small* country, which had no intercourse with its neighbours. The demand and competition of both Europe and America have been necessary to carry the manufactures of Glasgow, Manchester, and Birmingham, to their present state of improvement."[6]

The conclusion from these remarks, is that division of labour is only limited by the number of labourers, and tends continually and indefinitely to extend itself as they are multiplied. Labour is the sole source of wealth, and even if the productive power of individuals were not susceptible of augmentation, the more labourers were multiplied, the more force would the spring rise with, which overflows the land with fertility. But I have shown that an increase of labourers also tends necessarily to augment knowledge and extend division of labour. As the number of

[3] Wealth of Nations, book ii., Introduction.

[4] Cours d'Economie, book 1. ch. 8.

[5] It may be worth while here, to remind the reader that these means of facilitating intercourse are the results of invention and discovery; thus, such inventions promote division of labour—not only as they give rise to new employments, but by bringing more human beings to communicate with each other.

[6] Principles of Political Economy, p. 91.

labourers increases therefore, the productive power of society augments in the compound ratio of that increase, multiplied by the effects of the division of labour and the increase of knowledge. The labouring classes of society will, I am afraid, be slow to believe, when their poverty is in general attributed to their multiplying too fast, and perhaps justly attributed when that multiplication is only compared with the want of the capitalist for their services—that this vast increase in their productive power, is the result of their augmenting in number. Why they reap no benefit from it, why, when nature seems to have provided for the perpetual prosperity of society—there should be among one class indescribable and never ceasing distress—and among another, perpetual apprehension for their opulence,—how it happens that all the produce of increasing skill and knowledge, falls into the power of the rapacious landlord, the usurious capitalist, and the profligate dependants on, and profligate supporters of, profligate governments, swelling their wealth to an enormous amount, increasing the number of idlers in society, and checking its progress by checking division of labour and the progress of knowledge, must be explained, if at all, in a subsequent part of this work. I only advert to them now, to show the reader that the actual poverty of the labourer, is no argument against the principle I have endeavoured to establish. On the contrary, the immense revenue levied by our government, augmenting from year to year; the enormous and increasing amount of the sums annually paid to the pretended servants of a benevolent Deity; the increased wealth of the capitalist, and the yearly augmenting revenue of the owners of land,—all arising from the annual produce of labour, are indisputable proofs of that vast increase in productive power, the natural well-head of which is an increase in the number of labourers. When so much has of late been written against the principle of population, it is consoling to find any circumstances connected with it, like the division of labour and increase of knowledge, which appear to relieve the wise provisions of nature from the odium cast on them by the shortsighted and corrupt theories of interested men; giving us reason to suppose, that there is in these circumstances, at least an adequate compensation for that increasing difficulty of procuring the means of subsistence, which is said by most political economists to be the necessary consequence of an increase in the numbers of mankind.

There is one apparent exception to this consoling view, which could it not be explained by a reference to counterbalancing *social causes,* might make us doubt the correctness of the explanation:—Ireland is one of the most densely peopled countries of Europe, and that one in which population has made the most astonishing progress, yet Ireland is at this time conspicuous for the ignorance and poverty of the mass of its people. This is, however, only an apparent exception. We learn from Spenser the poet, and Sir John Davis, who are unquestionable authority, that in the reign of Elizabeth, the Irish were absolute savages. When Swift lived and wrote, they were not much better and were certainly more poor and wretched, though not so numerous as at present. In fact, since the reign of Elizabeth, they have improved considerably; but cut off by their peculiar language and still more by their political condition, from free communication with the rest of the empire, even with that part of their nominal countrymen who speak the English language and hold dominion over them—their commerce and manufactures annihilated by the trading jealousy of England, and professing a religion prescribed by the ruling party, the Catholics of Ireland have not advanced equally with the English and Protestant inhabitants of the empire. If I have rendered it probable, however, that an addition of heads and hands naturally multiplies productive power; if it cannot be doubted, that an increase of population clears the forests of America, and improves the agriculture and manufactures of Britain; if it roll the tide of civilization over the New World, from the Atlantic to the Pacific, and improve

the arts, though it may not add to the comfort of the labourers, in the Old; if it be a source of happiness in America, where a family, to those who are willing to labour for its support, is not a curse, but, as nature intended, a blessing,—increase of population cannot be the origin of poverty, wretchedness, and misery in Europe: and either we must reject all idea even of *unity of design* in the creation, and *uniformity of principle* in the moral government of the world, or we must seek for other causes of the poverty and distress which afflict the labourers of Europe generally, and particularly those of Ireland, than that principle by which man multiplies on the earth, and makes the material elements the instruments and the handmaids of his will.

In the case of Ireland, we have not far to seek for those causes: they lie on the surface; and when we are called on,—as the people of this country are daily and practically, on occasions of the deepest interest to us all—such as that of submitting to forced emigration, and of paying annually for a large standing army to keep the Irish obedient—to choose between the dispensations of Providence and the institutions of man, we cannot hesitate which to condemn. Whatever may be the respect due to the latter, it ill becomes us to misrepresent or calumniate the moral order of the universe, that they may retain our undiminished veneration.

It is admitted that no part of Europe, though generally misgoverned, and too much governed, has been, since the time of Queen Elizabeth, so frequently plundered and so grievously oppressed as Ireland. Confiscation, for a long series of years, followed confiscation in rapid succession, and the whole property of the country changed hands more than once. The kingdom was occupied by two parties, contending for the mastery, and was one continued scene of strife. When internal commotion ceased, which it can hardly be said to have done up to the present time, it was only by the power of England maintaining a minority in their usurped dominion. The Irish were a conquered people, and have ever been so considered and treated by the English masters of the soil, and the English Protestant government. They had no other privilege than that of maintaining out of their own resources, their own priests, in addition to being compelled to support the most extravagant and useless hierarchy that ever plundered mankind in the name of a merciful God, and inflicted ignorance and misery on those it pretended to enlighten and improve. Their landlords were in many cases unknown to them, and without bearing the name of slaves, to interest benevolence in their favour, they were mercilessly given over without appeal and without protection to the club of the Orangemen, the bayonet of the soldier, the scourge of the middle-man, and to the ecclesiastical courts of the tithe-proctor; they were without redress. The laws were made against them, by and in favour of their oppressors; animosity and hatred pervaded every bosom; and Ireland was the seat of anarchy. When the passions and intellect and time of all classes were thus occupied in maintaining usurped power, or in evading and resisting it, there were no means of improvement. A disposition to establish manufactures and to engage in trade was shown, but it was repressed by the jealous policy of England. Without examining in detail the effects of the penal laws against Catholics, of the restrictions imposed by our legislature on the commerce of Ireland, and of the people having two extravagant churches to support, when in general one has been found amply sufficient to stay the natural progress of nations in prosperity, it is abundantly evident that the causes of the ignorance and poverty of the Irish all belong to that class I have denominated social, and may all be expressed in the one comprehensive word, MISGOVERNMENT.

When by showing the natural consequences of an increase of people, we have rescued the order of the universe from the misrepresentations of ignorance and selfishness, we are enabled more correctly to appreciate the consequences of social institutions. The numerous population

of Ireland, instead of giving strength and opulence, and multiplying productive power in the ratio of their numbers, as nature dictates, is a serious misfortune to every part of the empire. The Irish labourers are now pulling down to their own level of wretchedness and ignorance, the people of the country who have been instrumental in degrading them. Misgovernment, therefore, poisons at its source the natural spring of healthy existence, and turns the principle of life into disease and corruption. Under its withering, its demoniac influence, the natural principle of population, the origin of all present national greatness and the promise of all future national power, teems only with poverty and wretchedness—continually threatening present disasters, and leading inevitably to future commotion.

The reader will observe, that I only notice here the natural effects of an increase of mankind on *productive power* without referring to the effects of the increase of any one class on the *distribution* of wealth. It is, however, chiefly in this latter point of view that the increase of labourers has been in general considered. The principle I have endeavoured to establish is, that an increase in the number of labourers, including those who work with their heads as well as those who work with their hands, naturally and necessarily promotes a knowledge of wealth-creating arts and extends division of labour. Mr. Malthus and other writers contend that an increase in the number of labourers, compared with the amount of profit the capitalist, who may or may not also be a labourer, can expect to make on their labour, and consequently compared with the quantity of employment he can or will give them, has a necessary tendency to lower wages and debase the condition of the labourer. Both these propositions may be true, for they are not contradictory; but confounding them as one, leads I believe to many mistakes. The sentimental part of mankind look only at the view here taken; the Political Economists confine themselves to the relation between labour and capital. Mr. Malthus points out the effects which an increase in the *number of labourers* has in lessening the share which each one receives of the annual produce,—the portion of that *distributed* amongst them being a definite and determinate quantity, not regulated in any degree by what they annually create,—I have only endeavoured to describe the effects of that increase on the productive power of the whole.

Chapter VI. TERRITORIAL DIVISION OF LABOUR. LIMIT TO DIVISION OF LABOUR FROM THE NATURE OF EMPLOYMENTS.

THE other limit to division of labour to which I now proceed, is the nature of different employments. It would seem, for example, that there cannot be any farther division of labour in turning, than that it should be the exclusive occupation of one man to guide a file or a chisel, as the block to be shaped or polished revolves rapidly before the instrument. As knowledge advances, however, new inventions cause in many arts this apparent limit perpetually to remove farther off. Machines are made which both guide the file or chisel, and cause the block to revolve; and the whole business of the turner consists in regulating his machine. Such inventions complicate business, as it were, in the first instance; or at least enable one man to perform those several parts of a productive operation which before required two or three; but in the progress of society these separate parts again fall, each of them, to be the exclusive business of some one individual. The application of steam-engines to working power-looms, enables one man to perform the operations of several; or to weave as much cloth as three or four persons can weave by the hand-loom. This is a complication of employments. But if things are allowed to take their natural course, this complication will be again separated, and it will become in a short time the business of several hands to perform what one now performs. The different parts of power-looms and of steam-engines, which are at present perhaps all made by one or a few persons, will each, as the demand for them increases, be made by a different person, and the making of these different parts will become separate and distinct trades. The application of the *power* to the weaving instrument will be another business, and the actual business of weaving will all be comprised in looking after the working of a machine, which is made and set in motion by almost numberless distinct tradesmen. In many arts, therefore, we find, in consequence of new inventions, a perpetual complication and subsequent simplification of the productive processes performed by individuals; or a perpetual renewal of occasions for the farther division of labour.

This beneficial effect, it should perhaps be noticed, is the necessary consequence of the invention and employment of machines. By their use, food and clothing are obtained with less labour; and the whole quantity of labour not being diminished, more food and clothing may be produced. If there be more food and clothing there will also be more people, increased demand, or extended markets, and farther division of labour.

This limit to the division of labour from the nature of employments, indefinite and progressively removing as it appears, has caused some theorists either to misunderstand, or has tempted them wilfully to misrepresent, the phenomena of our social existence. It is said to be sooner reached in agriculture than in other arts, which is assigned as a reason by those who are pleased to detract from that excellence they do not comprehend, why the means of subsistence cannot be made to keep pace with the increase of the people. “While the Romans were quite ignorant

of most of our arts, their agriculture," it is said, "was equal to ours." "Corn can be grown as cheap, or cheaper," it is added, "in unimproved as in improved countries.[1] Agriculture may well be called the master-art of life, it being that art by which we obtain the chief part of our food, and the raw materials of most manufacturers; and refraining at present from calling in question the alleged cheapness of cultivation in unimproved countries, I shall direct the attention of the reader to some other circumstances, which seem to me to have had fully as much or more influence in checking the progress of agriculture as the natural limit to the division of labour in this important art. As a preliminary step, I must bring under his notice what Political Economists have called,

TERRITORIAL DIVISION OF LABOUR. Independent of the different aptitudes and capacities in those who work, giving rise to the species of division of labour already considered, there are, if I may so express myself, different aptitudes and capacities in the natural instruments they work with. Diversities of soil, climate, and situation, and peculiarities in the spontaneous productions of the earth, and of the minerals contained in its bowels, adapt certain spots to certain arts. In one place an ever-bright sun brings to perfection grapes, oranges, pomegranates, pine-apples, and other delicious fruits; in another, continual moisture makes grass grow in rich abundance, and gives great facilities for rearing and fattening cattle, and for making butter and cheese. In fertile plains corn is a luxuriant crop; and on mountains, where corn will not grow, pasturage is excellent. Placed on the banks of a river, or on the sea-shore, a man becomes a fisher-man; while he becomes a hunter if his native land be wild, mountainous, and woody. Such a diversity of occupations, dictated by peculiaries of situation, takes place in the infancy of society, and is continued at every period of its progress. At the present day, as in remote antiquity, we find the inhabitants of Holland and all the coast of the North Sea, are skilful fishermen and sailors, while the Swiss and Tyrolese still continue, as at the first dawn of their history, to be enterprising sportsmen and hunters. Hemp or flax must have been a spontaneous production where linen was first made; and sheep must have been plentiful before woollen-cloth could have been manufactured. That country must have been rich in *ores,* where working in metals was first discovered, and they must be plentiful, whenever a nation contains, like Great Britain, a vast number of miners, founders, cutlers, and smiths. In consequence of these natural differences, certain arts cannot be practiced in some places, while in others nature forces them, as it were, on the attention of her pupil, man. The different arts and different species of cultivation, which grow up in different climates and situations from their natural peculiarities, are called *territorial* division of labour.

To follow the dictates of nature, in this respect, the mutual exchange of the products of different districts, or of the different arts which are favoured by these natural peculiarities, is as indispensable as barter is to division of labour among individuals. Territorial division of labour must exist, however, whether this exchange take place or not. Certain arts can flourish only in certain situations, and some products can only be obtained under certain peculiarities of soil and climate. If the inhabitants of districts favoured by peculiar circumstances, will not mutually exchange their respective products, the enjoyments of each will be limited to what their own skill, under their peculiar circumstances, can call into existence. In order, therefore, that both may have increased enjoyments—they must make this mutual exchange. Territorial division of

[1] For these statements the reader may see the writings of Dr. Smith, Mr. Storch, and of those economists who have contentedly repeated the doctrines of their great master.

labour grows up naturally and necessarily from a perception of its advantages, like division of labour among individuals; and mutually to exchange the different products resulting from this natural principle is beneficial to all.

This species of division of labour is not confined or limited, or in any way connected with the political separation of mankind into different nations. Thus the great *wine* district of Europe, extending from the latitude of 47&degree;, to the southern extremity of this continent, embraces within its limits, *part* of Germany, most *part* of France, Spain, Portugal, and Italy, excluding England, Sweden, and Denmark, and all the *states* to the north of this latitude. On the other hand, in each of these political divisions of the earth, we find districts, like the banks of the Rhine, and the golden vale of Thuringia in Germany; and like the banks of the Rhone, and of the Garonne, and the plains of Normandy and Picardy in France; which are peculiarly adapted, the former to the cultivation of the vine, the latter to the cultivation of wheat: and it may be doubted if the inhabitants of these districts could obtain both wine and bread, were they not each to limit their exertions to cultivating those products, mutually exchanging them, to which their respective countries are peculiarly adapted. It is, however, quite certain, that by doing this, which they in fact do voluntarily and freely, they both obtain a great deal more bread and wine by means of less labour, than they would do if the inhabitants of each district were to endeavour to grow both.

Our country—the politically organized *state* of Great Britain—offers numberless examples of territorial division of labour. The districts which abound in coal, for example, are the seats of our most important and valuable manufactures; while the cultivation of corn is carried on with great success in Norfolk, Suffolk, and Cambridgeshire. The growth of hops is confined nearly to Kent, Sussex, and some parts of Hereford and Worcester shires. The rich plains of Cheshire, and Gloucestershire, supply us with cheese, which is never made in Kent and Sussex; and the inhabitants of these different districts find it mutually for their advantage to cultivate or manufacture only these particular products, and buy what they do not produce from the inhabitants of different soils and climates.

Of the influence of such natural advantages as I have mentioned over the seat of the arts, I can, perhaps, give no better proof than what has occurred with respect to the iron manufacture in this country, almost within the last century. In the memory of persons still living, Kent and Sussex, abounding in timber, the species of fuel formerly most used, and supposed to be best adapted to manufacturing purposes, had very considerable manufactures, both of iron and woollens, but at present, in those parts, there is no such manufacture in existence. The iron railings about St. Paul's Cathedral were made, it is said, in the weald of Kent, where there is not at present the vestige of a foundery or a furnace.[2] Since coal has come so much into use, all these manufactures have forsaken the wooded for the coal districts; without leaving in the former a hope of ever recovering them. Coals afford so many advantages, that the parts of England in which they abound, or to which they are easily transported, are now the chief seats of all our manufactures. They have increased, comparatively, much more rapidly in population and wealth, than the other parts of the empire, and particularly than those exclusively devoted to agriculture. It is a curious illustration of the principle, that labour, not land, creates wealth, to see the black minerals of the

[2] At a village called Horsemonden, now only celebrated for hops and fine scenery, there is a large piece of water, which bears to this day the name of the Furnace Pond, and in the neighbourhood of it, the iron railings mentioned in the text were made. Beyond a common smith, there is not at present, either at Horsemonden, or any of the adjacent villages, a single worker in iron to be met with.

interior of the globe, the utility of which, a few centuries ago, was unknown, even if the minerals themselves were then discovered, thus converted by the hand of man into a source of wealth and happiness, more fruitful than the most fertile soils.

Returning now to the division of labour in agriculture, it must be obvious, that it depends on the agriculturist using the different natural capabilities of the soil in the most advantageous manner. That it may be carried as far as possible, the produce of different climates and soils, must be freely and unrestrictedly exchanged for each other. If, for example, the barely of Norfolk could not be given for the hops of Kent, the farmers in both counties must grow both hops and barley, or neither could have any beer: and to prohibit the exchange, would cause a complication of labour in both cases. But since man subjected his destiny to the control of one or a few men, the legislator looking only at political distinctions, has at all times and places laid restrictions on the intercourse which might and which would, but for him, have taken place between the inhabitants of different districts and climates; and never has it been possible for the agriculturist, owing to these restrictions, to push division of labour in his art, as far as would be generally beneficial. This view is confirmed by the different degrees of progress made in agriculture in the different countries of Europe.

Up to the period of the French revolution, when numerous restrictions on the interior commerce of that kingdom were abolished, when all the provinces were first taxed in one uniform manner, there was no part of Europe, of equal extent with Great Britain, and containing an equal number of people, and there is not at present any part, except France, whether forming the same political state or not, all the inhabitants of which enjoy a free and unrestricted commercial communication with each other. Dr. Smith attributes on the one hand the great comparative prosperity of England to the freedom of our interior commerce; and he attributes the ruin both of the manufactures and the agriculture of Spain, to the restrictions laid on its interior commerce.[3] In this country the different species of cultivation, adapted to different soils, owing to our free internal communication, is better understood and practised than in any other country of Europe. In Spain and in Germany, the produce of different provinces or states cannot be freely exchanged;—in both, therefore, the people must produce most of what they require, and cannot possibly devote themselves exclusively to that species of cultivation which is most profitable. The slow progress of division of labour in agriculture, and of the imperfection of the art, have been partly caused therefore by those political regulations which have impeded the intercourse between the inhabitants of different climates, soils, and districts.

If to this we add the manner in which land is appropriated and entailed throughout Europe, locking up in a few hands this great instrument, and thus necessarily preventing the division of labour, we shall see another cause for the slow progress of the art. The effects of this appropriation have been so ably described by Dr. Smith, that there is no occasion for me to do any thing farther than recommend his remarks to the readers attention. With that appropriation, however, was connected the slavery of the agricultural labourer; who has ever been in a worse condition, politically speaking, throughout Europe, than the manufacturing and commercial labourer. We have seen, that division of labour is extended by men following their natural tastes and propensities, and it cannot be extended if men are not in a state of freedom. M. Storch, who resided long in Russia, and was an eye witness to the effects of personal slavery in that country, says it is one of the most deplorable consequences of servitude, that it prevents the division of labour. In the

[3] Wealth of Nations, Book 5. Chap. II.

political condition of the agricultural labourer, we have, I think, a more efficient cause for the slow progress of improvement in this art than even in the restrictions which government have laid on traffic. Slavery, indeed, would lose half its hateful qualities, if it were not as injurious to national wealth and national power, by checking the division of labour and the progress of knowledge, as it is afflicting to humanity and ruinous to social happiness.

The great importance of relieving every natural principle from any imputation cast on it; in order to know correctly what are the causes of social misery, makes me advert to another case in which division of labour has been made the scape-goat for theorists and statesmen, and has borne the blame for the evils caused by their institutions. It is a common complaint, to adopt the language of M. Storch, among both these classes, "That it is a miserable condition to be only employed in making the eighteenth part of a pin. The workman who carries a whole trade in his single arm, may go where he pleases to exercise his industry, and find the means of existence; the maker of the eighteenth part of a pin, is only an accessory, who, separated from his comrades, has neither capacity nor independence, and is obliged to receive the law which may be dictated to him. This evil is more particularly felt in England, primarily because the regulations on this subject are there of a vexatious nature; and secondarily, because the division of labour is carried farther in that country than in any other."[4]

But this idea of dependence arising from one man's performing only one part of a productive operation, or being an accessory to others, is common to any and every species of industry in the present state of society, as well as making pins. The phrase of "carrying a *whole trade in a single arm*" is very pretty, but in the sense here employed, it is not true. It must be admitted, that a man who has learnt any one established *trade,* may be said to carry *it* in his single arm; but no one tradesman completes of himself any one commodity. A carpenter does not grow wood, nor fell timber, nor saw it into planks, nor bring it to the spot where he uses it, nor does he make his own tools or nails. A shoemaker, neither tans skins, nor curries leather, neither grows flax, nor makes threads, nor lasts, nor awls. For their tools and materials these workmen are dependent on other men, and both are only accessories in building houses or making shoes. Each labourer, let his task be what it may, only performs a part in the great work of civilized social production, and separated from his comrades, from other productive labourers, he has little or no wealth-creating power. If there be any man who completes a commodity of himself, it is the agricultural labourer, who is just as poor, wretched, and dependent, as the pin-maker,—if there be any labourer who does not complete of himself the work of production, it is a merchant trading with foreign countries. He requires the assistance in two countries, of, at least, those two classes of labourers who make the articles he exports and imports, and he requires the assistance of all those labourers who make and prepare his vehicles, and of the seamen or carriers who actually transport the goods he orders. Without the assistance of every one of these workmen, amounting, perhaps, to many hundreds, he could not possibly carry on his business. As far as division of labour is concerned, therefore, he is more dependent on other men for his revenue or support, than the man who only does the smallest and meanest part of pin-making. He performs much less, in truth, than the eighteenth part of that productive operation by which he subsists; but he never has any sentiment of painful dependence, nor is he ever the object of pity and commiseration. In the same manner the landlord or the capitalist, who perhaps derives all his revenue from the labours of the pitied and despised pin-maker, is never regarded as dependent, and never feels

[4] Cours d'Economie Politique, vol. 1

that he is miserable and degraded. The dependence complained of and mourned over, therefore, is the dependence of poverty and slavery, and not the mutual dependence occasioned by division of labour.

This practice is one great means of adding to the productive power of the labourer, and, of course, to the sum of wealth he is capable of producing, and actually produces. It is therefore a manifest contradiction to attribute the poverty and wretchedness of the pin-maker to his labouring in conjunction with other men. Whatever it may be which makes the reward of the pin-maker so small, and his toil so excessive, it is not division of labour, for that makes his task easy, and his produce great. We are thus compelled to fix our attention on the other cause mentioned by M. Storch, and to affirm, that not a part, but the whole of the poverty which he and others have attributed to division of labour, is caused by " *vexatious regulations.*" As far as I see my way in this complicated question, I should say that division of labour is an admirable means by which each person may *know* all things; while to enable him to subsist, he is required to perform only one small part of social production.

To complete the subject of division of labour, I ought now, were I treating the science fully, to proceed to the examination of the effects of social regulations in impeding or promoting this beneficial natural practice; and I ought to examine if governments can by any possibility promote it; that they can retard it needs, unfortunately, no proof; but I have expressly excluded this part of the science from my work; and had I not, the examination would be almost an endless task. On looking closely at the matter, it will be found that there is hardly one social regulation,—from that fundamental law which establishes a right of property, nay, even from that original frame of political society, which sets apart a body of men, or one man, to make laws for the whole,—to the statute of apprenticeship, or the most trifling mercantile or administrative regulation, which does not influence the division of labour. I shall content myself, therefore, with warning the reader of the incompleteness of my book as a scientific whole. Unfortunately he will find, that in works of much greater pretensions this subject is equally neglected. Very few writers appear to have formed correct notions either of the principles which give rise to division of labour, or of its natural limits; and few, therefore, have been competent, or have attempted, to explain the effects on it of social regulations.

Chapter VII. TRADE.

TRADE, whether wholesale or retail, is to be considered like agriculture or manufactures, as only one of the three chief heads under which the manifold employments and businesses of individuals in society, arising from division of labour, have been classified. Each of them embraces a great variety of separate employments. The cattle-breeder, for example, follows a distinct occupation from the hop-grower; and the cultivators of madder, of wheat, of the vine and the olive, are in general different persons, though they are all agriculturists. The whole business of working in iron is quite distinct from that of making cloth, and each of them, both being classed under the head of manufactures, consists of a great number of distinct employments. In like manner there is both wholesale and retail trade; and each of these separate branches is subdivided into numberless businesses. We have Baltic, West India, and Turkey merchants, each of whom confines his trade to the North of Europe, to the great American islands, or to the countries within the straits of Gibraltar; and we have tea-dealers, cheesemongers, and mercers. *Trade,* therefore, is only the general name for the business of dealers and merchants, as agriculture and manufactures are the general names for the two other important branches of that combined system of social production, by which the comfort and enjoyments of all are augmented.

In general all the occupations of individuals are considered as their own business, they are classed as the arts of life, and are purposely excluded from the science of national wealth. Some branches of trade, however, are generally included in the science, making a distinction between them and other occupations, for which I can see no good reason whatever; particularly as agriculturists and manufacturers are also merchants and dealers, buying seed corn, and lean stock, and cotton and silk, and again selling them when their peculiar labour has added to the value of these raw materials. Notwithstanding the example set by political economists, and the very undue importance attributed by them and by governments to trade, being convinced that it stands in the same relation to the science of political economy as every other useful art, I should not have taken any notice of it, were it not, that there yet exists in society, I believe, some unfounded prejudices against the persons engaged in it, which it may be advisable in us to correct; and under the influence of the hope that I may partly accomplish this, I shall endeavour to explain, as distinctly as I can, the natural circumstances which give rise to such occupations as those of wholesale merchants and retail dealers, and in what consists their utility to other labourers. Treatises on the art of trade are the proper books for discussing all the complicated questions connected with the principles which determine in every case the profits of the merchant, and induce him at any moment to export or import commodities.

It is a consequence of division of labour, that no one person completes of himself, and without assistance from other men, any one commodity. Every thing we now use or enjoy, is the result of joint and combined labour. Tools are made by one, raw materials are grown or collected by another, transported from place to place by a third, and fashioned, by means of the tools made by the first workman, into their ultimate form by a fourth. I here merely state the principle; but for the production of many commodities, several hundred different workmen must act in

concert, or work into each other's hands, and the mutual exchange of their different products is indispensable to complete production.

It has been shown, that there are two species of division of labour—one arising from difference of organization, and difference of taste and disposition, among the individuals of our species, and the other arising from difference of soil, climate, and spontaneous productions. The exchange of commodities, necessarily resulting from the former or division of labour among individuals, is usually confined to neighbours, or the inhabitants of the same district and place, and may be called the HOME TRADE; the exchange of commodities resulting from territorial division of labour, takes place, on the contrary, between the inhabitants of different and distant countries, whether they have or have not different governments, and a different political organization, and will here be called FOREIGN TRADE. In general the words *home trade* are applied to all the exchanges, including many derived from a territorial division of labour,—such as the exchange of the young cattle bred on the Scottish hills, for the hops of Kent, or the barley of Norfolk,—carried on between all and each of the parts, and between all the inhabitants of the same *politically* organized country, or between all the subjects of the same government; while the terms *foreign commerce* are applied to every species of exchange made between countries not under the same government. Thus applied, the meaning of these phrases is quite unscientific. I prefer, therefore, restricting the phrase *home trade,* to the exchanges arising from individual division of labour, and extending the term foreign trade, to all the exchanges arising from territorial division of labour, though the different districts which carry it on, be under the same government. We shall thus get rid of the arbitrary bounds and limits to thought, set by such chance-be-gotten things as governments and states,—we shall get rid, also, of some of the prejudices with which they are connected,—and have a clear distinction, not liable to alteration, derived from the nature of things.

As there are two distinct species of trade, there are, of course, two distinct classes of persons who carry it on; viz. wholesale and retail dealers. A retail dealer buys goods from the wholesale merchant, from the grower or manufacturer of commodities, living at or near the same place where he lives, and he sells them in small parcels to the persons who live in his own neighbourhood. There may be many exceptions to this description,—many retail dealers, who order commodities from a considerable distance, uniting with the retail a wholesale trade; but in general they procure what they retail in their own neighbourhood, and seldom extend their speculations to other districts and countries. Their occupation is the result, therefore, of division of labour among individuals.

Wholesale dealers or merchants, on the contrary, rarely or never deal in commodities manufactured or obtained on the spot where they are consumed, unless they are at the same time manufacturers and retailers. The wholesale druggists and furnitur makers of the metropolis, who supply the retail traders, both in town and country, are also manufacturers and retailers. As the rule, therefore, wholesale merchants trade with commodities manufactured or produced at a distance from where they are consumed, and their occupation is a consequence of territorial division of labour.

Both wholesale and retail traders, are distinct from the carriers of goods, whether by land or water. The latter, it is obvious, perform a very useful part in the exchange of commodities between distant places, and if the exchange be beneficial their utility and productiveness must be admitted. I understand by the term traders, men who merely buy and sell with a view to gain. The hardy navigator who is eternally buffeted by the storms of our own seas, or who braves all

the vicissitudes of climate between the ice at one pole, and the ice at the other,—and the patient-plodding waggoner who is a-foot and on the road long before even the industrious artisans of the city have left their beds, are, it is plain, labourers, and do not belong to the class of traders on whose occupations exclusively I wish to fix the reader's attention.

RETAIL DEALERS shall first be treated of. In general, the natural qualities and properties of the various products of labour are not taken notice of in writings of Political Economy. It will be found, however, that many of the phenomena of the science, such as the invention of money, the utility of various sub-divisions of labour, the dependence of all classes of labourers on one another, and, in particular, the almost extreme dependence of those who own and cultivate the land on other men, which is a most important circumstance, can only be explained by attending to the differences in time required to produce commodities, and to some peculiar properties in the different products of labour. Dr. Smith has, indeed, remarked the influence of the size and bulk of commodities, and the necessity of dividing them to suit individual consumption. On this principle he explains the utility of retail dealers. "If," says he, "there were no such trade as a (retail) butcher, every man would be obliged to purchase a whole ox or a sheep at a time. This would generally be inconvenient to the rich, but more so to the poor. Nothing can be more convenient to such persons, than to be able to purchase their subsistence from day to day, or even from hour to hour, as they want it."[1] The same fact is equally true of webs of cloth, whole cheeses, casks of butter, &c. &c. Or it is found by experience, that the form and quantity of commodities in which it is most convenient to produce them, is not that form and quantity best adapted to individual consumption. To suit them to this, is therefore another branch of labour which is performed by retail dealers.

After division of labour has taken place, it soon becomes evident, also, that the productive operations of different labourers, or the commodities they make, require different periods to complete them. From the period, for example, of beginning to prepare the ground for wheat in this country till the harvest is gathered in, full eleven months elapses. In this statement the time required to clear, drain, and inclose the land, and to work the fallow through the summer, if fallowing be the practice, is not included. To grind and sift the wheat, or to make flour into bread, may be done in a few hours. To construct a canal or a bridge, several months are in general needed; but the pick-axes and other instruments used in executing these works may each be made in less time than a day. Some weeks are necessary to make a plough, or build a house, but a pair of shoes, or a suit of clothes, may be made in less than twenty-four hours; and hundreds of nails are completed by one man in the same time. The labours, therefore, of the farmer, the miller, the baker, the engineer, the builder, the tailor, and of every class of workmen, are completed; or their respective commodities are prepared for sale or use, in unequal times.[2]

[1] Wealth of Nations, book 2. chap. 5.

[2] I take the difference of time required to complete the products of agriculture, and of other species of labour, to be the main cause of the great dependence of the agriculturists. They cannot bring their commodities to market in less time than a year. For that whole period they are obliged to borrow of the shoemaker, the tailor, the smith, the wheelwright, and the various other labourers, whose products they cannot dispense with, but which are completed in a few days or weeks. Owing to this natural circumstance, and owing to the more rapid increase of the wealth produced by other labour than that of agriculture, the monopolizers of all the land, though they have also monopolized legislation, have not been able to save themselves and their servants, the farmers, from becoming the most dependent class of men in the community. They can no longer prosper without continued legislative protection. The length of time required to complete agricultural productions, causing the dependence of those who cultivate the ground on other men, takes from them the power, wherever labour is in the least free, which they might otherwise possess, of starving

Commodities of all descriptions are moreover of unequal durability. Bread and meat, without some additional labour, cannot in general be kept more than a few days. Corn, with some little care, may be preserved for many months; and a bridge or canal, if it be kept in order, will last for ages.

But though the products of different species of labour are completed in unequal times, and are of such unequal durability, that some must be immediately sold and consumed, while others can be kept from the market for months, the appetite of each labourer is renewed daily, and must every day be satisfied. If we were aware of these natural laws, influencing both us and the materials of our subsistence, and if we at the same time knew that the great majority of the operations carried on in society, were, in the long run, of equal utility, each being necessary to the completion of the others, and that civilized society probably could not exist, and certainly could not flourish, wanting any of them, should we not think ourselves bound to take measures by which he whose useful task could not be completed and its produce brought to market for several months, might be able to obtain his daily bread? I am surprised, indeed, that our parliament-men, who delight so much in completing what Nature leaves imperfect, have not before now discovered her neglect in not enabling us to produce every commodity in the precise form, and at the precise time it is wanted; and have not taken measures to ensure all classes of labourers, however long a time may be required for their products to reach the market, their necessary daily subsistence. This, however, is one great branch of social economy, which grows up unperceived and uninfluenced by them. That it is as well performed as what they prescribe, must not, I suppose, be asserted. Dealers, however, know very well the utility of different commodities, and they conjecture, with tolerable accuracy, the different periods in which a given quantity will be consumed. They buy, therefore, from the various classes of labourers or manufacturers their different products, and share them out as is most suitable to the wants of all. They reconcile the apparent incongruity of nature, and while labouring for themselves are useful to others. The important business of actually distributing the wealth of society in such proportions as individuals can buy it, so that the daily wants of all classes, even of those whose produce is not completed for months or years, may be conveniently supplied, is, in fact, performed by retail dealers. They take to their business, I am aware, with no such high object in view; they are led to it by an instinctive view of their own interest; and they are just as unobserving of those great natural circumstances which give rise to their occupation, and as ignorant of the great utility to society at large of that sub-division of labour they carry into practice, as those individuals who pretend that nature regulates nothing, and that, but for their ordering wisdom, society could not exist.

Supposing men to have money to procure articles as they have occasion for them, "it would be very inconvenient." says Mr. Mill, "to repair in each instance to the several manufacturers and producers of each, who may often live at a considerable distance from one another. A great deal of trouble is saved to consumers when they find assembled in one place the whole, or any considerable portion of the articles which they use."[3] But the manufacturers of each article require their undivided attention for their own business of production. In the great majority of cases they may form a tolerably correct estimate of the quantity of their goods, which twelve or a score retail dealers will require; though it would be difficult, if not impossible, for them

the rest of the community. The observation may be extended to different communities as well as to the members of the same community, and convinces me, that those politicians who dread the dependence of our manufacturers on foreign agriculturists have never formed a correct notion of the phenomena of social production.

[3] Elements of Poliltical Economy, p. 84.

to judge of the wants of almost numberless individuals. But retail dealers, who make it their principal business to find out the extent of consumption, do ascertain this, each in his particular neighbourhood, in a rough way, and by their instrumentality the manufacturer and producer is enabled to judge of the quantity of commodities he is likely to sell with advantage. Retail dealers seem to me to be indispensable agents, in adjusting the supply of commodities to the demand and to consumption.

This view of their utility is confirmed by what takes place in societies formed and regulated by men. In communities, with property in common, it is not in general accessible at all times to every individual. Monks and nuns, for example, have servants or assistants, lay brothers or sisters, whose business it is to distribute among all the members their respective shares of the common stock. Every regiment of soldiers has Quarter-masters, or some corresponding officers; every ship of war has a Purser and assistants, who deal out to every soldier or sailor his allowance of provisions. Even in Mr. Owen's establishments, in which retail dealers are regarded as an evil, and rejected as a nuisance, there must be some persons to take care of the food and clothing, and distribute it among the inhabitants of his parallelograms, or the members of his co-operative communities. Retail dealers, therefore, perform such offices for society at large, as quarter-masters perform for soldiers, and pursers for sailors, and which somebody must perform for Mr. Owen's pupils. They are not appointed to this office except by nature, but they are quite as useful as if they acted under the direction of Mr. Owen, or by the King's warrant.

Retail dealers receive no wages for their services. They are paid by making a profit on what they sell; and on this account they are generally objected to. They are sometimes described as sucking the marrow out of the bones of the poor labourers. But were they paid by a salary or wages, what interest could they have in taking care of the common stock? At present, as they can only make a profit by the greatest economy in distributing commodities, they must, for their own sakes, buy as cheap as possible; and if they are negligent or wasteful, no additional price they can ask will remunerate them. They have now a direct interest in performing their task well, and strong motives for that watchfulness which is beneficial to the whole society. So impressed are most men with the utility of such motives, that we may find numberless instances of regulations made expressly to produce them. To encourage Pursers, for example, to watch over the distribution of the provisions entrusted to them, they are allowed a per centage for every thing saved, and are compelled to pay a high price for any deficient articles. Under the influence of self-interest, buying and selling only with a view to their own profit, retail dealers distribute the whole wealth of society in the most economical manner possible. They find customers even for refuse; and it may be doubted if there is as much food actually wasted in this great metropolis in one year, as by a single tribe of Esquimaux or other savages in a successful season.

In making the distribution, retail dealers have no settled scale, no rations for each individual appointed by governments, which seem only to have known of their occupation to tax and vilify, to licence and derange it; they take voluntarily to their business, and other men voluntarily go to them to buy what they want. This particular subdivision of labour is in no respect, therefore, the offspring of legislation; it is a part of the social polity of nature; and so nicely is it regulated, that all the different classes of labourers, whatever period may be required to bring their commodities to market, and whatever may be the durability and the bulk of them, are in general enabled to procure, by labouring only at their own business, any assignable quantity of any useful commodity.

WHOLESALE DEALERS, of whom I now proceed to speak, derive their occupation from territorial division of labour. Before I can fully satisfy the reader, however, of their utility, I must explain the utility of that exchange they are the instruments of making. We may first distinguish two kinds of territorial division of labour: one, which in the present state of our knowledge is unavoidable; the other is not absolutely unavoidable, it is only highly advantageous.

As examples of the former, I may mention that bark, which is an admirable febrifuge in every quarter of the globe, is the produce of only a small district of America. For us to have it, some persons there must collect it; and though we can purchase it at a small price by our own productions, no art could enable us directly to produce it. Cotton, which forms so healthy and convenient a covering for the body in every climate, grows only in countries situated in or near the tropics; and though the plant which bears it, by dint of hot-houses, can be nourished here into puny existence, yet, in countries nearer the pole, to rear it is not possible. Tea, though it refresh and delight the people both of Europe and America, is obtained only from China, and hitherto numerous attempts made to cultivate it in other countries have not succeeded. Bark, cotton, and tea, therefore, are the products of very limited spaces, but they are highly useful wherever any portion of the human race lives, suffers, or enjoys.

Whether wool could be produced in large quantities in tropical climates or not, seems doubtful, the coverings of most animals in such climates degenerating into long straggling coarse hair. At present, however, it is chiefly obtained in the temperate parts of the globe; but the woollens of England have long formed the chief part of our exports to India; and a blanket, as I know from personal experience, is one of the most tempting articles of traffic which can be offered to the negroes of the Western coast of Africa, who live in the hottest region of the globe. The inhabitants of Norway, the produce of which is chiefly fir-trees, the sea-coast consisting of an immense multitude of bleak, barren, and rocky islands, can of necessity do little else than catch fish, and saw trees into planks. Fortunately, they find in this opulent and industrious community a market for their lobsters[4] and their planks, and we are equally fortunate in having the useful articles they produce or procure plentifully supplied to us. I do not say merely that catching lobsters and sawing trees into planks, are the most advantageous occupations the Norwegians can pursue; I say no art that we are at present acquainted with, could enable them to grow corn in any quantity, or have fine rich velvet pasture, like the low flat land of Holland, though by catching lobsters, and sawing trees into planks, they can purchase the grain, and butter and cheese, for producing which the most fertile land is chiefly useful. There is one species, therefore, of territorial division of labour, which must take place whether the inhabitants of different districts mutually exchange, or not, their respective products.

There is another species of territorial division of labour not strictly necessary, but highly advantageous. In general, for example, the continent of Europe is chiefly supplied with sugar and coffee from the West Indies; but in France, during the late war, when that country was excluded by Buonaparte's decrees, and our blockade system, from all communication with tropical climates, the people succeeded in making sugar from beet-root, and in finding several substitutes

[4] Norway planks are not exactly excluded from our market, but they are burdened with a heavy duty, in order to impose on those who use planks the additional labour of bringing them from Canada. It is, perhaps, fortunate for the Norwegians, that lobsters were formerly considered a great luxury, and were chiefly consumed by the rich. They, with turbot, another article of luxury, were accordingly, under our much praised Navigation laws, allowed to be imported into this country in the vessels of any nation, I believe, while the importation of every other species of fish, which might have contributed to the *subsistence of the people,* was strictly confined to British vessels.

for coffee. The cost, however, of producing the former, with all the help of science and art, was at least four times as great as the cost of producing it in the West Indies, and bringing it to France; and the substitutes for the latter were at once so miserable and so dear, that they were instantly given up when real coffee could be procured. It would not be absolutely impracticable to make sugar or grow rice in England, but it would be amazingly disadvantageous, compared with the practice of buying both with our hardware, and bringing them from Carolina or Jamaica. It would be nearly intolerable, though not impossible, for the West Indians, who have no coal, to cast and forge their own cutlery, and other iron and steel instruments, which, in return for their sugar, they can procure at a comparatively small cost. Wine, which may be purchased in France, Spain, or Portugal, for twopence, fourpence, or sixpence a bottle, and brought here at a very small additional expense, could not be made in England for four times the sum. Sour and half ripened oranges, though rather for ornament than use, are made to grow in this country at a very great cost, by means of the forcing-houses of our opulent gentry; but they may be purchased in Portugal, or at the Azore islands, for threepence a score. To make such knives in these islands, as are sold at Birmingham for twopence a-piece, and with which, perhaps, the oranges are bought, would probably cost twelve times twopence if they could be made at all.

The mutual exchange of such objects as can only be produced in districts and spots, but more abundantly in those spots than their inhabitants require, and of which the utility is universal, must be conducive to the enjoyments and welfare of all concerned. The manifold advantages of such an exchange,—of our giving woollens for tea, and knives for bark,—can no more be doubted than the advantages of the division of labour, or of the due cultivation of both our mental and bodily faculties.

The advantages of mutually exchanging those different productions which are only favoured by difference of climate and soil, may be made, I think, equally evident. Many of our most useful and valuable manufactures could not exist, except we made such an exchange. We do not possess more than enough land in our immediate neighbourhood to supply us with the bulky articles of provision, such as cattle, potatoes, corn, which cannot so conveniently be brought from a distance; and where, then, could we find the means of growing cotton, the raw material of our most extensive manufacture? At present, this is conveniently brought from several distant parts of the earth, and working it up gives employment and subsistence, including the sailors who bring it, and the persons who make the machinery for manufacturing it, to at least one-tenth part of our whole population.

Silk, manufacturing which, employs a great, though not an equal number of our people, and enables them to subsist comfortably, is also a foreign production. It might be, and is, produced in England, but in such small quantities, and at such a great expense, that if we did not import it from climates enjoying a warmer sun and brighter sky, our spinning-mills would fall to ruin, our looms would be idle, the cheerful shuttle, with its accompanying hum of human voices, would no longer be heard, and our numerous silk manufacturers, with all their skill, intellect, and happiness, would be gradually annihilated.[5]

[5] It may be worth observing, that our people are quite as dependent for *subsistence* on these foreign products, as if they constituted their actual food. Were the supply of silk and cotton to be cut off, it would as surely annihilate all our silk and cotton manufacturers, as if the food necessary for their subsistence could no longer be produced. They would then have nothing to give for food, and the landed gentry and farmers would most certainly not allow them to have food without an equivalent. There is no class of men, however, interested in preventing the importation of cotton and silk, and, therefore, this species of dependence never excites any sinister forebodings. No apprehension

Cochineal, indigo, and various other substances used in dying, are not the produce of Britain; they, or substitutes for them, could perhaps be procured or made here, but at such a cost as would check, if not ruin, several of our most flourishing manufactures. Much of our furniture, and even the frames of our houses, are made of foreign wood. Our chair and cabinet makers, and our house carpenters, are as dependent on the forests of Honduras and Norway, as the cotton manufacturers are on the cultivators of Georgia, for the raw materials they work into beautiful furniture or invaluable dwellings.

Our breakfast, and by common consent, it seems the best we can have, is prepared from a plant brought from the farthest part of Asia, sweetened by the juice of a cane cultivated most successfully in the West Indies. We might, undoubtedly, live on oatmeal, or beer and meat, or something else which grows or is made in England, but we do not, because we like tea better. Our meat is seasoned with spices, the produce of islands in the Indian Ocean; and the sweet-meats, such as figs, prunes, etc, with which we indulge our passion for niceties, or which we give our children, on account of their cheapness and gratefulness, come from Germany, France, Spain, and Turkey. The oranges that are so plentifully hawked in our streets, in the winter part of the year, which moisten the speaking organs of our law mystifiers and of our law-makers, as well as the bawlers in the upper gallery at the theatres; which relieve the parched palate of the fever-sick patient, and gratify the apparently natural longing of all classes for a little fresh vegetable acid, when no other fruit can be procured; are brought thousands of miles, are purchased, by our hardware and cloths, and could not be procured in any quantity except by this mutual exchange.[6] Our roast beef, the Englishman's fare—would to God that every one of our countrymen could command its daily enjoyment!—is indeed a native production; but its companion, plum pudding,—exclusively an English dish,—derives its name and its savouriness from the produce of foreign climates. Raisins are brought from Malaga and Smyrna, and currants from the Greek Islands.

I have purposely selected these few familiar illustrations, in order to bring the fact clearly before the reader, that all classes and conditions of men derive enjoyment or benefit from the mutual exchange of the products of different countries and climates. The humblest man in this community, the common beggar, to say nothing of our industrious labourers, solaces himself with tobacco, or refreshes himself with tea. If this mutual exchange were confined to such things as are only enjoyed by a few opulent and luxurious nobles and merchants, as is sometimes supposed; if nothing could be brought from Italy but a few antique pictures and modern statues; nothing from India and the Brazils, but diamonds and topazes; if nothing could be obtained from France

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is entertained of our people being starved by the supply of cotton or silk being withheld; but we are told, though the thing seems impossible, that were we to eat foreign corn, we should be reduced even to a worse state of bondage, than that sought to be imposed on us by the lords of our soil. To me the dependence, and of course the danger, if there be any, arising from so many of our people subsisting by working up cotton and silk, seems far greater than would arise from importing food. Cotton and silk are the products of comparatively limited spaces; but food of one kind or another, and even wheat, is the produce of almost all the climates of the globe. We can find almost numberless substitutes for any particular kind of food: if one nation will not allow us to have wheat, we can procure rye, or barley, or flour, or maize, from some other; but if our supplies of cotton and silk were withheld, what could we substitute for them? To me it is plain, that the dependence of men on men, whether they live under the same government or not, is the necessary consequence of the beneficial practice of division of labour; and politicians, unless they abolish this practice, cannot prevent the mutual dependence of nations; though, by their ill-timed jealousies and absurd restrictions, they may sow strife where Nature meant to teach kindness, and they may bring into jeopardy the existence of several millions of industrious men.

[6] Oranges, cheap as they appear, pay a duty of 15 *s.* the 1000, or 75 *l.* per cent. on their value; or 2 *s.* 6 *d.* per box, containing 5000 cubic inches. See Act 7, Geo IV.

but a small quantity of very costly but delicious wine; foreign trade would not be deserving of the high place it ought to have in our esteem, as a means of adding to the wealth and comfort of mankind. If, instead of contributing to universal enjoyment, it merely gratified the almost bloated desires of a few for an endless succession of luxuries, it would be no more worthy of our approbation than an emasculated singer, or than any other of those unsightly excrescences which grow from our present diseased and unjust distribution of wealth.

The few commodities, however, by which I have illustrated the advantages to us of that exchange which results from territorial division of labour, constitute only a small part of those imported from countries not under our government, which are used by the great mass of the people, which contribute to their subsistence, or to which the industry and skill of our labourers give additional value. Numberless persons and very important interests in this country, are connected with and benefited by such trade,—in all cases it is voluntarily carried on; we may therefore be sure that it is beneficial to all parties. The persons who receive our cutlery, hardware, woollens, and cottons in exchange for their sugar, raw cotton, oranges, raisins, etc., could not obtain these necessary and valuable articles so cheaply by any others means. Must it not be as pleasant to the inhabitants of Portugal, of Turkey, and of Spain, to procure by the cultivation of their own vines, fig-trees, and olives, the instruments and the clothing manufactured in this country, as it is for us to obtain, by making these articles, the refreshing produce of a brighter sun than in general shines over Britain? Productive labour, be it also remembered, is that which procures the labourer his subsistence; and if the labour employed in making the commodities to be exchanged was not productive, no man would or could continue it. We have thus a direct proof that such trade is beneficial and productive to both the parties who actually carry it on.

It is said, indeed, that importing commodities from one district into another, lessens employment in the importing district. On this principle most of the restrictions on the trade carried on between different states have been imposed and justified. But the people from whom we obtain commodities, of whatever description, do not *give* them to us. On the contrary, they receive for them an equivalent, or what they esteem more than an equivalent, for they prefer it to the commodities they exchange for it. But this equivalent, be it what it may, is made or purchased by our own industry. There is no species of wealth which is not the produce of labour; consequently, to produce or obtain the equivalent commodities requires about as much labour as is necessary to create the commodities imported at the place whence they are brought. An individual not supported by the labour of others, pays with his labour for his subsistence or his luxuries; and so does a trading nation. For every pipe of wine imported from Portugal, for example, a quantity of woollens or hardware, corresponding in value to the wine, must be made here and exported to pay for it. Unless the exchange were made, there would be no market and no payment for the wine and the woollens; there would be no hope of any enjoyment from producing these commodities, and neither would be produced. The wine is not wanted in Portugal, the woollens are not required here; and both are only made in order to be exchanged for one another. If the exchange were prohibited or prevented, there would be so much less industry and wealth in two districts, and so much less enjoyment in the world.

We know from very long experience, that in proportion as commodities are obtained by trifling exertion they are sold for a small sum. What comes light goes light, is applicable in trade as well as in the other concerns of life. But I have, I hope, satisfied the reader that the means of obtaining commodities at a small expense consist principally in the increase of knowledge and division of labour. We may expect, therefore, that we shall obtain commodities at a cheap rate,

from those countries with which we trade, in proportion as they are there cheaply produced, and they will be cheaply produced as the people of those countries increase in knowledge.[7] From this circumstance we learn, that it is for the interest of every nation that every other should make the utmost possible progress in knowledge and civilization, in skill and in all the wealth-creating arts; and it demonstrates the utter foolishness of that national jealousy and rivalry which politicians love to foster and encourage.

To make the advantages of having skilful and opulent neighbours more apparent, I beg leave to remind the reader of what England has lately done, and is now doing for the rest of the world. Though other nations may envy her prosperity, they eagerly borrow her arts. By her example they are stimulated to make greater exertions, and they are clothed by her hands. British cottons and woollens, that are so cheaply manufactured, in consequence of our increased skill, are almost as cheap in Russia and South America, as in London; which is as advantageous to the inhabitants of those countries as to our own people. Steam-engines, as well as various other equally useful machines, are almost exclusively our inventions and improvements, but they add to the wealth and power of other nations. They ought, consequently, to be delighted with our increased skill, for it supplies them with cheap commodities and useful instruments. And for what reason should we not reap similar advantages were all our neighbours as skilful as ourselves. I do not recollect any useful art we have imported from Russia, or from the slave coast of Africa, or from the West India Islands; but, to say nothing of the various improvements we adopted from Italy, France, Flanders and Germany, in the 15th, 16th, and 17th centuries, they being then the most opulent and skilful nations of Europe,—from France we have lately introduced an improved silk loom, from Flanders the Hainault scythe, and from North America lightning conductors, and several improvements in steam-boats. From ignorant, poor, and unskilful people, neither knowledge, wealth, nor ingenuity, can be brought; wherefore it is for the interest of all nations to have enlightened, wealthy, and ingenious neighbours.[8]

The immediate pecuniary advantages which accrue to all the parties concerned, in exchanging the products favoured by one climate, for those favoured by another, gives but a feeble notion

[7] The principle stated in the text, obviously holds good throughout all countries under the same government; and if it do not hold good in countries not under the same government, the cause of the variation is political—not natural.

[8] The following passage from Mr. D. Hume's Essay, " *Of the Jealousy of Trade,*" may perhaps not be without interest as confirming the view taken in the text, and exemplifying the great alteration which has taken place since a period somewhat prior to the time he wrote, in the relative situation of this country to the surrounding countries. "I go farther," he says, "and observe that where an open communication is preserved among nations, it is impossible but the domestic industry of every one must receive an increase from the improvements of the others. Compare the situation of Great Britain at present with what it was two centuries ago. All the arts of agriculture and manufactures were then extremely rude and imperfect. Every improvement we have since made, has arisen from our *imitation of foreigners,* and we ought so far to esteem it happy that they had previously made advances in arts and ingenuity. But this intercourse is still upheld to our great advantage; notwithstanding the advanced state of our manufacturers, we *daily adopt* in every art the inventions and improvements of our neighbours. The commodity is first imported from abroad to our discontent while we imagine it drains us of our money. Afterwards the art itself is gradually imported to our visible advantage; yet we continue still to repine that our neighbours should possess any art, industry, and invention, forgetting that had they not first instructed us, we should have been at present barbarians; and did they not still continue these instructions, the arts must fall into a state of languor, and lose that emulation and novelty which contribute so much to their advancement." At present Britain has become the teacher of her former teachers, and although we require the competition of other nations to stimulate us onward in our career, the instruction we at present derive from them is so little that there can be no fear, though it should wholly cease, of the arts falling into languor.

of the benefits conferred on mankind by trade. The animal appetites of man are soon gratified, and unless he be then roused by some terrible and destroying passion, he sinks into inglorious repose. The savage passes his life contending with wild beasts, or with his wilder fellow savages, for food, or in gluttony and sleep. The skill and knowledge requisite at any time to provide for our animal wants, must be small, and did not some other stimulus intervene, all the ingenuity and faculties of civilized man would remain dormant, or be much limited. No reflections on our intellectual nature or high density, did they ever occur, could rouse the barbarian from his sloth, or wean him from his sensuality. Such motives have been employed by missionaries, but have been found ineffectual to overcome indolence. But present him with the solemn pageantries of Catholicism; offer him some glittering bawble to adorn his person; show him the utility of some wealth-creating arts; let him taste the enjoyment of some new productions of human skill; and you will infallibly excite his exertions. He will give you every thing he already possesses for mere bawbles; he will endeavour for the sake of a dram or a musket to collect more elephants teeth, and kill more fur-bearing animals; nay, for glittering and sometimes pernicious presents, he will sell himself or his dearest relations. Precisely the same motives, though they are not so perceptible, and do not lead to the same excesses, in consequence of our enjoying numerous foreign commodities from the beginning of our existence, operate also on all classes of the most civilized community; and after our mere animal wants are gratified, we still labour, and are happy when labouring, to obtain some other, and generally foreign productions.

"Flourishing cities," says Dr. Paley, "are raised and supported by trading in tobacco: populous towns subsist by the manufacture of ribands. A watch may be a very unnecessary appendage to the dress of a peasant; yet if the peasant will till the ground in order to obtain a watch, the true design of trade is answered; and the watch-maker, while he polishes the case or files the wheels of his machine, is contributing to the production of corn, as effectually, though not so directly, as if he handled the spade or held the plough. The use of tobacco affords a remarkable example of the caprice of human appetite, yet if the fisherman will ply his nets, or the mariner fetch rice from foreign countries, in order to procure himself this indulgence, the market is supplied with two important articles of provision by the instrumentality of a merchandise, which has no other apparent use than the gratification of a vitiated palate."[9]

The mutual exchange of the products of different climates, is a great means, therefore, of promoting civilization. It offers additional enjoyments, and to procure them it incites to additional exertions. It is the parent, consequently, of much of our skill. To obtain its gratifications, gives a perpetual but gentle stimulus to our passions, saving us both from the weariness of idleness, and from those violent emotions which are followed by painful lassitude, and end in speedy when not self-destruction. A number of innocent desires fill up, with an equable flow of happiness, the time of our existence; and foreign trade is even a greater good by the stimulus it gives to thought and exertion, than by the enjoyments it immediately bestows.

All these immense advantages arise naturally from men acting, as we know from all history they are disposed to do, on a perception of the advantages to be derived from the mutual exchange of the products of different climates. There are numberless instances of governments checking and prohibiting the natural trade which, but for their interference, would be carried on between different countries; there is no instance of their calling any beneficial trade into existence, and no instance of a people, unless prevented by their government, refusing to engage in such a

[9] Moral Philosophy, vol. ii.

trade. Thus trade, in all its vast ramifications, and with its immeasurable benefits, is a natural phenomenon growing out of natural differences in the soil, climate, and spontaneous productions of the earth. Merchants at present regulate their proceedings by the money price of goods, by the rate of exchange, by the enactments of the law-giver, and by that forced state of things which these enactments have brought into existence. With all these considerations, the science of Political Economy has no more to do than it has with the motives which induce the farmer to sow wheat or plant hops. To judge of them is the *business* of the merchant. The science contents itself with enumerating some of the advantages of trade, and stating its natural source. The ultimate regulating principles of all foreign trade, whether it be carried on between countries under the sway of the same king or not, are the great natural circumstances mentioned; and any interference, whether by governments or individuals, to impede or prevent the mutual exchange of those commodities which can be only or most advantageously produced in limited spaces, is a violation of the order of nature, equal in principle, if not in degree, to an interference to prevent men dedicating themselves to separate employments.

The advantages, moral and physical, of trade, are unknown to the rulers of mankind; or at least, in their estimation, they are of no importance in comparison with the preservation of their power. Under the influence of ignorant ambition, they have, in almost all cases, prescribed regulations for that trade which has, and prohibited much of that which might have been, carried on between different states. Any thing more meddling or impertinent cannot be imagined. The individuals who are willing to make an exchange say for example, of French wine for English cutlery, find it mutually advantageous; and no third party, whether he be a rival manufacturer or merchant, a monopolizing trader or landlord, a theoretical politician or a practical statesman, can, under any circumstances, be entitled to say such an exchange is mischievous, or lay any impediments in the way of this species of honest, honourable, and productive industry. Unfortunately, this principle is not yet generally recognised, and the business of the merchant has been interfered with, prescribed, and regulated, in a manner which is tolerated in no other branch of social production. We are all interested in checking this absurd conduct; for unless we stop the interference of one man, or a class of men, with the business of another, at its very commencement, by a positive and complete denial of its utility, there is no point short of entire slavery where we can arrest it. Ambition is insatiable, and all history tells us, in regulating kingdoms as well as regulating clubs, that those whom we permit or request to assume for some trifling purpose the office of legislators, never rest satified till they obtain the power of prescribing our speech, our behaviour, and our thoughts.

Why should the advantages resulting from territorial division of labour, and the consequent exchange of commodities between districts of the earth differently situated, be confined to countries acknowledging the same master, and why should they not be universally enjoyed? Why should any individuals of this country not be freely permitted to exchange all or any part of the produce of their industry for the produce of some other industrious men living in France or Spain, as well as for the produce of the unhappy slaves in *our* colonies? It is found to be very advantageous for the cotton spinners in Lancashire to buy wheat from the Irish, by means of their own produce, for the manufacturers of Birmingham, and the farmers of Cheshire, mutually to exchange hardware and cheese, for the graziers of Scotland to give cattle for barley, and for the English to trade with China and America,—and for what reason would an exchange of commodities with neighbouring countries not be equally beneficial; and what has the fact of their having different governments to do with their trade, that it should be restrained or interdicted?

If it be good for individuals to confine their exertions to one branch of business, for the tailor or fisherman, for example, to do nothing but make clothes or catch fish, buying whatever he may need with the produce of his peculiar industry; if it be advantageous for the miners of Durham and Cornwall, to be only miners, having their knives, pickaxes, and gunpowder brought from Birmingham and Hounslow; if it be advantageous for the inhabitants of the Scotch hills, to attend only to rearing cattle, importing cutlery and cloth from Yorkshire,—it must also be advantageous for the people on the south coast of England, to exchange their produce for the produce of the people on the opposite side of the Channel, with whom they are naturally and geographically much closer connected than with Ireland or Scotland;—and it must also be advantageous for the inhabitants generally of this foggy, moist country, abounding in coal, to exchange the commodities of which the production is favoured by these circumstances, for the apples and wheat of Normandy, the raisins of Provençe, and for the brandy and wine of Gascony. The English Channel can make no more difference in this respect, than the Irish Channel or than the Tweed. If, in fact, the provinces of France, which once bowed beneath the sceptre of our Plantagenets, now acknowledged the sway of our Guelphs, if they were regulated and taxed by laws made at Westminster, if their affairs were administered by our Eldons, Liverpools, and Cannings, a free commercial intercourse with them would be considered as advantageous as such an intercourse between Yorkshire and Suffolk.

Fortunately for us, and fortunately for the world, when our colonies in America thew off the yoke of the British Parliament and King, and formed themselves into the United States, the trading bonds of connexion between the two countries were so numerous, their want of each other was so urgent, and something like a free communication between them was so necessary to the prosperity of both, that whatever may have been the wish of statesmen,—and it has been plainly manifested by many jealous and unwise regulations in both hemispheres,—it was not possible to interdict the trade between Britain and America, and declare it a nuisance, as the trade between this country and the ancient dominions of our kings on the neighbouring continent, has been interdicted and declared. To a certain extent, the trade between the United States and Great Britain has been *permitted,* and has contributed largely to the prosperity of both countries,—teaching the world that the organization of men into different political societies, or into little hordes and knots of slaves, has nothing whatever to do with their progress in wealth, except to impede it; and that the trade which is beneficial when carried on by the subjects of the same state, is equally beneficial when they have different masters.

No man can suppose that the chance which made our former continental dominions a part of the patrimony of the Bourbons, instead of their adding to the almost numberless dependencies of the Guelphs,—or that the wisdom which took the people of North America from under the dominion of our sporting squires, intriguing statesmen, and greedy capitalists, which, God knows! we find enough burdensome,—can alter in the smallest degree those natural and eternal laws which regulate production, and by which the mutual exchange of the varied products of different climates, stimulates industry, adds to enjoyment, and bestows, like Charity, a double blessing, for it blesses those who buy and those who sell.

If the reader is now sensible of the benefits of foreign trade, a few words will elucidate the utility of the wholesale merchant. It is plain that the producers of commodities to be exchanged, whose business it is to produce as much with as little labour as possible, cannot attend to the wants of mankind in distant parts of the world. The wine-maker must be acquainted with the principles of fermentation, and the cloth-maker must know the arts of weaving, fulling, and

dying; but to send either wine or cloth to a suitable market, requires a knowledge of the wants and tastes of different communities. Such knowledge is quite distinct from that necessary for the production of the commodities to be exchanged: to acquire it, both time and attention must be bestowed; and the art of the merchant must be learned like any other branch of business. He is a labourer, but his labour is chiefly mental; and his occupation is one branch of the division of labour. By finding a market for the commodities of two producers, living at a distance from and unacquainted with each other, he relieves them both from this trouble. He produces neither wine in Portugal nor cloth in Yorkshire, but by ascertaining that one can be advantageously exchanged for the other, and being the chief agent in making the exchange, he contributes, like the watchmaker mentioned by Dr. Paley, to produce both cloth and wine. If these commodities, as I have already stated, would not be produced unless they could be exchanged for each other, the merchant must be as instrumental in producing both, as the actual wine and cloth makers. He is quite as useful, therefore, but not more useful, than those who make cloth and wine. His occupation could not exist but for them, and it springs from one of them being able to produce a greater quantity of wine, and the other of cloth, than they require for their own use.

All wealth, it must be remembered, has a relation to our wants. The rich and luscious pine-apple, that annually ripens and decays in the wilds of Africa, and the majestic trees which flourish and fade, century after century, in the unexplored forests of America, almost unseen and untouched by a single human being, are not wealth. Transport them, however, into Covent-garden market, or to the banks of the Thames, and they would instantly acquire that relation to the wants of some persons, which gives to a material object the characteristics of wealth. This is an extreme case; but the business of the merchant is to give, in a degree, this characteristic of wealth to every object he deals with. He removes commodities from where they possess little, to where they possess much value; from where there are few or no persons requiring them, and they are of little use, to where they are of more use, and where the demand for them is greater; and as far as this relation of material objects to the wants of man is concerned, he *creates* wealth as much as the man who, by converting wool into cloth, adapts it to the purposes of clothing.

He is not paid by any salary or wages for these valuable services, but by the increased price the commodities fetch in consequence of being removed to the spot where they are most required. From this mode of payment, we see that his principal object must always be to buy when and where commodities are cheap, and sell when and where commodities are dear. This is the principle of his operations, and therefore they tend to equalize prices at all times and places. It is accordingly found, as, for example, in Holland, where for many years the price of grain has been comparatively steady, that whenever trade is free and governments leave it to its natural course, fluctuations in price are of little extent. The mode of paying merchants, and the object they must necessarily have in view, shows that trade instead of causing, as is usually stated, alternations of prosperity and decay, and fluctuations in the condition of a society, tends, in fact, to raise it above all such fluctuations, and even to secure it against the effects of variations in the seasons.

That the seasons vary in fertility, and that great fluctuations consequently take place in prices, causing perhaps some of the most grievous calamities by which the very complicated mechanism of civilized society is liable to be deranged, is very well known. But variations which appear very great when examined only in relation to limited spaces and short periods, disappear as observation is extended to a wider range. Nature provides a remedy for the evils which might occur from such variations, by making the fertility of one species of produce, one district, climate, soil, or year, compensate for the barrenness of some other year and district, and the failure of

some other crop. Such a provision, however, requires that the surplus of the fertile year be stored up against the coming of the barren year; and the luxuriant crops of one spot be conveyed from the place where they are in excess, to where there are mouths but no food. To ascertain all such circumstances, and to buy and sell accordingly, is one part of the business of the merchant; and but for his occupation, this beneficial arrangement of nature would be useless. Let it also be remarked, that the evils of such variations in the seasons would probably be less felt as the earth was deficient in people; that they would be augmented, and become terrific as men multiplied; but as that multiplication goes on, division of labour is extended, the business of the merchant is established, and his occupation places the citizens of a well-peopled country in this respect far above the level of the thinly-scattered inhabitants of the most fertile regions. Thus there have been no such enormous fluctuations in price, and no such famines in this country, within the last century, as occurred in the 14th, 15th and 16th centuries, and as now occur in South America; and corn never fluctuates in price in Holland to the same degree as in Spain. Trade, which is in a great measure free in Holland, and amazingly restricted in Spain,—which is now so extensive in this country, and was formerly almost unknown,—is the great means of preventing fluctuations in price, and the alternation of dearth and abundance.

The governments of some countries, distinguished for wisdom, noticing the evils resulting from variations in the seasons, have established public granaries to prevent them, and to equalize the operations of nature; but the merchant buying when and where commodities are cheap, and only selling when and where they are dear, does, in fact, perform, but infinitely better than governments can, all the functions of public granaries. But are not the magnificent store-houses erected on the banks of the Thames public granaries, exceeding in vastness and completeness the national granaries of any other people; and would any salaried servants of government have the same interest as the merchant to watch and conjecture the fluctuations of the markets? The sharpsightedness of his self-interest is continually on the alert, and he can only obtain a profit as his operations tend to equalize supply and demand. His motives are selfish, but the consequences of his proceedings are not the less beneficial. They are not prescribed by the legislator, but they are a most important part of social order. Trade supplies us with one of the many examples of *nature* regulating and prescribing our conduct, in cases for which governments,—imagining she had turned us adrift on the wide ocean of the universe, without compass, chart, or pilot,—thought it was their business to provide. The motives of the individuals may be called trivial; and perhaps some great sea and land captains may say they are unworthy and inglorious; but nature nevertheless effects by them a purpose of far more importance to mankind than all their victories. The operations of the merchant, though they arise from the most selfish motives, have a direct tendency, whenever they are freely permitted, to neutralize the variations of the seasons, and to spread with an equal hand the means of subsistence and enjoyment over the whole civilized world, and among all classes and conditions of men.

I beg the reader to recollect that I speak only of the natural effects of the conduct of merchants, having for their object to buy when and where commodities are cheap, and to sell when and where they are dear. Such a class of labourers being highly useful to the rest of the community, it must be deeply lamented that in our time their honourable name and character have been usurped by gambling speculators. As they acquire wealth by dealing in commodities, the producers of which are very often in a state of destitution, they are liable, under the most favourable circumstances, to excite envy and hatred; but this usurpation will bring their name and occupation into contempt. In our time, unfortunately, owing to our immense taxation, the burden of

which every man tries to throw on his neighbour, and to the variations in the value of paper money, which is sometimes exchangeable for gold, and sometimes not, as suits the conveniency of the government,—a low cupidity, and the spirit of lottery contractors have become the animating principles of all traders. A hocus-pocus system of multiplying wealth has been adopted throughout the community, and our merchants generally seek to become rich by time bargains and gambling speculations. Industry loses all its charms when affluence may be acquired by a lucky hit. At present the order of nature is reversed, and opulence, instead of being the result only of pains-taking labour, is the reward of some chance speculation. Among the numberless evils created by our national monetary, and borrowing systems, there is none greater perhaps than the abstracting a large number of persons from industrious occupations, who, under the name of merchants, rely for their prosperity on effecting by various falsehoods and tricks, a turn in the markets, or a rise or fall in the price of the Stocks. The business of the real merchant is totally different. His occupation springs from the natural circumstance of different climates giving rise to territorial division of labour; and in its effects it equalizes prices, and neutralizes the variations of the seasons. He is an indispensable member of the complicated, but well combined and nicely arranged system of social production, which grows up naturally and independent of all legislative regulation as our species is multiplied; and which renders civilized man so much more opulent, happier, and better than the savage.

Chapter VIII. MONEY.

"MONEY," to use the definition of Dr. Smith, "is the instrument or means by which every individual in the society has his subsistence, conveniences, and amusements regularly distributed to him in their proper proportions." It is, in fact, only the instrument for carrying on buying and selling, and the consideration of it no more forms a part of the science of political economy, than the consideration of ships or steam-engines; or of any other instruments employed to facilitate the production and distribution of wealth. It is different from all other instruments, in respect to its being used by the whole community; and not being exclusively the property of any individual. It affords also a very instructive proof of the manner in which the general laws of nature operate on the minds of individuals, producing a uniformity of conduct, equal in regularity to any of the movements of the planets. Governments have meddled incessantly with money, which in our time has been the fruitful parent of intricate discussions and painful changes. Money has accordingly attracted much learned attention: and the principles which regulate it have been the subjects of much dispute. On these accounts it is worthy of a brief notice, though having of itself no stronger claims to be treated of in political economy than any of the other instruments or merchandizes useful to man. Into the history of the alterations made in it by our government, or into an examination of the conflicting opinions and schemes of theoretical writers and practical dabblers in legislation, I have no wish to enter; and I shall, therefore, confine my observations to the *natural circumstances* which gave occasion to the invention, *first* of metallic, and *afterwards* of paper money, and which regulate the quantity and value of both.

I have already mentioned the natural circumstance of all commodities being produced in unequal periods, while the wants of the labourer must be supplied daily. This circumstance influences the conduct of mankind at all times and places, after a division of labour has been introduced. In the rudest state of society, the fisherman or hunter may obtain a supply of food in one excursion, but the maker of bows and arrows, canoes or stone hatchets, must employ some days to complete his task. So at present, the produce of the baker, the butcher, or the shoemaker, can be brought to market in a few hours, while the farmer, the tanner, or the grazier, must wait weeks, months, or even years, before he can offer his produce for sale. This inequality in the time necessary to complete different commodities, would cause the hunter or the baker to have a surplus of game or bread, before the maker of bows and arrows, or the grazier, had any commodity completed to give for the surplus game or bread. No exchange could be made; the bow maker or the grazier, must be also a hunter and a baker; and division of labour, could its advantages have been conjectured, would only have been regarded as the visionary scheme of some hot-brained enthusiast. The obvious utility of division of labour suggested the means of getting over this difficulty, which consisted in the invention of money.

Another natural circumstance which influenced the invention of money, was the inequality in the value of commodities which cannot be divided. A bow and arrow could at no time have been precisely equal in value to each of such different things as a hut, a canoe, or a hatchet; or to an ox, a deer, a hare, or a salmon; and these things could not be exchanged for one another, without

some measure to determine how much or how many of other commodities were equal in value to those which could not be divided without destroying them. This measure also, be it what it may, is money.

"One man," says Dr. Smith, " *we shall suppose* has more of a certain commodity than he himself has occasion for, while another has less. The butcher has more meat in his shop than he himself can consume, and the brewer and the baker would each of them be willing to purchase a part of it. But they have nothing to offer in exchange except the different productions of their respective trades; and the butcher is already provided with all the bread and beer which he has immediate occasion for. No exchange can in this case be made between them. He cannot be their merchant, nor they his customers; and they are all of them less mutually serviceable to each other." "To obviate this difficulty," Dr. Smith adds, "each of them would endeavour to obtain possession of some *(additional)* commodity, which he knew would be received by others at all times and places;"[1] this commodity is money.

The language used by Dr. Smith might almost make us suppose that he regarded the invention of money as a chance occurrence; or, at least, that he had not formed any accurate idea of those specific circumstances which give rise to the employment of some one commodity as money, whenever the division of labour is introduced. Those circumstances are inequalities in the periods necessary to production, inequalities in the value of indivisible commodities, and one man not producing what another desires, while he desires what that other possesses. Owing to these natural circumstances, labourers cannot possibly supply their mutual wants by barter. The invention of money, therefore, or the employment of some one commodity as a measure of the value, or means of exchanging all commodities, is a natural and necessary step in the progress of society; is introduced by division of labour, being essential to the continuance of this practice; is as equally useful, therefore, as it, and as generally adopted.

METALLIC MONEY will first engage our attention, and we shall consider only the precious metals. For although some particular commodity, as a measure of the value of other commodities, has been used since the beginning of history, and amongst most of the nations of the earth, just as they have all had some measure of capacity and of linear extent; yet, as one nation selects a yard and another *2 metre* as the measure of length, so different commodities have been employed as money at different times and places. In the early ages of the world, the articles most generally useful, such as cattle, salt, iron, cloth,[2] and in cold climates, among the ancient Russians for example, furs,[3] were used as money; in the West Indies, sugar; in New-foundland, salt fish; and in some parts of Africa, small shells,—have been the currency. On the western coasts of this continent it is still customary, as it was formerly in Virginia, to reckon in rolls of tobacco or bars of iron; and in Bornou, Major Denham informs us in his recent travels, that *gubkas,* or narrow strips of cloth, constitute its money. The precious metals, however, or gold and silver, are now, and have been for ages, the money not only of all Europe, but of the greater part of Asia, Africa,

[1] Wealth of Nations, book i., chap. 4.

[2] Wealth of Nations, book i. chap. 4.

[3] *Cours d'Economie Politique.* The armour of Diomede is said by Homer to have cost nine *oxen,* but M. Garnier has shown, according to M. Say, *Notes to Storch,* that this valuation was made in a species of metallic money having an ox or a bull stamped on it, and so called from this circumstance; just as we call a certain *coin a sovereign,* from its bearing the image of the King's head. There is no reason to suppose that the King's head is stamped on the gold because it is worth about twenty shillings, but an ox was probably about equal in value to the piece of metal on which it was stamped, and was selected because oxen had previously been used as money.

and America, and they are willingly received at the islands of the Pacific Ocean. As natural circumstances dictate the use of some one commodity as a measure of the value of others, or as a means of exchanging them, so we may be sure that the preference universally given to the precious metals, has its source in some obvious natural circumstances.

These natural circumstances are the peculiar properties of the metals, and they are stated by Mr. M'Culloch to be, *first,* the capacity of almost infinite divisibility, so that they can be made to represent commodities of almost every degree of value; *second,* great durability, so that they are not deteriorated by time; *third,* great value in small bulk, so that they can be cheaply transported; *fourth,* sameness, so that pieces of metal of the same size and denomination, are always equal to one another; and *fifth,,* steadiness in value, without which they would not serve to measure the value of other commodities. It is not affirmed that the value of gold and silver is invariable, but it is less variable than that of most other things. The other qualities mentioned also belong, in a higher degree, to the precious metals than to any other known substances; and these qualities have operated with such uniformity on the mind of man, at all times and places, that they have always induced him to act in a uniform manner, and employ the precious metals as money. The power of the mightiest conqueror the world ever saw, lasted only for his life; and his influence extended only over a very limited space, while the use of the precious metals as money, has been known for many centuries, and is now nearly universal. The employment of them as money, therefore, and it ought never to be forgotten, began, like division of labour, without the interference of any legislature. Metallic money is not like an army of ruffian soldiers, the offspring of law, and the creature of governments, it is something instinctively adopted by the human race. "It has not been," says the philosophic Turgot, "in consequence of any agreement among men, or by the intervention of any law, but by the nature and force of things, that the precious metals have become universal money."

It is sometimes supposed that money and wealth are synonymous, which is indeed true of individuals, but not of nations. During the late war, for example, when the notes of the Bank of England were declared by the legislature to be good and sufficient money, the precious metals were nearly banished from circulation. Notwithstanding the loss of our gold and silver, and notwithstanding a more profligate waste of public treasure than even the subjects of our most extravagant government ever before witnessed, the nation increased in population, power, and wealth. An individual gets all the money he can, and is said to be rich in proportion as he possesses or can procure a great deal of it; but the wealth of nations is exclusively measured by the conveniencies, comforts, and luxuries enjoyed by all their inhabitants. The money possessed by an individual may be called his wealth, because he can buy with it whatever he wants; the money in any one country will in general circulate as money only there, and the bullion, like cloth or corn, will only buy commodities from other countries, or exchange for them in proportion to its intrinsic value. We can hardly suppose, as natural circumstances dictate the employment of some one commodity as a measure of the value of others, and forcibly recommend the adoption of the precious metals for this purpose, that the quantity of money possessed or required by any country at any one time, is not also regulated by some natural circumstance. As money is not the offspring of legislation, so it is not by laws that its quantity or value are regulated. Two natural circumstances which exist quite independent of governments, though they interfere with and derange them; viz. the *quantity of labour* required to obtain or purchase the precious metals and other commodities, and the number of exchanges to be completed in any given time and place,

always determine the relative value of these metals to all other commodities, and what quantity of them must be in circulation.

As all commodities are exclusively the produce of labour, there is no other rule, and can be no other rule, for determining their relative value to each other, but the quantity of labour required to produce each and all of them. This circumstance establishes between the precious metals and all other commodities a *natural* relation, subject only to such variations as may be caused by an increased difficulty or facility of procuring any one commodity, including the precious metals. I do not say that governments cannot alter and disturb this relation; that they may not, by prohibitions or bounties, enhance the difficulties of procuring some certain commodities; and that they may not, by particular taxes, derange the proportions in which they would naturally exchange for each other; but I say different quantities of labour are *naturally* necessary to procure, and different degrees of difficulty are *naturally* met with in procuring all commodities, and these different quantities of labour, these different degrees of difficulty, establish in our minds a natural relation of value between all commodities, including the precious metals, which, thought it may vary, exists at all times and places, quite independent of any human laws whatever. The precious metals, therefore, have a settled value, both in relation to each other, and in relation to all other commodities, which is always determined by the quantity of labour necessary to produce each and all of them.[4]

Thus when the harvest is short, the quantity of labour employed in preparing the ground and gathering in the crops, being about the same as if the harvest were abundant, more labour than usual has been employed in producing a given quantity of corn, and corn accordingly rises in value in relation to all other commodities. The apprehensions of scarcity may intervene and raise this price far beyond what remunerates the agriculturist for his labour; but, independent of this apprehension, the corn would necessarily rise in value, because more labour had been expended on a given quantity. On the same principle, it is well known that the successive improvements introduced into the manufacture of all metallic articles and most articles of clothing within the last century, having diminished the quantity of labour necessary to produce them, they have all fallen in value. On the same principle also, the discovery of America lowered the value of the precious metals throughout Europe. The consequence of that discovery was to supply us with gold and silver, particularly the latter, by means of less labour than was necessary to obtain them from the mines of Europe. Accordingly, gold and silver in a few years fell so much in value, that the period of the discovery of America has become a remarkable era in the history of political economy, as well as in the more extensive history of mankind. After that period it became necessary throughout Europe, to give more than three times as much silver as was before given for corn.[5]This alteration was co-extensive with the use of the precious metals as money; and confirms to demonstration the statement, that their value in relation to other commodities is determined by natural circumstances.

[4] It is perhaps necessary for me to notice that some authors reject labour as the exclusive standard of value; and add profit and include rent. With their trifling, verbal, and nonsensical discussions, I have no wish to take up the reader's time, particularly as all the observations in the text apply only to the relative value of commodities, which is, for all commodities, equally affected by rent and profit; which, therefore, as far as the relation I am considering is concerned, may be rejected, even on their theories, without leading to any error. (The reasoning would be wrong, certainly, if I were to include labour, the creator of all wealth, as they most erroneously do, under the term commodities.

[5] Wealth of Nations, book i. chap. 11.

Having established this principle, we see clearly another principle which determines the quantity of money required in any country. Gold and silver are used for many other purposes besides money; and they are expensive articles. As money they facilitate the exchanges which are necessary to the continuance of division of labour. Miners will not supply these metals without an adequate payment, and other men will not pay miners unless they require the precious metals. Their want of money is regulated by the number of exchanges to be made or the quantities of goods to be bought and sold; and thus the *quantity* of money required at any time and place, is always determined by the number of exchanges to be made. Of course the relative value of the precious metals to other commodities determines how much of them must be given for other things; and the number of sales to be made within a given period, determines, as far as money is the instrument for effecting those sales,—the quantity of money required.

Governments may indirectly, but not directly influence the quantity of business, and thus the quantity of money necessary in a country. They may for example, by exorbitant taxation check all industry, and extinguish many productive enterprises, but producing nothing themselves, they have no power whatever to increase business; and, therefore, no power to influence or determine the quantity of money required in any country. At all times, however, they have endeavoured to regulate both the value of the precious metals when used as coin, and the quantity of money in circulation. Not to enter any further into the history of their proceedings than is necessary to explain the principle and source of their interference, I shall here only remark, that whenever they have by their regulations departed from the standard established by the natural circumstances just pointed out, the tendency of things to regulate themselves by these natural circumstances is so much more powerful than all the restraints of the legislator, that sooner or later it has mastered his laws, and occasioned frightful convulsions in property.

When the precious metals were first used as money, they were always weighed like any other commodity; a practice still continued in China and some other countries, and still adopted in all countries with foreign coin. "Abraham," we are told, " *weighed* to Ephron the silver which he had named in the audience of the sons of Heth, four hundred shekels of silver, current money with the merchant."[6] "The revenues of the ancient Saxon Kings of England are said to have been paid, not in money but in kind, that is, in victuals and provisions of all sorts. William the Conqueror introduced the custom of paying them in money. This money, however, was for a long time received at the Exchequer by *weight,* and not by tale."[7] At present, if we carry foreign coins, or even guineas, to a money changer, he weighs them to determine their value. The plan of dividing the metals into small pieces, certifying the weight and value of each piece by a stamp or mark, was an after invention; the utility and conveniency of which, as a means of telling everybody that the metal was genuine, and what it was worth, must soon have forced themselves into notice. The visible characteristics of the precious metals are possessed by other substances, and it requires the art of the goldsmith or assayist to ascertain their genuineness. For every man to go through this process in buying and selling would be impossible; and even to weigh each piece of metal, would be almost an endless task. By the bullion being assayed in large quantities, then divided into small portions, each portion being marked to signify that it contains a certain weight of metal of a specific fineness, individuals were spared the trouble of assaying and weighing the

[6] Genesis, chap. xxiii.

[7] Wealth of Nations, book i. chap. 4.

metals. Such a process is therefore very useful, and accordingly *coining* has been introduced wherever the precious metals have been employed as money.

Governments having perceived the use which might be made of taking this process into their own hands, forbad individuals to coin money, and declared themselves the only lawful coiners. From money being used by the whole society also, it is not the peculiar business of any one individual to regulate and arrange it, though I have no doubt, had the matter not been interfered with, that in the progress of society there would have arisen a class of labourers deserving the confidence of society, whose exclusive business it would have been to have supplied metallic, as such a class of men now supply paper money. It having been supposed, however, in this as in numberless similar cases, that unless the legislature made regulations, there would be only disorder and confusion, governments accordingly assumed the power of coining. Moreover, those who are allowed to coin money must necessarily enjoy the public confidence, which governments have generally done,—whether justly or not, the reader must determine for himself,—or they have been able to compel obedience to their decrees, and having assumed the power to coin, were either trusted or obeyed. To me there seems no other grounds for governments taking on themselves the charge of providing the community with coined money.

Coining, the reader will recollect, does not and cannot alter the natural relation of value which exists between the precious metals and all other commodities, except that it adapts them better to perform the functions of money, adding to their utility, and giving them a slight increase of value in proportion to the labour of assaying and coining them. We should immediately see the absurdity of any endeavour to alter the relative value of commodities, were the attempt made with any thing but money. If the government, for example, should decree that an ox should be given for a sheep, and a sheep for a hat or a pair of stockings, its folly would be laughed at, its unjust interference would excite our indignation, and its decrees would be despised and disobeyed. The same would be the case with all other similar commodities; and what is there then in the nature of gold and silver which should release them from this general law, and enable governments by a fiat of theirs, to establish a relation of value between them and other things which does not naturally exist? There is nothing; and when it has been ascertained, for example, that a piece of gold as large as a sovereign is equal in value to a quantity of silver containing twenty shillings; or when it has been resolved to coin gold into pieces weighing a certain number of grains, the King's head, and the royal arms, or whatever else may be the chosen marks, are only intended to testify this fact to the community, on the authority of the sovereign. It is a declaration that the piece of gold is worth twenty shillings. Formerly it was the custom to mark on each coin its weight and value, in relation to some other commodity, and this good custom is still kept up in some of the nations on the Continent. A piece of gold in France, though called a *Napoleon,* or a *Louis d'or,* tells you, or told you on the reverse side, up to a late period,—for the present government has substituted the lilies of the Bourbons for the words of common sense,—that it was worth twenty pieces of silver or francs. In this country the people are informed by a proclamation of the value of the coin; and his Majesty's head, and the royal arms, or Britannia, or George and the Dragon, are substituted for some plain expressions which we can all understand.

When the reader is aware that governments have no power to alter the natural relation of value between the precious metals and other commodities, and that they have only assumed the power of certifying this relation by issuing coin, in order, as they say, to guard the people against imposition and fraud, he will form a correct opinion of their honesty, honour, and trustworthiness, when he also recollects or is informed, that all governments have frequently used

this power to delude and defraud their subjects. They have either mixed the precious metals with baser materials, or they have divided them into smaller pieces, certifying at the same time by their public seals, or by the busts of their chiefs, that the coin remained of the same value. It would carry me a great deal too far, were I to enter into a history of the proceedings of the different governments of Europe in debasing the coin of their respective dominions, endeavouring to cheat their subjects by tricks unworthy of the meanest sharpers:—though I know not if the whole history of the erring confidence of mankind affords a more instructive lesson; and I must content myself, therefore, with mentioning the single example of the English pound and penny, which had been so adulterated by successive governments, that when Dr. Smith wrote, they contained about one-third only of the quantity of metal they originally contained.[8] It has been quite in vain, however, that governments have tried to give a value to their coin different from that of the precious metals they contained, settled as that is in our minds, by what Dr. Smith calls the "higgling of the market;" or rather by the labour required to procure them and all other commodities. Whether they have altered the denomination of the coin, while the quantity of metal in it has remained the same; or whether they have lessened the quantity or deteriorated the quality, and have preserved the same denomination; all the efforts of successive governments here and on the Continent, to keep the public coin in circulation at a fictitious value, have been quite fruitless: and whether the standard were a *pound* as in England, a *livre* as in France, a *florin* as in Austria, it has always come, in a very short period, to exchange for the value of the precious metal it contained, and no more. The universality of this fact establishes to demonstration the uniformity as well as the universality of that law which settles and determines in the minds of all men, at all times and places, the natural relation of value between all commodities.

Were it suitable to enter in this short treatise into the question whether governments should have the power of coining money or not; and were the question worth discussion, which it hardly seems to be; for *paper-money* issued by private individuals, whatever may be the opinions and practices of legislators on the subject, will unquestionably supersede, even to a greater degree than at present, metallic money,—I think I could shew, as money is not, like an order of nobility or a regiment of dragoons the invention and creature of governments, that they have no occasion to regulate the *coin*of any country. I am sure I could satisfy every reasonable man, that no individuals are so utterly and completely unfit for this purpose as those who possess and exercise political power. Experience tells us, that of all false coiners, none have so sported with the confidence of mankind, under the pretence of protecting them from false coiners, as governments. By making alterations in the coin, they have altered all the relations of property, and have produced longer confusion and more varied misery in every country of Europe, than could by any possibility have been caused by their subjects resolving not to submit to their power. In practice, moreover, the question seems already settled. To supply the necessary quantity of bullion is unquestionably a far more important part of the whole process than assaying it and certifying its value by a stamp. As the rule, our government never interferes with the supply of bullion; leaving it to individuals, who import or export bullion according to the state of the markets. The mint merely stamps what they bring, most injudiciously charging them nothing for the labour of coining; and taxing the nation for the benefit of those who deal in money. It would seem therefore, both in theory and

[8] For the illustration of the statement in the text, I must refer to the "Wealth of Nations," book 1. chap 4; to Mr. Storch's Cours d' Economie Politique, vol. 4, Note on "Banking;" and to an admirable article by Mr. M'Culloch entitled " *Money*" in the Supplement to the Encyclopædia Britannica. Such writings teach *real* practical wisdom.

practice, that the best way of keeping the metallic currency of any country steady in value, and to have a proper quantity in circulation, is to allow both bullion and coin to be freely imported and exported like all other commodities, and freely dealt with by all classes and conditions of men, like the equally useful articles of hats and shoes.[9]

In all the works of Nature we may observe a delightful uniformity of purpose, a harmony in executing that purpose which never permits any collision, and a completeness which leaves to our finite understandings nothing to be desired. There are never any harsh interruptions of the general order: and as natural circumstances dictate in one stage of society the use of the precious metals as money, regulating both their value and quantity, it would be inconsistent with that general order to imagine that Nature ceases her instructions at this point, and leaves the numberless other circumstances connected with a safe and sound currency to be regulated by chance, or by the ignorant presumption of ambitious men. Though money is sometimes supposed to be the invention of statesmen, and to require their control more than the other parts of that wonderful system of combined production which takes place in civilized society, I know no part of it which affords, better than money, an illustration of the important fact, that this system is regulated in its minutest details by natural circumstances. Money, we have seen, is a universal, and therefore a natural invention; and the precious metals are universal or natural money. Their value is determined by that natural law by which labour produces all wealth, and is the sole measure of value: and having a determinate natural value in relation to other commodities, the quantity of them required at any time and place is regulated by the quantity of produce to be exchanged, or of commodities to be bought and sold. A certain chemical proportion in alloying the metals must be observed, to make them answer the purpose of money in the best manner, and mathematical laws dictate into what aliquot parts they ought to be divided; though hitherto these latter circumstances have formed no part of the scientific researches of those who have discussed the theory of money, or have vainly attempted to regulate it by their decrees.

In tracing the origin of money, I have mentioned its chief utility. It aids production, by facilitating barter and contributing to division of labour. "hen money," says M. Storch, "supplies the place of all other commodities, every man can more readily give himself up to one exclusive occupation; rejecting all other means of providing for his wants, than that of procuring, by the sale of his own produce, as much money as possible, being fully assured that with money he can buy every thing else." As a man can dispose of small portions of produce that is corruptible, for what is incorruptible, he is under no temptation to throw it away; and thus the use of money adds to wealth, by preventing waste. The disadvantages sometimes eloquently attributed to it by poets and moralists, arise not from the convenient use of stamped pieces of gold and silver, but from the passions of men; they are examples of profusion or ambition, of fraud or avarice, or of the power possessed by some over the labour of others, of which money is only the sign, the representative, and the servant.

[9] There is abundant reason to believe that the practice of coining originated with individuals, and was carried on by them before it was seized on and monopolized by governments. "In many countries," says Mr. Storch, "the care of ascertaining the weight and stamping the metals was left to individuals."—"Such was for a long time the practice in Russia." The Royal prerogative of coining therefore, about which so much has been said in Parliament, is of no remote antiquity. It smacks much more of usurpation than the practice of issuing bank-notes. Individual coiners would always be responsible to the public; but the individuals who possess the powers of government are in almost all countries irresponsible. They alone may defraud the community uncontrolled; they therefore ought not to have temptation laid in their way, by being the only privileged coiners.

PAPER MONEY, one kind or another of which is used in the greater part of the civilized world, is now to be treated of. We may distinguish two species of it, each of which possesses very different characteristics, and has very different effects; viz. paper money issued, regulated, and controlled by governments; and paper money issued and circulated by merchants, bankers, and tradesmen, for the purposes of commerce.

Paper money of the former description has been issued by almost every government of Europe, either directly by its authority, or by some bank, the funds of which it has appropriated to its own use, while it has forcibly kept the notes of the bank in circulation. On the Continent, the sovereigns have generally issued their own paper, for the express purpose of supplying their wants by this mode of levying a tax on their subjects; or as a substitute for metallic coin. In this country the government, after borrowing the funds of the Bank, passed a law to make its notes a legal tender, and relieved it from the responsibility of paying in specie. So far it acted on the same arbitrary principles as the governments of the Continent. It converted the Bank into a state machine for emitting and keeping in circulation a forced and depreciated paper money. The reasons which should make us refuse to governments the privilege of coining money, have tenfold force against their becoming bankers and issuers of paper money of any description. "The payment of their notes depends," says Mr. Storch, "on the will of the government, which cannot be compelled, like individuals, to fulfil its engagements."[10] However they may debase the coin, it still possesses some value, and cannot be issued in boundless excess; but paper money, which cannot be exchanged for specie, is quite valueless: and as there can be no limit to its issue, it confers on the individuals who possess the government a boundless power of working mischief.

The invention of this sort of paper money is of great antiquity, and its use is of wider extent than the reader may probably suppose. "It was invented," says Mr. Storch, "long before the first bank of circulation was established. That of Saint George of Genoa, the most antient we know of, was not founded till 1407, while Koblai, the grandson of Genghis Khan, introduced paper money into China towards the end of the thirteenth century,—an example which was immediately imitated by his cousin Kaigatou, the Khan of Persia. Both were, however, soon obliged to abolish it, in consequence of the great disorders it produced in their respective states. I do not on this account," Mr. Storch continues, "pretend to affirm that paper money was invented among the Mongols; on the contrary, the invention was so easily made, that it was probably brought into use long before this period. Since that time," he adds, "the Chinese government has again introduced paper money into its dominions, and I possess a Chinese *assignat,* which was given me by a Russian traveller on his return from China."[11] It seems also, from the same author's statements, that paper money is used in Turkey.

Paper money issued by governments is, therefore, very extensively known, and has been long in use. Of this description of paper money I have only to say, that it never is issued but for the purpose of surreptitiously and fraudulently levying a tax on the people. It is a complete cheat and a nuisance; and from the period when it was invented by the Tartar robber Koblai, it being the worthy offspring of Mongol rapacity, till the acts of the last session of our Parliament, or its authorised issue of Exchequer bills during the present session, paper money, issued, regulated, or controlled by governments, has ever been as at first, and in all countries, as in China and Persia, a source of innumerable disorders.

[10] Cours d'Economie Politique, book vi. chap. 14.

[11] Cours d'Economie Politique, vol. 4. note xvi.

Commercial paper money is something very different; promissory notes to pay certain sums of money at specific periods, are probably the most ancient species of commercial paper money, and must have come into use almost as early as the invention of writing and the beginning of trade. The merchant who undertakes a long voyage, or the manufacturer who plans an extensive project, requires the means of subsistence and of continuing his operations till his produce can be brought to market. He accordingly borrows the goods which he needs daily, or the money to buy them, promising payment at some specific time, or when his own produce is sold. Persons are willing to supply him with this accommodation, because his future produce will be his only means of payment, and in fact the only commodities produced to exchange for what he immediately requires, and of course the only market for it. Such was probably the origin of promissory notes, and, in their most legitimate form, they are merely a happy invention, like metallic money, for exchanging commodities requiring different periods to complete them; which, without such an invention, could never have constituted the market for each other, and neither of which, consequently, would ever have been produced. It is, however, to be considered as chiefly resulting from those long commercial undertakings, which extend over months or years before they produce any thing for sale, of which there are no examples in the infancy of society.

All trade, though nominally transacted by money, is in fact the exchange of one commodity for another. The London merchant buys wine at Oporto for so many *milreas,* and the Portuguese merchant orders cloth from London to the amount of so many *pounds* sterling; but in fact, the wine pays for the cloth, and the cloth for the wine. The Portuguese merchant obtains from his neighbour, the wine-grower, for a proper consideration, an order to receive the price of his wine from the London importer, or the latter procures from the cloth-manufacturer an order to receive the price of his cloth from the Portuguese importer; and, by such an order, each of these merchants is enabled to pay his creditor, on the spot where he lives, without using money. The order to receive such a sum is called a bill of exchange. In fact, therefore, the cloth is bartered for the wine, money being used to reckon the value of each without any being transmitted, or even employed to effect the payment.

Such orders or bills, it is obvious, are not confined to making payments between, politically speaking, foreign countries; they are also used to make payments between individuals of the same state. To enable the person on whom they are drawn to provide for the payment of them, this depending principally on his selling or completing the article, on account of which credit has been given to him, they are made payable at or after some specific period. Like promissory notes, they have a settled and fixed term of payment,—and, in general, represent commodities on their way to the market.

Those who received promissory notes or held bills not yet due, might require to make purchases or payments when they had no money. In this case they would make over the notes or the bills to their creditors, pledging their credit as the credit of the issuers of the promissory notes, or of the acceptors of the bill, was already pledgd for its payment; and thus both promissory notes and bills of a long date would pass through many hands, and be the means of making many payments before they were finally discharged. In general all *bona fide* commercial bills and notes originated in a well-founded expectation of having the means at a subsequent period, by the production or sale of commodities, to take them up, or pay them. At least, they were in the vast majority of cases duly honoured, and thus they came to be considered as of equal value to the money they were to entitle the holder to receive at a certain time or place. As long as

they are so considered, and as long as they are in circulation, or passing from hand to hand, they perform all the functions of money.

" *Bills of exchange,*" says Mr. Burgess, "have long ceased to be merely an instrument of commerce to render perfect a mercantile transaction between country and country, and *internal bills* have become gradually more and more a part of our circulation; they have ceased to be so currently used by the manufacturers in payment of small sums under ten pounds as they were thirty or forty years ago, owing to the high rates of stamps upon small sums. Bills above the value of ten pounds form now as completely a part of the currency as bank of England notes. They are used to pay for minerals—for all kinds of raw produce used in manufactures—for all the principal articles of food or clothing, and recently, in some cases, for mere labour. If a butcher in the north of England buys cattle, he pays for them partly in these bills, and partly in country bank notes. If a miller buys corn, or a mealman or a baker flour, he does the same. If a Yorkshire wool-buyer purchase wool of the farmers in the country, or in Northumberland, or in Lincolnshire, he pays for it partly in these bills, partly in country bank notes, or sometimes wholly in one kind, and sometimes wholly in the other. In the manufacturing districts of Yorkshire and Lancashire, no man, generally speaking, thinks of paying for any commodities above the value of ten pounds, otherwise than by a bill after date. This practice is now very general through the northern and midland counties, and is increasing in other parts.[12]" "A bill at three months is considered in Lancashire and part of Yorkshire, which as regards bills is almost half the kingdom, to be a money payment.[13]" Mr. Burgess then proceeds to make some conjectures as to the amount of such bills which are continually in circulation. The data on which he proceeds seem worthy of confidence, and he concludes that the amount of such bills continually in circulation, continually performing the functions of money, is not less than three hundred millions STERLING. Whether this statement be strictly accurate or not, it cannot be doubted by any man in the least conversant with the present mode of managing business, that bills and promissory notes issued and circulated by manufacturers, merchants and traders, do at present constitute by far the greater part of the circulating medium, understanding by that the instrument used for buying and selling, of this commercial and enterprising country.

This species of money is comparatively of such modern origin, and has grown up with such great rapidity, that governments have not yet thought of regulating its issue except by levying a stamp duty on bills and notes; we are all therefore fully sensible that this valuable instrument is not the offspring of legislation. It may be even doubted if there be any possibility either to regulate or control it by law without such an interference with private business as would not be tolerated. Whether the few presumptuous beings who call themselves, and who get a multitude of beings as unwise as their masters are presumptuous, to call them the *state,* sanction the issue of commercial paper money or not; whether they permit bankers' notes for every sum, or limit them to a specific amount, paper money must and will form the principal part of the circulation in every well-peopled and industrious country. It grows up in all countries, for it is in use in every part of the civilized world, unwilled by the legislature and almost unknown to it; and seems as necessary a step in progressive improvement as that metallic currency, which it has already superseded to a vast extent, and seems destined almost wholly to supersede. It is not a question

[12] A Letter to the Right Hon. G. Canning, &c. &c. By Henry Burgess, Esq., page 19.

[13] Ibid. page 24. This letter is evidently written by a man well acquainted with the commercial districts of England; and the statement deserves, I am informed, the confidence of the reader.

of theory, whether paper can be substituted for gold and silver; it is not a proposed arrangement of some individuals, or of the legislature, to employ paper for metallic money; it is not a scheme of some hot-brained projector, but it is found in practice and by general agreement, that by far the greater number of exchanges can be and are actually made without using metallic money. The costly commodities of gold and silver may therefore be dispensed with in the progress of society, and all the labour necessary to keep a money of the precious metals in circulation, amounting to several millions sterling per annum, in this country alone, may, by the happy invention of commercial paper money, be directed to produce commodities adapted to supply our animal wants or add to our enjoyments.

The promissory notes issued by bankers, commonly known by the name of bank notes, are only one particular kind of commercial paper money. Properly speaking, they no more fall to be considered in the science of political economy, than the promissory notes or bills of any other class of traders. They form altogether, including the Bank of England notes, and all the bank notes issued by private bankers, not above the sixth part of the commercial paper money of the country. Why they should have so exclusively attracted the attention of politicians, and why they should have been the subjects of so much censure, while every other description of paper money, particularly that authorised by governments, the very worst of all, should have been unnoticed or praised, cannot be accounted for on any scientific principles. But this being the fact, I propose very briefly to explain the origin and utility of private bankers, and of the bank notes issued by them; from which we may probably learn, that they are a necessary part of that great social system of production which is not the offspring of legislation; and they therefore do not require, in any manner or degree, to be regulated by the legislator.

With the exception of banks expressly established by governments, like the Bank of Assignats, at St. Petersburg, and the Bank of Stockholm,—and of banks incorporated and authorised by governments, to which they have granted exclusive privileges, like the Bank of England, it is plain that the existence of such a class of tradesmen as bankers can no more be attributed to any act of the legislature, than the existence of such separate classes as farmers and merchants. As men multiplied, and division of labour was extended, one class of men came to deal only in money, as another class deals only in wine, or in Manchester goods. As trade extended, the exchanges between different states, and different parts of the same states, became more frequent, and many transmissions of money or bills of exchange became necessary. This species of business fell into the hands of those who dealt exclusively in money. In consequence, it was soon found convenient to employ them in settling all accounts between merchants living at different places, and even at the same place. From the extensive connexion they formed by this employment, they came to know, better than any other men, the mercantile character and credit of merchants and manufacturers: they were, therefore, enabled to lend out money to advantage; and most of the persons who had money to lend, placed it in their hands for this purpose. They accordingly became, and still are, the chief agents in supplying money or capital to those who engaged in useful undertakings, the produce of which could not be immediately brought to market. Thus arose that class of men called bankers, who are still very important, and have long been very useful labourers. We may be satisfied of their utility by observing, that they are found in every part of Europe, and that all classes and conditions of tradesmen and dealers *voluntarily* employ them. They first sprang up in Italy, then the most enterprising and civilized part of the world; they came from that country to this,—Lombard Street, the great seat of our banking establishments, deriving its name from them,—and at present, while theirs is a branch of business almost extinct in Italy, it

is established in every town of this country, now the great seat of commercial enterprise, and the farthest advanced in the natural system of co-operating production. Their business results naturally, therefore, from division of labour, and is extended as men multiply. Being only one small, though a necessary branch of this vast system, why should their proceedings or business be in any manner regulated by the legislative authority, which had no hand in establishing, and is unable to extend division of labour?

In fact, there is only one small part of their business with which our government does interfere, viz. the issuing of promissory notes. Let us look, therefore, at its natural origin. They receive money in deposit, and they lend money. They are, as the rule, therefore, persons of established credit, and worthy of confidence; and their promissory notes, on account of their transacting all the money transactions of the neighbourhood, are naturally much more acceptable than those of any other tradesmen. Instead, therefore, of lending money to a merchant or manufacturer to buy commodities, they lent him their credit. They exchanged the large promissory notes or bills of other tradesmen, for their own small promissory notes. To the merchant, on account of their established credit, these small notes were as valuable as gold. The bankers have confidence in the individual to whom they lend money, for the whole length of time his bills are to run; and their promissory notes are, to all other persons, better than his, on account of their general credit, and on account of being made *payable at sight;* while the large commercial bills drawn on account of commodities not yet in the market, are always made payable at some specific and distant time. Bank notes grew out of bills of exchange and promissory notes, and only differ from other species of commercial paper money, in being the promissory notes of a particular class of tradesmen deserving general credit; and in general having the great advantage of being payable at sight. The circumstances which led to the invention of them are made so palpable by these gradual steps, and they are obviously so useful, being adopted without the interference of the legislature,—and, generally, adopted in proportion as the community advances in opulence,—that we can, I think, have no hesitation in supposing them also to be a necessary part of the great natural system of co-operative production. I see no scientific reason, therefore, why the issuing of promissory notes by bankers should in any respect or degree be regulated, controlled, or influenced by the legislature.

The astonishing extent to which the practice is carried of settling accounts and making payments, without the intervention of money, can hardly be known to the great majority of the community. In London there is a place called the Clearing House, at which the clerks of the different banking-houses meet at one specific time every day, to balance all accounts between these houses; and as almost all merchants and dealers of every description make all their payments by means of bills payable at some banker's, or by checks drawn on a banker; as they all have their money paid into a banker's, and as a considerable quantity of business originating in the country is transacted or settled for in town, not only by far the larger quantity of all the payments of every description arising from the trade of the metropolis, but also from the trade of a large part of the country, are made by the London bankers; the consequence is, that they have daily immense sums to pay to each other. In 1810, according to evidence given before the Bullion Committee, the amount settled on ordinary days at the London Clearing House, between the different bankers, was at least five millions sterling; and on settling days, at the Stock Exchange, this amount was frequently fourteen millions. By means, however, of the clerks of the different banking-houses meeting at the Clearing house, and only paying the balance of their respective accounts, 220,000 *l.* was the whole amount of money or bank notes required to pay

the enormous sum of five millions sterling daily. The bankers of the metropolis are the agents for paying the greater part of the bills in circulation; so that, in fact, the chief money transactions of all England are settled by the insignificant sum just mentioned. Even this, it is supposed on good grounds, may and will be dispensed with. Such is a specimen of the natural and vast system of co-operating production; which, unknown and unmarked by us, is continually extended, and continually simplified. So much nonsense is spoken in Parliament, and written in the world at large, about bankers and bank notes, that it is right to add, that this beneficial simplification is the result of banking, and of employing commercial paper-money.

Briefly to enumerate the advantages of bank paper-money. It seems to me to be such a useful instrument for supplying the daily wants of those whose products require a long time to perfect them, that it can no more be dispensed with, as society advances, than weights and scales. It is cheaper than coin; and the profits made by bankers in the first instance, arose from their substituting a cheap for a dear instrument. Such profit, however, can only be large while the process of getting rid of the coin is going forward, which must in its own nature ever be very gradual. By no possibility could paper be made all at once to supply the place of the precious metals among a people accustomed to the latter as coin. Among a people once accustomed to paper-money, and who have again had a metallic currency forced on them, it may, if circumstances permit, be suddenly substituted for gold. This process of getting rid of the coin, and replacing it, our government has renewed almost periodically; at one moment ruining bankers, and at another tempting cupidity to turn banker, by the prospect of enormous profits; permitting the issue of country bank notes for small sums in 1822, and forbidding it in 1826; while before 1836 it will most probably again be permitted. In the measures which have been adopted or recommended as to issuing bank notes, it would be difficult to find a single scientific principle. They are directly and completely adverse from the regular progressive and steady march of civilization.

The quantity of money, it has been explained, required at any time in society, depends on the quantity of business. Now this necessarily varies with the seasons. To keep money as much as possible steady in its value, the quantity should vary with the business to be done. As the rule, bankers only issue their notes by discounting *bona fide* commercial bills, which are the best possible data for judging of the quantity of business. The issue of bank notes varying with the amount of bills discounted, they being also in all cases returned to the banker, if he put too many in circulation, is, perhaps, the best method which can be imagined or devised to make the quantity of money in society vary with the quantity of business. Thus bank notes, when the issue of them is freely permitted, when no corporations are endowed by the legislature with exclusive privileges, when the issues of every banker are checked and controlled by the watchfulness of rival bankers, tend continually to prevent all those fluctuations in prices which are occasioned by alterations in the relation between the quantity of business to be transacted, and the quantity of money in circulation.

If little or no coin be used, it forms a nominal standard not liable to deterioration from wear. Paper money supplying its place, and being continually renewed at the expense of those who issue it, suffers no deterioration. In this case coin becomes to paper what the imperial gallon deposited in the custody of the Speaker of the House of Commons is to all the measures of capacity in the kingdom,—an almost invariable standard, subject to none of the bruisings and batterings of daily use, by which they may be, but by which paper is, at any and all times corrected and reformed. Having such a nominal standard as long as the circulation of paper is entirely free, it seems to be a measure of value which would be liable neither to depreciation nor fluctuations.

The characters on paper-money are legible, and every man capable of reading may tell its value; but to know whether coin be good or not, requires the skill of the assayist. Bank notes are on this account also better than coin. That they have been frequently forged seems to me, in almost all cases, the result of the Bank of England monopoly. Notes issued by private bankers, who control and check each other, are rarely or never forged. Their circulation is so limited as to space, and they are, in the natural course of business, so frequently returned to the issuer, that to forge them, with any prospect of advantage, is almost impossible. Of the credit due to a country banker, whose notes supply the place of money only in his own immediate neighbourhood, almost every man in whose hands they fall can judge; so that it is hardly too much to suppose if the whole business of banking were left, like the business of making hats and clothes, perfectly free, if there were no government and national banks, that bank notes could neither be forged nor issued to excess.[14]

I beg the reader will recollect that I have only endeavoured to ascertain the natural origin of commercial paper-money, and that I mean the above observations only to apply to that species of paper-money which grows up among the productive classes of society from the division of labour. That both government and commercial paper-money have in our time been productive of incalculable mischief, it would be madness to deny. We have seen nominal prices rise and fall twenty per cent. within a few years,—the variations having been caused by an improper issue of paper-money. Whole hecatombs of unfortunate wretches have been sacrificed on the altars of the law for imitating the names of those who were abusing public confidence to a much greater degree than their victims who suffered the penalty of death for their guilty avarice. Debts have been augmented or lessened, and all money contracts substantially violated. One class has been defrauded to enrich another; and the whole course of business has been diverted from its usual channels. No man has in consequence been certain of the amount of his income for two successive years; and confusion, dismay; and terror, such, perhaps, as were never witnessed in any country not overrun by a victorious enemy, nor devastated by some great natural calamity, have been caused in this, year after year, by an alteration in the quantity and value of paper-money. If such evils were inseparable from the invention, whatever may be its natural advantages, they would be far outweighed by its social disadvantages, and it would be impossible to condemn paper-money too strongly. But the reader will find in the Wealth of Nations, in Mr. M'Culloch's admirable article entitled money, in the Supplement to the Encyclopædia Britannica, and in Mr. Storch's book, numerous examples of governments having caused, by *tampering* with metallic coin, "a greater and more universal revolution in the fortunes of private persons," to use the language of Dr. Smith on this subject, "than could have been occasioned by a great public calamity." In consequence, however, of the present extended use of paper-money, governments have latterly, and since the publication of Dr. Smith's book, always effected the same unhallowed purposes, by tampering with paper-money; and the present generation feeling only present evils—regardless,

[14] If the statement in the text, as to the origin of paper-money, and the source of its utility, be correct, we cannot condemn every species of government paper-money too strongly; governments are not producers, they have no commodities on their road to the market, and can have no claim whatever to issue paper-money. Even exchequer bills are wrong, they represent a revenue hereafter to be received, but all the credit which can be reasonably obtained on the commodities which will constitute that revenue, is obtained and used by bills and notes of one kind or another, while the merchants and manufacturers are preparing these commodities, or bringing them to market. All bills drawn and circulated on mere revenue by those who do not produce commodities, although they may hereafter be entitled to receive certain sums, are more than is required for the business of the country, and are always issued that the issuer may obtain a share of other men's produce before he has any legal claim to it.

apparently, or ignorant of the economical history of Europe—has attributed those fluctuations to the instrument itself, which have been caused by the manner in which it has been abused by the *venerated* governments of Europe. Such fluctuations, caused by similar conduct, frequently occurred when the whole circulation of Europe consisted only of coin.

If from the abuse of paper-money we are to condemn its use, nothing will escape our censure. What can be more lovely or consoling than religion, and what has been perverted to more detestable purposes? In its name are continually practised base hypocrisy, blasphemous iniquity, and shameless plunder. With the perversion of a beautiful natural contrivance, with the wrong-headed speculations of ignorant and designing men, with the gambling and fraud of scheming projectors, with the ignorant cupidity of kings and statesmen, the natural science of national wealth has nothing more to do than to point out in what manner their conduct is opposed to its principles; though we must all lament that infatuation in mankind, which refuses to take counsel from experience, and continues, after repeated proofs of deceit, fraud, and treachery, to place confidence where confidence never was merited. Declining on all occasions to examine in detail the effects of social regulations, I cannot explain the circumstances which have led in this country to the perversion of paper-money. I agree, however, fully with Dr. Smith, "that private and local banks, and private and local bank notes, which may be called natural, as contra-distinguished from legislative paper-money, are attended with the most advantages, and the fewest dangers." From the conduct of the governments of England, Russia, Austria, France, Denmark, and Sweden, with respect to paper-money—of which an impartial and not unfavourable account is given in Mr. Storch's book—it is plain, that national and government bank-paper, ought on no account to be tolerated. Governments have no commodities on the way to the market, which is the natural guarantee of all paper-money; they cannot be compelled to make payment, and they can know nothing of individuals, which knowledge is the only secure foundation for giving them credit.

Much has of late been said against Country bankers, and I readily admit, they deserve censure; but whoever takes into due consideration the vast extension of business within the last fifty years, and the great demand for bank notes, in consequence of the political state of the country, giving immense profits to bankers, will find numberless excuses for their conduct, which cannot be made for other classes of tradesmen, who have effected equal mischief by the circulation of their paper-money. Banking, or at least the issuing of bank notes, is, as it were, a new business, and while the temptations to engage in it have been very great, the correct methods for carrying it on have been imperfectly known. And after all that has been said against country bankers, their issues of late have been far from extravagant. It is proved, for example, by parliamentary documents, that the issues of the Bank of England have been trebled in amount since the year 1792, while the amount of the issues of Country bankers were less, immediately prior to the late revulsion in the latter end of 1825, by seven millions, than they were in 1814, and less by four millions than in 1807.[15] Nothing but colossal power can work colossal mischief, and if that revulsion and consequent distress were in any degree caused by paper-money, they were so vast and extensive, that nothing less than the immense power of the Bank of England, which did actually vary the amount of its issues one-sixth within a few short months, could have caused them. Whatever may have been the real object of the Acts of Parliament passed in the year 1826, to put a stop to the issuing of bank notes for one and two pounds, because Mr. Canning supposed, very ridiculously, that country bankers were usurping the king's prerogative of coining money,

[15] See Edinburgh Review, No. 87. Article Commercial Revulsions.

their effects have been to injure country and local banks, which are the best kind, and to augment the power of the Bank of England, which has already done inconceivable mischief. They are a direct violation of the principles of free trade, which the ministers profess; but as the Bank of England is under the control of government, those Acts have added to the power which it before possessed over the currency of the country. By tampering with it, the government has already inflicted vast misery on us, and no man can expect, from this added power, any other result than increased mischief.[16]

That issuing bank notes and the business of banking, must be conducted on some settled principles to make them advantageous, is quite certain; but to expound those principles, is the duty of the persons who write on the *art* of banking. As both the value and quantity of metallic money are regulated by natural circumstances, as the quantity of paper-money necessary is determined by the number of exchanges to be made, there is reason to believe, that the whole business of issuing bank notes is subject in its minutest details, to controling natural circumstances, many of which, whether theoretically known or not, are already acted on. There can be no doubt, for example, that there is a point at which it becomes disadvantageous to substitute paper for coin. Some persons of good judgment have stated, that one pound is below this point; and this principle, though it has not been either scientifically or practically ascertained, has been made the basis of legislation. Banking, however, let us never forget, with the issuing of bank notes, is altogether a private business, and no more needs to be regulated by meddling statesmen, than the business of paper making. In fact, the impertinent interference of law-makers, their pretended wise regulations, but in reality their tricks and frauds, with the currency, have been the causes of all the evils we have suffered within the last century from variations in the value of metallic and paper money; and nothing can rescue mankind from such desperate fluctuations in prices, as have of late afflicted all the countries of Europe, but allowing, both the coining of metallic and the issuing of paper money, to find, under the controlling influence of natural circumstances, their proper course and just level.

[16] The consequences of Messrs. Canning and Huskisson, departing in this instance from the liberal principles of free trade, on which their popularity was founded, are now coming home to them. By destroying country bank notes, they added to the general distress, lowered prices, and increased the difficulties they must at any time have encountered in amending the corn laws, to which they stand pledged. On the one hand they gave, by increasing the distress, additional urgency to the claims of the manufacturing classes for the repeal of those laws; on the other, by lessening the quantity of the circulating medium and thus lowering the price of corn, they alarmed all the agriculturists and all the landlords, who are under engagements to pay specific sums, and roused such opposition and such dread of the consequences of altering the corn laws, that it is doubtful if they can carry through their poor and spiritless measure; and it is certain they can accomplish by it nothing beneficial. To have obtained a satisfactory modification of the corn laws from the landed gentry, it was necessary that prices should be high, that they should have been threatened with an inundation of foreign corn under the present law; but this necessity, which began to exist, was in part removed by the illiberal measure respecting country bankers, which thus supplied those who previously hated both Mr. Canning and Mr. Huskisson with arguments against them, and has tended to destroy their popularity and ruin their reputation.

Chapter IX. PRICES.

FROM what has been said on money, the reader will see that the term "money price," as applied to any commodities, only signifies the natural relation which exists at any given moment between them and a specific quantity of bullion in coin,—the use of bank notes, as long as they are payable on demand in the precious metals, not altering this relation: NATURAL or necessary price means, on the contrary, the whole quantity of labour nature requires from man, that he may produce any commodity,—the natural and necessary price of money being determined, like that of all other commodities, by the quantity of labour required to produce it. Nature exacted nothing but labour in time past, she demands only labour at present, and she will require merely labour in all future time. Labour was the original, is now and ever will be the only purchase money in dealing with Nature. There is another description of price, to which I shall give the name of *social,* it is natural price enhanced by social regulations. Whatever quantity of labour may be requisite to produce any commodity, the labourer must always, in the present state of society, give a great deal more labour to acquire and possess it than is requisite to buy it from nature. Natural price thus increased to the labourer, is SOCIAL PRICE. To understand the natural laws which regulate the progress of nations in wealth, and rightly to estimate the causes which retard it, we must always attend to the difference between natural and social price.[1] Leaving, however, a social price entirely out of view, I shall confine my present remarks to natural price; and I should not have noticed it, were there not a theory now prevalent, which assumes as its basis that natural price necessarily rises in the progress of society.

"In the progress of society," says Mr. Ricardo, the great supporter of this doctrine, "the *additional quantity of food required is obtained by the sacrifice of more and more labour.*" "It is the *natural* effect of improvement." says Dr. Smith, "to diminish gradually the real (natural) price of almost all manufactures." I have endeavoured to show, that extended division of labour and increased knowledge are necessary consequences of the progress of society. Mr. Ricardo himself states, that this "sacrifice of more and more labour is happily checked at repeated intervals, by the improvements in machinery connected with the production of necessaries, as well as by discoveries in the science of agriculture, which enable us to relinquish a portion of the labour before required." Supposing that there does actually arise, in the progress of society, a necessity

[1] The following passages from Mr. Tooke's book, On Prices, set the distinction between natural and social price in a striking point of view; and though the political obstructions alluded to, were of a more weighty nature than in general, yet some such obstructions exist at all times and places, and make all social much higher than natural prices. "During the late war," says Mr. Tooke, "some silk came to this country through France, and the charges of conveyance from Italy to Havre, and duty of transit, amounted to nearly 100 *l.* per bale of 240 lb. net weight, exclusive of freight and insurance from Havre hither. The whole expense of freight and insurance from Italy, does not at present amount to more than 6 *l.* per bale." "The charges of freight and French licence on a vessel of little more than 100 tons burthen, have been known to amount to 50,000 *l.* for the voyage merely from Calais to London and back: this made the proportion of freight on indigo, amount to 4 *s.* 6 *d.* per pound; the freight at present is about 1d. per pound."—"A ship, of which the whole cost and outfit did not amount to 4000 *l.* earned a gross freight of 80,000 *l,* on a voyage from Bordeaux to London and back."

for us to have continually recourse to soils of less and less fertility, though we are completely ignorant of what constitutes a fertile soil, and that which is fertile when we know how to employ its powers, is barren when we are ignorant of the laws which regulate vegetation; yet it is plain, and it is admitted, that there are numberless circumstances which compensate for decreasing fertility. It is therefore equally plain, that to ascertain whether these opposing circumstances exactly neutralize each other in the progress of society, or whether the necessary supplies of food be obtained by a less or a greater quantity of labour, as men multiply, demands a wide inquiry; and I must confess I am astonished at the hasty and dogmatical manner in which Mr. Malthus, Mr. Ricardo, and their disciples, have decided, on the single principle of decreasing fertility, this most important, extensive, and complicated question. I do not suppose that I shall induce the reader to come to a directly opposite conclusion, neither do I mean to enter fully into the question; but I regard the inquiry as of so much importance, that I cannot avoid stating some of those circumstances, which should make us at least hesitate in adopting a conclusion, which seems at variance with the general system of the universe. If nature do not demand more labour for food as society advances, then may we suppose that the difficulty which the labourer unquestionably experiences in obtaining food, is the result not of natural, but of social circumstances.

The natural difficulty of procuring food, or natural price, depends so almost exclusively on increase of knowledge and division of labour, and consequently on an increase of people, that it seems to have a continual tendency to diminish. In fact, it is admitted that, except as to the production of food, natural and necessary price does fall in the progress of society. "In all cases," says Dr. Smith, "in which the real price of the rude materials either does not rise at all, or does not rise very much, that of the manufactured commodity *sinks* very considerably. This diminution of price has, in the course of the present century, been most remarkable in those manufactures of which the materials are the coarser metals. A better movement of a watch than about the middle of the last century could have been bought for twenty pounds, may now, perhaps, be had for twenty shillings. In the work of cutlers and locksmiths, in all the toys which are made of the coarser metals, and in all those goods which are commonly known by the name of Birmingham and Sheffield ware, there has been, during the same period, a very great reduction of price, though not altogether so great as in watch-work. It has, however, been sufficient to astonish the workmen of every other part of Europe, who in many cases acknowledge that they can produce no work of equal goodness for double or even triple the price.[2] Since the Wealth of Nations was published, numerous improvements have been made in the very arts to which Dr. Smith refers, and could his piercing mind now contemplate the skill of our contrivances, and the cheapness of our commodities, his conviction that natural price diminishes in the progress of society would acquire tenfold force. The reader cannot fail to remark, that the improvements mentioned by Dr. Smith, and those subsequently made in the same arts, arose in one of the most crowded communities of Europe, and have been extended as the people increased in number.

Dr. Smith extends this general principle to woollens, to corn, and to all commodities which are the produce of labour; but he excepts game, cattle, poultry, &c. &c. which find food for themselves, and are originally in such plenty, that man obtains them by the labour of killing them. In the progress of society, as it becomes necessary to domesticate, rear, and nourish them by labour, their price rises, but the price of all other commodities decreases. I have already mentioned, page 66, the fall in the price of tea: in the " *Wealth of Nations,*" book i. chapter XI,

[2] Wealth of Nations, book i. chap. 11.

the reader will find many examples of a similar fall in prices, which, though very instructive, I do not think it necessary to quote, as the book is easily accessible, and in all manufactured cottons, the fall of natural price has been still more remarkable, confirming to demonstration, the general principle of natural price necessarily falling in the progress of society.

Corn of every kind may be considered as a manufactured commodity, matured certainly by the aid of natural agents,—as what can we mature without them?—but matured by means of a great deal of labour. Is there any peculiarity possessed by manufactured corn which makes it, like game, or wild animals, or the spontaneous productions of the earth, an exception to the general law? If we do not exclusively fix our attention on the single circumstance of men first occupying, as it is supposed they do in all cases, the most fertile lands, we must, I think, answer no. To prepare the soil for the cultivation of grain, requires, in all cases, a series of operations, which need not afterwards be annually repeated, though the harvest is gathered every year. In America, for example, the ground must now be cleared of forest trees, and when this labour has been executed, the soil yields a crop annually, in return for the mere labour of sowing and reaping it. A field under-drained, to carry off superfluous moisture, or intersected by numberless canals, that it may be artificially watered, yields its rich returns every subsequent year, though it is not necessary to repeat these labours. When houses and barns are built, when roads and bridges are once made, they only require some trifling annual repairs, and they facilitate the labour of all succeeding generations, giving them, in fact, an equal crop, for a continually diminishing quantity of labour. Nor must we forget that *our grain* is the produce of art and industry; and when once matured or obtained, is a means of lessening the labour of all those who provide the society with food. The same remark holds good of cattle, which when once tamed and domesticated, only require that man should provide them with subsistence. Moreover, the mere sowing the seed, and reaping the harvest, are only parts of the complicated process of providing food. The ground must be cleared and tilled, and the grain must be ground and prepared; and to perform these operations, as well as the operations of sowing, and reaping, and carrying home, and housing the grain, numberless instruments and machines are requisite, all of which have been invented and improved, as society has advanced,—diminishing to an almost inconceivable degree, the labour necessary to procure meat or make bread.

It must also be remembered, that those who are engaged in agriculture must have clothing, and many other things, as well as food and instruments. If the instruments they use are made by less labour, it is plain that the *whole* quantity of labour required to produce corn is diminished. It is not, however, so plain, though it is equally true, that if the cost of other necessaries required by the agriculturists is diminished, that also will lessen to him the cost of producing corn. He must have clothing, and if he can obtain it by sacrificing a tenth, instead of a sixth part of his crops, more remains for his own use, and the labour necessary to procure his subsistence is diminished. If other people did not make the clothing, he must make it himself, and all the facilities he could invent for manufacturing clothing, would enable him to devote more time to manufacturing wheat. It makes no difference, in a general point of view, that clothing is made by another set of labourers; all their improvements, supplying the manufacturers of corn with clothing at a less cost, leave the latter more corn in return for their labour; or diminish to them, and to society at large, the natural price of that quantity of food required for subsistence.

The opinion that the natural price of food lessens rather than increases in the progress of society, seems borne out by facts. If we take the two extremes of savage and civilized society, the natives of New Holland and the people of England for example, if we observe how the propor-

tion of persons who raise no raw produce,—including not only those who do not labour at all, but also those who are engaged in the various departments of manufactures and trade, as well as all the officers, dependents, and servants of government,—continually increases, forming, as I have already mentioned, five-sixths of this community,—we must be convinced, that in the progress of society food is obtained by less and less labour. When we look also at the various improvements continually made in the arts, most of which tend, in some way or other, to diminish the labour necessary to prepare bread and procure meat, we must come, I think, to the same conclusion. Those who have embraced the opposite opinion, have been led into a mistake by confining their observations to a short and single period; and, perhaps, by looking too exclusively at the immediate cause of extended cultivation, which is in all cases increased demand, and temporary higher prices. Their opinion has grown up within the last thirty years, and within that period there was a considerable rise in the price of corn, which, in this country, thrown back as it was by the conduct of its rulers on its own resources, might be distinctly traced to the increased difficulty then experienced in obtaining the necessary supplies of food. But if we extend our observations over a longer period, we shall find no proof of a gradual and general rise in the price of corn as population increases.

In Dr. Smith's valuable work, there is a table containing the average price of wheat, calculated in our present money, in the Windsor market for several centuries. The invention of paper money, it will be remembered, has contributed to render metallic coin less necessary than formerly. Various improvements also in navigation, in the art of mining, and of extracting metals from the ore, have diminished the labour necessary to obtain gold and silver in Europe. From these causes combined, it is probable that the precious metals have fallen considerably in value. For the alterations which have been made in the nominal value of our coin, Dr. Smith has allowed; but for the quantity of labour now required less than formerly to obtain and coin the precious metals, no man can make an accurate allowance. If the quantity of labour necessary to obtain money have been lessened, any given quantity of it will now measure a less quantity of labour than formerly, and of other things. If, for example, it required, four centuries ago, three weeks labour to obtain a pound of silver, which then exchanged, on an average, for a quarter of wheat; and if a pound of silver be now obtained by fourteen days labour, and it still exchange, on an average, for a quarter of wheat, the latter must, like the former, be now obtained by one third less labour. I am fully aware that we have no accurate standard for former and present values, and that tables of prices, extending over long periods, are not much to be relied on; but when they confirm a theory, which seems on other grounds to be sanctioned by experience, we are entitled to place some confidence in them.

On Dr. Smith's showing, it appears that the average price of wheat in the Windsor market was per quarter.

After this period, the effects of the discovery of America, and consequent cheapness of the precious metals, was felt on money prices; their value being every where much lowered, and money prices much raised. Prior to the discovery of America, the value of silver, it is supposed, was gradually rising, owing to the increasing difficulty felt throughout Europe of obtaining the necessary supply. The average money price of the quarter of wheat became subsequently much higher, and was as follows:—

Since the last mentioned period, the price has varied considerably. The average of five years, ending with 1811, was 96 *s.* the quarter, while the average of ten years, ending with 1823, during which time we have had the corn laws in full operation, was 68 *s.* Now, if these laws were

Years.	£.	*s.*	*d.*
From 1202 to 1286	2	19	1
1287–1338	1	18	8
1339–1416	1	5	9
1423–1451	1	1	3
1453–1497	0	14	1
1499–1560	0	10	0

Years.	£.	*s.*	*d.*
From 1561 to 1601	2	7	5
1602–1620	2	0	7
1621–1636	1	19	6
1637–1700	2	5	4
1701–1764	1	15	1
1766–1770[a]	2	7	8
1792–1796[b]	2	19	6
1796–1801	4	10	10
1801–1804	3	5	6

[a] This statement is taken from Principles of Political Economy, by Mr. Malthus.
[b] All the subsequent statements are copied from Mr. Tooke's work On Prices.

repealed, and the trade in corn were quite free, there can be no doubt that the quarter of wheat would be sold in our markets for a sum considerably less than 68 *s.* Some authors say it would fall to 30 *s.* the quarter, but none fix it higher than 54 *s.* There is no reason, therefore, to infer from the price at which corn is now sold in this country, or at which we might obtain it, as compared with former prices, that corn has gradually, naturally, and necessarily risen in price. The average price of wheat in the thirteenth century, was higher than the average price at any subsequent period, except the period between 1792 and the present time; and for the extraordinary rise of price during this latter period, from which alone Mr. Ricardo and his disciples appear to have formed their opinion, it is easy to account without having recourse to the supposition that the difficulty of obtaining food naturally and necessarily increases in the progress of society. The principal causes why the price of grain rose subsequently to 1792, were, first, a succession of bad seasons; second, the political state of all Europe; and third, the vast increase which then took place, owing to the invention of the steam-engine and other useful machines, in the produce of manufacturing and commercial industry. It is incompatible with my present object to explain these causes in detail. Fortunately also it cannot be requisite. It is plain from the table, and from the price at which, but for social regulations, wheat would now be sold in our markets, and taking into consideration the circumstance of money being gradually procured by less and less labour,—that the price of wheat has a natural tendency to fall, rather than to rise in the progress of society.

This view is confirmed also, I think, by what we know of other countries. In the returns, for example, recently made by his Majesty's consuls abroad, which have been printed by the order of the House of Commons, it is stated that the price of grain was higher in 1825, and generally is higher in Spain and Portugal, than in France, in England, and in Holland, and higher in France than in Holland. In Spain the number of inhabitants to each square mile is 55, in Portugal 90, while in France the number is 143, and in Holland 212. Spain and Portugal, therefore, are less densely peopled than France, and France is not so crowded as Holland. As it is well known that these returns coincide with the general state of the market in these countries, we have in them a corroborative proof, that the price of grain does not naturally and necessarily rise as people are multiplied.

On this all important question, the political condition of the agriculturist, and the manner in which land is appropriated, have no inconsiderable influence: in consequence of the latter, corn has ever been at a monopoly money-price; in consequence of the former, improvement has been comparatively slow in agriculture. The price of its produce has not, therefore, fallen in the same degree as the price of manufactures, with which alone it could be and has been compared. The price of most other manufactured commodities, on the contrary, has not been a monopoly price; and generally speaking, the manufacturers have been in a better political condition than the agriculturists. They have been collected in towns, have been able to protect their rights, and have been superior to the peasantry in all the circumstances which increase knowledge and promote division of labour. Knowledge and division of labour have both increased amongst the agriculturists, but not in the same degree as among manufacturers. It is only, however, by comparing the price of agricultural produce, with the more diminished price of manufactures, that any plausibility has been given to the statement of a natural and a necessary increase in the difficulties of procuring subsistence.

The natural price of food to a manufacturer and to a manufacturing nation, is measured by the quantity of labour, and nothing else, necessary to produce the commodities with which they buy

food. The natural price of food, for example, to the inhabitants of Manchester, is the quantity of labour necessary to make the cottons, with which they can or might purchase at their own doors, the wheat of Ireland or Poland, the flour of the United States, the maize of Mexico, or the raw produce of any other part of the world. But the quantity of labour necessary to manufacture cottons at Manchester, and to grow wheat in America, and bring it to Europe, has decreased wonderfully since America was first discovered; whence it is plain, that the inhabitants of Manchester, numerous as they now are, might, were it not for certain social regulations, obtain food at a less natural price than one, two, or three centuries ago. Unfortunately, all commerce is so much regulated by legislation, that all money price at present represents social price; and still more unfortunately, industry and trade have been so impeded by social regulations, that it is not possible for us to form any idea of the extent to which the natural price of all things would necessarily fall. Restrictions and exactions have been multiplied as the benevolent laws of nature became manifest, and more and more has been continually taken from the labourer, as it was discovered that his powers of production increased, and that more might be taken without putting him out of existence. By his labour, and by nothing else, is natural price measured, but he never obtains commodities for the labour of producing them. At present, therefore, all money price is not natural but social price.

The natural or necessary price of commodities is only influenced by all those circumstances which make labour more or less productive. It is the prime but not sole regulator of exchangeable value, of money and of social price. No commodity can in the long run be exchanged for less, though it may for more, labour than it cost. Natural price is therefore always the limit in one direction, but in only one, to the money price of all commodities. They cannot be sold for less labour than they cost, but they may be sold for more.

Over natural price, the relation of the demand to the supply, which is frequently said to regulate price, seems in the long run to have a tendency to lower it. The ingenuity of man being necessarily first and chiefly directed towards supplying his more urgent wants, the labour employed in supplying necessaries will be most improved. Clothing, for example, is in this country one of the necessaries of life. Owing to a variety of circumstances, the manufacture of cotton is perhaps less shackled by social regulations than any other, and the reduction of the price of cotton within fifty years has been most extraordinary; substantiating by fact the assertion, that demand, when man is free to labour, has a tendency to diminish the natural cost of the necessaries of life.[3]

[3] In a former part of this work, page 86, I endeavoured to explain the effect of *necessity*, or the increased demand arising from an increase of people, in promoting the improvement of cultivation, and lowering the price of corn. As soon as division of labour is introduced into society, or as soon as the principal part of the agriculturist's produce is intended not for his own consumption, but to be sold, this increased demand can only be known to him by an increase in the price of corn. Such an increase is the immediate stimulus to his exertions, and the cause of an increase in his ingenuity; which, in the long run, tends invariably to supply us with agricultural produce by less labour, and thus to lower price. If this be a correct explanation of what actually and naturally occurs, it shows us how short-sighted was that selfishness in the non-agricultural classes, which induced them, in times past, continually to appeal to governments to keep the price of corn from rising by artificial regulations; and it shows how perversely ignorant were those governments which, in consequence of such appeals, actually fixed a maximum for the price of corn and bread. The effect of such appeals, and of such regulations, must have been the very opposite from what the parties wished and intended. They must have diminished the stimulus to agricultural improvements, have lessened the supply, and have prevented that fall of price which I contend would naturally and necessarily have taken place. This observation is of some practical importance, because there is yet a disposition to call out for regulations to keep down prices; and yet, not a few parts of the world, where the governments endeavour to accomplish this by regulations.

Over money or nominal price, the relation of the demand to the supply has a very powerful but varying influence, comprising all the difference between the price of food in a besieged city, and its price when the supply is greater than is required. Money, as well as all the commodities of which it measures the value, are subject to variations in their natural price; and most commodities, including money, are unequally affected by social regulations. The money price of all commodities is consequently influenced by numerous circumstances; and it is by no means an easy task, as many persons suppose, to detect the real cause of those variations in price which are of daily occurrence. In no case, however, is a fall of price beneficial, unless it be caused by a diminution of the labour necessary to bring commodities to market. In all other cases the fall can be only temporary, and it takes place at the expense of the producers.

Variations in price have very important results. By bringing commodities within, or carrying them out of the reach of a certain number of persons, they regulate consumption. If the price of bread were not to rise the instant it is ascertained, or even rendered probable, that the crop of wheat will be short, no persons would be admonished in time to lessen their consumption, or seek for other food than wheaten bread; and before the next harvest famine might ensue. On the other hand, were prices not to fall when the crop is abundant, there would be no stimulus to increased consumption, and the bounties of nature, instead of causing joy and gladness, would turn to mouldiness and corruption. Money price, as determined by the relation of the demand to the supply, "is the nicely poised balance," says Mr. Buchanan, "with which Nature weighs and distributes to her children their respective shares of her gifts, to prevent waste, and to make them last till reproduced." It is also the index to the wants of society; or it is the finger of Heaven, indicating to all men how they may employ their time and talents most profitably for themselves, and most beneficially for the whole society.

"Among the means devised by the ingenuity and enterprise of adventurers, to elude or overcome the obstacles presented by the decrees of the enemy, one in particular, which was resorted to on an extensive scale, deserves to be mentioned, as illustrating in a striking manner the degree in which those obstacles were calculated to increase the cost to the consumer. Several vessels laden with sugar, coffee, tobacco, cotton-twist, and other valuable commodities, were despatched from hence, at very high rates of freight and insurance, to Salonica, where the goods were landed, thence conveyed on horses and mules through Servia and Hungary, to Vienna, for the purpose of being distributed over Germany, and possibly into France. Thus it might happen, that the inhabitants of that part of the continent of Europe most contiguous to this country, could not receive their supplies from hence, without an expense of conveyance equivalent to what it would be if they were removed to a distance of a *sea voyage twice round the globe, but not subject to fiscal and political obstructions.*"

Chapter X. EFFECTS OF THE ACCUMULATION OF CAPITAL.

THE only circumstances at all deserving the epithet natural, besides those already treated of, which have ever been noticed in treatises on Political Economy, on account of their influence over the production of wealth, are *security of property* and *accumulation of capital.*

Of the former, which must be considered as an object to be attained by social regulations—though property itself, or a man's right to the free use of his own mind and limbs, and to appropriate whatever he creates by his own labour, is the result of natural laws—I shall not say one word; because it is necessary, before we discuss the effects of security of property, to have the right of property accurately defined, and we must be quite agreed as to its basis. Not being disposed to regard the existing right of property, with the same respect as those who urge on mankind the necessity of preserving it inviolate, in discussing it I should have many difficulties to encounter, and might incur some reproaches. I admit that the sacredness even of the present right of property, cannot be too strenuously upheld against the aggressions and violations of governments; but as far as it ought to be held sacred against the claims of the labourer to own whatever and all which he produces, I entirely dissent from the prevalent opinions. The power now possessed by idle men to appropriate the produce of labourers, seems to me the great cause of bloated and unhappy weariness in the former, who, having their natural wants provided for, necessarily live having no useful aim and object,—and of poverty and wretchedness in the latter, who being obliged to subsist many more than their own families, have no time and no thought, but how to obtain the means of preserving an existence so filled with toil and care as to seem scarcely worthy of preservation. On account of the respect generally inculcated for *the* right of property, and on account of the intemperate and furious passions connected with it, the free discussion of this important question is not without danger. I must therefore pass it by, merely observing that the prevalent opinions of most political economists are directly at variance with their own definition of wealth.

Dissenting, also, from the opinions prevalent among them as to the utility of accumulated capital, I propose to make a few remarks on this subject. Not wishing to give this little book a character of controversy, I should have abstained also from treating of capital, were it not of great importance to relieve, as far as possible, the wise system of nature from the imputations cast on it by erroneous theories, and to place the laws regulating production before the reader, in all the clearness of their own simplicity. Both the theory relative to capital, and the practice of stopping labour at that point where it can produce, in addition to the subsistence of the labourer, a profit for the capitalist, seem opposed to the natural laws which regulate production. Moreover, our ideas of just or unjust distribution, will be materially modified by our opinions of the mode and degree in which capital is useful. The subject embraces also several practical questions of considerable importance, if we may judge from the frequency with which they are mentioned in Parliament. And as there can be no violent passions involved in the discussion of the abstract

question of the utility of capital, the above considerations have induced me to treat of it. In a little work entitled " *Labour Defended against the Claims of Capital,*"[1] the nature and use of both fixed and circulating capital have been, I think, accurately analyzed, which relieves me, at present, from the necessity of doing any thing more than briefly explaining in what sense the employment of capital promotes production.

Political Economists have distinguished two species of capital, viz., fixed and circulating capital. The former consists, according to Dr. Smith, of "1st, useful machines and instruments of trade, which facilitate and abridge labour; 2nd, of all those profitable buildings which are the means of procuring a revenue, such as shops, warehouses, workhouses, farmhouses, with their necessary buildings, stables, granaries &c.; 3rd, of the improvements of land, or what has been profitably laid out in improving, draining, inclosing, manuring, and reducing it into the condition most proper for tillage and culture, (in this category we may probably include bridges, roads, canals; which are both fixtures in the soil and instruments for abridging labour); 4th, of the acquired and useful abilities of all the inhabitants and members of the society."[2] I prefer Dr. Smith's enumeration of the articles which constitute fixed capital, because it is far more complete than any subsequent description, and it has the great merit of not overlooking the most important part of fixed capital, viz. the *acquired* and *useful* abilities of ALL the members of the society.[3] The definition of circulating capital I shall borrow from Mr. Mill.

> "There is another portion of the articles," he says, "subservient to production, which do perish in the using. Such are all the tools worn out in one set of operations, all the articles which contribute to production only by their consumption, as coals, oil, the dye stuffs of the dyer, the seed of the farmer, and so on. Of this nature also are the raw materials worked up in the finished manufacture. Under the same head must be included the expense of repairing and keeping in order the more durable articles of fixed capital; such as repairing roads and bridges. The distinctive character of all this portion of capital is, that it is necessarily consumed in contributing to production, and that it must be reproduced, in order to enable the producer to continue his operations. There is another thing which is also constantly consumed, and constantly needs to be reproduced, and that is the subsistence, or consumption, or wages of the labourer; and that equally whether the labourer supplies it himself, or whether he receives it from the capitalist in the shape of wages."[4]

Taking into consideration that the articles above mentioned are only given as examples, the two lists include every species of material object which falls within the most comprehensive definition of wealth. In fact, Mr. McCulloch has defined, in his latest work, " *Principles of Political*

[1] Published in London by Knight and Lacy, in 1825.

[2] Wealth of Nations, book ii. chap. 2.

[3] It is somewhat extraordinary that many of the acquired and useful abilities mentioned in the text, are the only parts of the national fixed capital which never bring their owner a profit, while the produce of these acquired and useful abilities in the possession of the capitalist, obtains an ample reward. "The national capital," says M. Storch, "includes the natural and acquired faculties of the productive classes, the nature of individual capital excludes them. However gifted with such faculties an individual may be, and however large may be the revenue he acquires by them; it would overthrow all our received ideas to call him a capitalist, if he did not possess besides this personal and unalienable capital, a capital composed of *transmissable values*." " *Cours d'Economie Politique,*" vol. v. p. 60. This anomaly is not explained by any existing theory of the distribution of wealth.

[4] Elements of Political Economy, by James Mill, Esq. second Edition.

Economy," the capital of a country to be that portion of the produce of industry existing in it, which can *be made directly available, either to the support of human existence, or to the facilitating production,*"—a definition which embraces every species of wealth, except that which serves merely for ornament. There must, therefore, be some accessory idea, or some relation belonging to capital, which distinguishes it from national wealth under other relations. To me it appears that the single and only circumstance which gives to any portion of the produce of labour the relation understood by the term Capital, is, that it be made, employed, or consumed, not for the sake of any enjoyment it affords its *owner,* in either the making, employing, or consuming of it, but for the sake of some ulterior profit. It is a part of the national wealth employed, to use the language of Dr. Smith, to "procure *its owner* a revenue."

Thus a steam engine to move cotton spinning machinery is made, and afterwards used—not for any delight we have in the beautiful mechanical contrivance, but for the sake of the profit to be obtained on the cotton yarn. Nobody keeps a shop in the Strand, or a warehouse in Thames Street, except for the revenue he is to derive from either. The ground is drained, ploughed, and inclosed, for the sake of the expected future produce, not from an idea that the furrow and the hedge add to the beauty of the landscape.[5] He who uses dye-stuffs cares little or nothing about the fascinating colours he fixes in silk or cotton: he only uses them for ulterior profit. The money or goods given by the capitalist, or owner of them, for the labour of workmen, is given, that *they,* like the steam-engine, or the draining of land, may produce him something of greater value than their wages. These wages, on the contrary, are not capital to those who consume them to support life, or for the sake of enjoyment. All property lent by one man to another, or to the state, for which the lender receives interest, is called his capital; because he does not use it for his own immediate gratification, but for the revenue it gives. In the same manner each man learns, in most cases, some art,—that of making shoes for example; not for any pleasure he finds in making shoes, but that he may ultimately obtain his subsistence by practising this species of industry. There are, perhaps, no arts learnt for the sake of the pleasure they afford, though many give pleasure in the learning; and thus all the acquired and *useful* abilities of the members of a society are not acquired for their own sake, but for ultimate profit. Whatever an individual makes or acquires for the sake of after-production—whatever he lends for the sake of interest—whatever is used or consumed for the sake of profit, comes under the denomination of fixed or circulating capital.

It would appear, at the first view, that the greater the quantity of the annual produce devoted to reproduction, or used with a view to procuring its owner a revenue, the more the annual produce would be increased. This idea is at the bottom of all which can be said in favour of the productiveness of capital. But, though every portion of capital brings a profit *to its owner,* it depends on the nature of the capital itself, whether it assist production. The capital of the national debt, or the capital lent on mortgage, brings its owner a revenue,—a share of the taxes, or of the rent of the estate, mortgaged,—as well as the capital laid out on steam-engines and at the same rate of profit, but it has no wealth-creating power. If every portion of capital were like a steam-engine, or a carpenter's plane, *made* as well as employed to aid production, the whole

[5] It deserves to be remarked, that the claims now made by landlords and farmers, to be allowed to tax the rest of the community for the *capital* vested in the soil, are neither more nor less than claims to make us pay them for the labour they have extorted from the parish-fed peasant. There is no other *capital* vested in the ground, nor can there be any other than the *labour* of the labourer; and his task-master, having already grown rich on it, now tries to exact a further reward for his oppression.

annual produce might be increased as capital increased. But a great quantity of capital is always lent to share the revenue or produce of others, and this portion can have no beneficial effect on the wealth of the whole. What enriches the individual capitalist does not necessarily add to national wealth.

Taking only fixed capital into our consideration, and leaving circulating capital, particularly that portion of it which pays wages out of view,—a manner of treating the subject most favourable to the idea of capital aiding production, let us inquire if it really have any such effect. For this purpose we may distinguish three classes of circumstances under which the effects of an accumulation of capital will be very different. *First,* if it be made and used by the same persons; *second,* if it be made and used by different classes of persons, who share between them in just proportion the produce of their combined labour; *third,* if it be owned by a class of persons who neither make nor use it.

First. If the instruments, tools, dye-stuffs, etc., intended to promote production be made and used by one and the same individual, we are bound to suppose that he finds these labours advantageous, or he would not perform them; and that every accumulation in his possession of the instruments he makes and uses, facilitates his labour. The limit to such an accumulation is plainly the power of the labourer to make and use the instruments in question. In the same manner, the quantity of national capital is always limited by the power of the labourers to make and use it with advantage. When capital, therefore, is made and used by the same persons, when all which they produce belongs to themselves, too much cannot be said in its favour.

Second. Capital may be made by one labourer and used by another, and both may divide the commodity obtained by the labour of making and of using the capital between them, in proportion as each has contributed by his labour to produce it. He who makes the capital finds this employment productive to him, or he would not continue it; and he who uses the capital finds that it assists his labour, or he would give nothing for it. Under these circumstances, the accumulation and employment of capital is advantageous. I should rather express this fact, however, by saying, that a part of the society employed in making instruments, while another part uses them, is a branch of division of labour which aids productive power and adds to the general wealth. As long as the produce of the two labourers,—and speaking of society, of the two classes of labourers,—be divided between them, the accumulation or increase of such instruments as they can make and use, is as beneficial as if they were made and used by one person.

Third. One labourer may produce or make the instruments which another uses to assist production—not mutually to share in just proportions the produce of their co-operating labour, but for the profit of a third party. The capitalist being the mere *owner* of the instruments, is not, as such, a labourer. He in no manner assists production. He acquires possession of the produce of one labourer, which he makes over to another, either for a time,—as is the case with most kinds of fixed capital, or for ever, as is the case with wages,—whenever he thinks it can be used or consumed for *his* advantage. He never does allow the produce of one labourer, when it comes into his possession, to be either used or consumed by another, unless it is for his benefit. He employs or lends his property to share the produce, or natural revenue, of labourers; and every accumulation of such poverty in his hands is a mere extension of his power over the produce of labour, and retards the progress of national wealth. In this which is at present the case, the labourers must share their produce with unproductive idlers, and to that extent less of the annual produce is employed in reproduction.

If there were only the makers and users of capital to share between them the produce of their co-operating labour, the only limit to productive labour would be, that it should obtain for them and their families a comfortable subsistence. But when in addition to this, which they must have whether they be the owners of the capital or not, they must also produce as much more as satisfies the capitalist, this limit is much sooner reached. When the capitalist, being the owner of all the produce, will allow labourers neither to make nor use instruments, unless *he*obtains a profit over and above the subsistence of the labourer, it is plain that bounds are set to productive labour much within what Nature prescribes. In proportion as capital in the hands of a third party is accumulated, so the whole amount of profit required by the capitalist increases, and so there arises an artificial check to production and population. The impossibility of the labourer producing all which the capitalist requires prevents numberless operations, such as draining marshes, and clearing and cultivating waste lands; to do which would amply repay the labourer, by providing him with the means of subsistence, though they will not, in addition, give a large profit to the capitalist. In the present state of society, the labourers being in no case the owners of capital, every accumulation of it adds to the amount of profit demanded from them, and extinguishes all that labour which would only procure the labourer his comfortable subsistence. More than this, however, he does not want; and thus, accumulation of capital in the present state of society checks production, and consequently checks the progress of population, the division of labour, the increase of knowledge, and of national wealth.

The term Fixed Capital, includes some of the most noble inventions of man, which are indispensable to the success of labour. Without machines and tools the labourer could perform but few, and those very imperfect operations. Without dye-stuffs he could produce no colours, and without coals he could not fuse metals. Machines, tools, and coals, undoubtedly facilitate labour; but we must labour to prepare or obtain them. That the labour employed in preparing them facilitates subsequent production, no man can deny; but when it is admitted that labour produces all things, even capital, it is nonsense to attribute productive power to the instruments labour makes and uses. All capital is made and used by man; and by leaving him out of view, and ascribing productive power to capital, we take that as the active cause, which is only the creature of his ingenuity, and the passive servant of his will.

Among the articles enumerated as capital, we find wages, or the subsistence of the labourer; but wages do not, like instruments, facilitate production. The master cotton-spinner, for example, gives to his labourers what is equivalent to an ordér on the neighbouring butcher and baker to obtain a certain quantity of meat and bread, and he redeems this order by giving to the butcher and the baker a certain quantity of cotton cloth. If he give a quantity of money, he does not perhaps get that immediately from the butcher and the baker with whom his workmen expend what he gives them, but he gets it by selling his cloth in the market. The real *wages* of the labourer do not consist in money, but what the money buys. When a capitalist therefore, who owns a brew-house and all the instruments and materials requisite for making porter, pays the actual brewers with the coin he has received for his beer, and they buy bread, while the journeymen bakers buy porter with their money wages, which is afterwards paid to the owner of the brew-house, is it not plain that the real wages of both these parties consist of the produce of the other; or that the bread made by the journeyman baker pays for the porter made by the journeyman brewer? But the same is the case with all other commodities, and labour, not capital, pays all wages.

If the master, in addition to being a cotton manufacturer or a brewer, be also a banker, and supply the vicinity of his residence with paper-money, the case becomes still plainer. He then

gives his workmen a mere promise to pay a certain sum; and, it should be recollected, the greater part of what are called the *advances* of capitalists consists of such promises; which mere promise is taken in exchange for meat or bread by the butcher or baker, who gives it to the grazier or miller, who returns it back to the banker, either from banking with him, or to remit money, perhaps, to London, in payment of rent.[6] The master manufacturer has either money or paper with which he pays wages; those wages his labourer exchanges for the produce of other labourers, who will not keep the wages, whether money or paper; and it is returned to the manufacturer, who gives in exchange for it the cloth which his own labourers have made. With it he again pays wages, and the money or paper again goes the same round. In wages, take them in whatever shape we will, whether as stock or money in the hands of the capitalists, or what the labourer consumes, I defy any man to see the least particle of power aiding or facilitating the operations of industry similar to that possessed by instruments and machines.

If accumulation of capital be a source of wealth, as the profit on circulating capital is equal to that on fixed capital, we must conclude, however, that the bread and meat the *labourer* eats, and the clothes he wears, nay, even that the gin, porter, and tobacco he consumes, because the capitalist has given him a right to consume them, and derives a revenue from making this right over to him,—facilitate labour like the most refined and powerful machine ever made by the cunning art and accumulated knowledge of man. For the wretched hovel of the labouring cotton spinner or weaver, though it scarcely afford the brow-beaten and downcast inhabitant a shelter from the inclemencies of the season, the owner obtains as large a profit, in proportion, as from the use of a steam engine. To say that there is in wages, and in instruments, a similar productive power, because the capitalist obtains a profit on both, seems to me a blunder of no ordinary magnitude. Had it been intentionally made, it would have been deserving our severest reprobation; for its effect is to justify the appropriation by the capitalist of that large share he now receives of the annual produce. It ascribes to *his property* merely, whether he employ it to pay wages, or whether it consist in useful instruments, all that vast assistance, which knowledge and skill, when realized in machinery, give to labour.

I do not mean to notice the various sources of what I conceive to be the error of the Economists, as to capital, though it is justly said, "to trace an error to its source is half way towards destroying it;" but the language commonly in use is so palpably wrong, leading to many mistakes, that I cannot pass it by altogether in silence. We speak, for example, in a vague manner, of a windmill grinding corn, and of steam engines doing the work of several millions of people. This gives a very incorrect view of the phenomena. It is not the instruments which grind corn, and spin cotton, but the labour of those who make, and the labour of those who use them. The co-operating labours

[6] If the invention and employment of paper-money had done nothing else but show the incorrectness of the notion, that capital is something saved, it would have led to one important consequence. As long as the capitalist, to realize his wealth, or command over other people's labour, was obliged to have in his possession an actual accumulation of the precious metals or of commodities, we might have continued to suppose, that accumulation of capital was the result of an actual saving, and that on it depended the progress of society. But when paper-money and parchment securities were invented,—when the possessor of nothing but such a piece of parchment received an annual revenue in pieces of paper with which he obtained whatever was necessary for his own use or consumption, and not giving away all the pieces of paper, was richer at the end of the year than at the beginning, or was entitled next year to receive a still greater number of pieces of paper, obtaining a still greater command over the produce of labour, it became evident to demonstration that capital was not any thing saved; and that the individual capitalist did not grow rich by an actual and material saving, but by doing something which enabled him, according to some conventional usage, to obtain more of the produce of other men's labour.

of the millwright, for example, and the almost numberless other workmen who prepare his tools and the materials, of which the mill is fabricated, or who bring them from remote parts of the earth,—they themselves using very complicated machines for this purpose, which are prepared by the combined labour of a vast number of persons,—in the first instance construct the mill; and then the labour of the miller, assisted also by various instruments, millstones, sieves, sacks, &c. which are made by some other labourers, profiting by the force of the wind, and the natural hardness of the stones, as compared to the hardness of corn, grinds it, sifts it, and prepares it for the use of the baker. So the united labours of the miner, the smelter, the smith, the engineer, the stoker, and of numberless other persons, and not the lifeless machines perform whatever is done by steam engines. Formerly all spinning was done by the hand, and probably the spinner or the spinner's husband made with a knife the rude distaff and twirl, which were then the only instruments used in spinning. When spinning wheels were invented, the co-operating labours of the wheelwright and the spinner were necessary to complete the thread; but the result was the production of a much greater quantity of yarn than could before be produced by any given quantity of labour. Subsequently those who make steam engines, and set them in motion, and those who make mules and spinning frames, became the assistants of the spinner; and so much more efficacious is this knowledge-guided labour than the first rude mode of spinning, by twirling a piece of wood between the finger and thumb, and causing it to draw out the thread, as it sinks towards the earth, by its own weight, that one person can now probably spin as much thread in a given time, as four or five thousand primitive spinners. The fact is, that the enlightened skill of the different classes of workmen alluded to, comes to be substituted in the natural progress of society, for less skilful labour, and this enlightened skill produces an almost infinitely greater quantity of useful commodities, than the rude labour it has gradually displaced. By the common mode of speaking, the productive power of this skill is attributed to its visible products, the instruments, the mere owners of which, who neither make nor use them, imagine themselves to be very productive persons; particularly, if they are at the same time labourers, planning and directing the operations of those who make and use the instruments. Political Economists have probably been led by this incorrect language into their mistake; and have accordingly attributed that increased productive power, which has its source in the increased knowledge and skill of society at large, to the accumulation of fixed capital.

There is another obvious error leading to absurdities and abuses in practice, against which I must endeavour to guard the reader. It must be quite plain that the greater part of the commodities constituting the capital of a country, cannot, under any circumstances, be removed. The most common instruments and tools are of no use without skilful hands; and many of them are fixed in spots and places, or connected with buildings which cannot be displaced. Shops and warehouses, farm-houses, stables, and granaries, are nearly as immovable as the soil itself. They may be destroyed—not carried away. The improvements of the soil, the draining and manuring of it, are deeds of a man's hand, done and completed, and irrevocable. Other labours may make them useless, but neither they nor the benefit they confer on us, can be transported to France or America. Bridges, roads, and canals, may be neglected or suffered to fall into ruin, or they may be broken up; but no one will be at the trouble of shipping the materials off to Spain or the Brazils. The principal part of circulating capital is food, which we import; and, consequently, not a particle of it could be advantageously sent to other countries. Neither can coals, dye-stuffs, or any other raw materials of manufactures be sent abroad in any greater quantity than at present. We are more generally importers than exporters of such articles; and of those that we can advanta-

geously export, as great a quantity is already exported as is profitable. Thus, except the acquired and useful abilities of the labourers of a society, and what they can carry with them—for there are some few instruments, such as ships, easily transportable—no part of the capital of a country can be either driven or sent away.

Men may be, and frequently have been, forced from their native land by arbitrary and oppressive laws, by religious persecution, or political tyranny, and by a grinding and ruinous system of taxation; but unless men are, capital never is either forced or sent abroad. To talk of sending away roads, bridges, canals, and cultivated fields, is a striking absurdity, and yet we hear perpetually a sort of cuckoo song among members of Parliament, who are capitalists themselves, or leagued with capitalists, about the danger of *forcing these things* under the name of *capital* out of the country. In fact, to prevent them from being driven away, as it is said, laws against the combination of workmen have been made in this country, quite as atrocious in principle, as the slave codes of the West Indies. It may suit the views of those who imagine they are benefited by keeping up our monstrous system of taxation, our corn laws, and church establishment, and our West and East India monopolies, to ascribe all the evils of the country to a demand for higher wages, and they may consistently with their own selfish views, enact laws to keep labourers obedient: I can understand their motives, but I cannot comprehend how their statements can be believed by society at large. While the industry of this country labours under its present enormous burdens, arising from social regulations, to attribute the fact of our manufacturers being sometimes undersold in the foreign market, to the high wages of our labourers, is like omitting the influence of the moon, and attributing the tides of the ocean to the sudden impetuosity of a few mountain streams.

In asserting that accumulation of capital in the hands of persons who neither make nor use it, impedes the progress of society, let me not be supposed to overlook the statement, that if there were no profit to be obtained on the capitalists' stock, there would be no motive to save, no spur to industry, and no increase of national wealth. I do not overlook this statement, but because I am sensible of its importance, I will not hastily and dogmatically decide concerning it. It is plain, however, that the assertion of interest on capital being necessary to stimulate saving and industry, as it can only be taken from the produce of the labourer, is quite irreconcileable with the assertion that labour will be energetic and skilful in proportion as it is rewarded. I can understand how a right to appropriate the produce of other men, under the name of interest or profit, may be a stimulus to cupidity; but I cannot understand how lessening the reward of the labourer, to add to the wealth of the idle, can increase industry or accelerate the progress of society in wealth. Interest on capital was beneficial, when, feudal landlords being then the absolute masters of all the slave labourers of the country, it tended to reduce their power; but it is an error of no small magnitude to describe that as a general law of nature, which is only applicable to remove or lessen a particular usurpation.

We shall be led, I think, to a different solution of the question, "whether or not society could advance were there no interest on capital" than that generally given, by reflecting on the principle of population in union with our affections, and by observing what takes place in the wilds of America. The former will convince us, that the produce of every labourer is all required for the nourishment of his own family. To bring up and provide for his children, is a sufficient motive, in general, for the labourer to be industrious. As they are brought up and provided for, and taught some manual art, they become labourers, extend division of labour, promote increase of knowledge, and add in their turn to the population and annual produce of society. In our present state,

the savings of the capitalist are as much consumed, and generally by labourers, as any other part of the annual produce; but first passing into the hands of the capitalist, he takes a large portion for himself, which would otherwise remain with the labourers and enable them to rear larger families, adding, which multiplying capitalists does not, to division of labour. "The motives," says a writer in the *Westminster Review,* "which operate to save, exist totally independent of any addition which might be made to the savings themselves." In parental affection, there is, I think, a source both for industry, and for that saving from his own consumption, which enables a man to rear up a family, by sharing with them the produce of his labour: and where there are many families properly brought up, the nation increases in wealth and people.

In fact it is a miserable delusion to call capital something saved. Much of it is not calculated for consumption, and never is made to be enjoyed. When a savage wants food, he picks up what nature spontaneously offers. After a time he discovers that a bow or a sling will enable him to kill wild animals at a distance, and he resolves to make it, subsisting himself, as he must do, while the work is in progress. He saves nothing, for the instrument never was made to be consumed, though in its own nature it is more durable than deer's flesh. This example represents what occurs at every stage of society, except that the different labours are performed by different persons—one making the bow, or the plough, and another killing the animal or tilling the ground, to provide subsistence for the makers of instruments and machines. To store up or save commodities, except for short periods, and in some particular cases, can only be done by more labour, and in general their utility is lessened by being kept. The savings, as they are called, of the capitalist, are consumed by the labourer, and there is no such thing as an actual hoarding up of commodities.

In filial affection we may also find, I think, a better security for the supply of our wants in old age, than any interest on accumulated savings can give. Labourers, at least, should always remember that the interest on savings, or capital, is paid by the produce of labour. It merely gives them a power over the labour of their own descendants, which would be obtained, I hope, from affection if it were not extorted by law. The natural and best method of saving against the wants of old age, is to rear, educate and instruct our offspring. In their willing contributions paying back to their parents, when no longer able to toil, some of those advances the parents had made in manhood, to support and rear them, old age would find a certain subsistence derived from a pleasing source. Those who would substitute parliamentary decrees and social regulations, enforced by punishment, for this mutual affection—looki rather to them, than to it, for national prosperity, must have more confidence in legislative skill than in the wisdom of nature.

If we look to the wilds of America, where families multiply very fast; where most of what is raised or produced is consumed in the family; where, except in the towns, no part of the annual revenue is saved and put out to interest; where the labourers have large possessions, and many instruments which they use for their own advantage; but where there is comparatively little labouring for the profit of the capitalist,—we shall find, I think, this view confirmed. The United States are increasing more rapidly in wealth, power, and population, than any of the countries in which capital has been extensively accumulated. Whether the progress of society depends or not on interest being paid on capital, is a question, however, which comes home to the feelings and private lives of individuals, and rests for its solution on our affections. If parents are generally willing to share with their offspring what they produce, if they have natural motives for carefully bringing up their children and teaching them the arts of life, we must conclude, that independent of the wish to obtain power over the produce of other men's labour,—independent of vulgar

avarice, or the vulgar ambition of what is called rising in the world, and imitating the follies and vices of those who already lord it over their fellow-men,—independent also of all gradations of rank and degrees of opulence,—there are motives which continually tend to increase the number of labourers. As their numbers are increased, both increased production and consumption take place, which is all that is ever meant by the terms accumulation or increase of national wealth.

CONCLUSION.

That I have, by the foregoing remarks, exhausted the vast subject of the natural science of the production of wealth, or even glanced at numberless natural circumstances which influence production, I cannot suppose; yet I have set before the reader all those usually noticed in treatises of Political Economy. Moreover, I have included the influence of knowledge, and have endeavoured to ascertain the natural source of its progressive increase. Justly to appreciate the effects of natural principles, which always operate by creating motives in us, we must carefully separate them from social regulations, which are also intended to create motives, and which seem to have almost as powerful an influence on our destiny, though in an opposite direction, as the laws of Nature. Of all social regulations, the peculiar right of property, which exists in each country, has perhaps the greatest influence on production. I have not examined this right and its effects. Other writers have been equally timid, or equally prudent. Several other circumstances, to some of which I have already alluded, have been in like manner totally neglected. I consider the science, therefore, as extremely imperfect. If all the natural laws regulating our welfare were known; if we could always ascertain how much of our misery or happiness springs from them, or from social institutions; if, the instant any new problem arose, it could be satisfactorily solved, there would be no longer any disputes among the most distinguished professors of Political Economy, as to its first principles; and the science would, I should hope, be taught at school like common arithmetic; and, like it, would no longer stir up the fierce passions of contending parties. But it would then have no charms for the rising generation, which must be ambitious of adding to the stock of knowledge, and will never be contented with the humble drudgery of merely learning what others have discovered and known.

My principal object has been to satisfy the reader, by setting before him, in the first instance, the basis of the science, and by subsequently selecting only such phenomena as are uniform and almost universal, that the progress of mankind, in all that vast branch of civilization which relates to the production of wealth, is always determined and regulated by natural circumstances operating on the mind of man. Whether the impetus given by them to our race has been checked or accelerated by the regulations of the lawgiver, is a very wide question, which it would be prudent in us all to examine, but which I do not pretend to decide. As far, certainly, as the production of wealth is concerned, it does seem that those regulations are in all cases only burdens of unequal weight, retarding the progress of all nations, but of some much more than others. Whether the chief cause of the increase of knowledge be, as I suppose, the natural principle of population, is another question which deserves, undoubtedly, a more careful and minute investigation. On the ground of universality and uniformity, we are also compelled to believe, that the division of labour springs from a natural principle, which continually extends and perpetually regulates it; whether or not my explanation of the origin of that practice, and of the natural causes of its extension, be successful, the reader must decide. Over it legislators, though in fact their regulations check it to a very considerable extent, do not in general pretend to exercise any influence;

and it forms, and is acknowledged to form, with all its vast and dependent phenomena, a great branch of the natural history of our species.

In the chapters on trade and on money, I have only endeavoured to trace some of these dependent phenomena; and I should hope I have been successful in satisfying the reader, that both arise naturally in the progress of society, and are always, and in every particular, as at their origin, controlled and regulated by natural laws, although both have also been controlled and regulated, to the great injury of mankind, by the human legislator. As the will of man is the medium through which these natural laws operate, we have, in the comparative invariability of the value of the precious metals, in the great changes which have taken place in their value, at certain periods all over the globe, and in the comparative variableness in the value of other commodities, which may, in all cases, be traced to general principles, a proof,—corroborating the proofs that have been drawn from numberless other phenomena, that the will and conduct of man, capricious as the will of individuals may seem, form a part of the universe, controlled, like every other part, by general and determinate laws.

We can never suppose, or believe, that a drop of water trickles to the ground, that a feather floats in the atmosphere, or that the blood circulates in our veins, under the influence of a law which extends beyond the orbits of the planets, regulating their motions—and at the same time suppose that the thoughts and will of men, the proximate causes of their weal or their woe, are released from the control of general laws; we can never believe that the inventions of aspiring genius, and the success which follows close and continued industry,—that the ambition which, when men consent to be its instruments, devastates the world, and which, finding no subservient menials, improves and adorns it,—or that the desire for enjoyment, which under one government prompts only to industry, and under another is the parent of endless cupidity,—in short, we can never believe that our passions and affections, or the mighty power we call in one comprehensive word, the mind of man, is less controlled by general laws than a trickling drop of water, a floating feather, or than the red globules on the circulation of which his life and intellect depend. The whole system of social production must be considered, like the solar system, as a part of the universe, which man may observe and know, but cannot regulate. He may thwart for a time the benevolent views of his Creator, but is invariably admonished, by the misery which ensues, of his having done wrong. To him, indeed, is given the high faculty of noting, weighing, and admiring the complicated and harmonious whole, which is the result of the instincts and self-interest of individuals; but that whole, like the co-operating communities of bees and ants, which have ever been the admiration of the naturalist, springs from a higher source than the foreplanning wisdom of man. Like other animals, he acts from unerring instincts; but his boasted reason, and his glimmerings of knowledge, also influence his conduct, and more often misdirect than guide it. To what those instincts may ultimately lead,—to what social perfection they will train mankind,—into what vast and benevolent system they are ultimately to develope themselves,—is as impossible for any man to foresee or imagine, though his intellect be as comprehensive and searching as that of Bacon and Newton combined, as it was for the savage to predict, in the infancy of the world, that the present system of co-operative production, embracing both hemispheres, would spring from the circumstance that he and his wife, under the influence of physical differences of organization, and in order to provide for themselves and their offspring, selected different employments. As it will undoubtedly be regulated and controlled in every minute part, and at all times, by the same hand that placed man on the earth, and gave to the embryo of the forest tree a living power to shoot upward, overcoming the ruling principle of

all matter, there is reason to believe that it will be perfect, like the Master Power from which it emanates. The principles we have already traced are not limited by time nor space; and we may therefore hope also, that this perfect system is intended to embrace the whole community of man, and to extend over the whole globe; to every part of which, whether it be land or sea, mountain or plain, whether it be a burning climate, as under the equator, or a freezing one as at the Poles, he alone, of all animals, seems physically adapted. As a part, therefore, of the great system of the universe, though perhaps doubly interesting because their effects are not yet completely developed, the natural laws which regulate the progress of population and wealth ought to be, like the instincts of bees and ants, or like the motions of the planets, objects of rational curiosity; but when we know, in addition, that on them the welfare of mankind depends, it is impossible to conceive any study more deserving of our undivided attention.

That there is as yet a great diversity of opinion even as to the principles and foundation of political economy, cannot be denied. But this circumstance, which is sometimes made an argument for despising the science, seems to me a strong reason why it should be studied. It involves the domestic and dearest interests of all classes, coming home to the business and bosoms of all men; its doctrines now exercise also considerable influence over legislation, affecting all the relations of life, and therefore they require to be illuminated by the concentrated rays of the national intellect. Political economy is a natural, not a political science, and must not be left exclusively to statesmen. It originated among practical men, and it does not end in barren speculation. We are called on daily to give an active assent to its principles, and make them the rule of our obedience, or the guide to our remonstrances. By them legislators now propose to frame their institutions, and on them is founded the only reasonable justification of the present order of society. We cannot acknowledge, therefore, that we are incapable of ascertaining and understanding the natural laws which regulate the progress of society, without giving into the hands of one class of men the power of interpreting them according to their own views and interests. If we will not inquire into these laws, preferring a blind submission to some of our fellow-creatures, we surrender unto them the disposal of all that is valuable in existence; and we know from all experience, that such a power has never been possessed but to be abused. If I had any merit in the undertaking which led to the publication of this work, it was only in supposing that the members of a mechanics' institution were as capable as other men, constituted like themselves, and having no patent monopoly of genius or knowledge,—of comprehending whatever doctrines relative to the general welfare philosophers may put forth, or whatever truths they may discover. That supposition was not deceived: the lectures were heard with unexampled attention; and I shall have great reason to congratulate myself if that undertaking, or this book, shall excite in any one person a desire to examine into the natural laws which regulate the progress of national wealth.

To connect more distinctly these laws and the doctrines of political economy with individual welfare, let me remind the reader of the wide-spread poverty and distress which at present bear down to the earth all the industrious classes of this country. The peasant, who produces so much corn, that his master is ruined by its reduced price, has not wherewithal to eat and cover himself. The weaver, who supplies the world with clothing, whose master undertakes perilous adventures to tempt savages to use his productions, is perishing with hunger and nakedness in the midst of an inclement season. In Parliament and out of Parliament the poverty of the labourer is said to be the cause of numerous crimes. The established right of property,—that *right* which denies bread and raiment to the labourer, in order to pamper those who do not labour with luscious

viands and clothe them in purple and fine linen, is daily violated to an alarming extent, and its total subversion by violence seems near at hand. Even those who cannot feel for the sufferings of others, are alarmed for the continuance of their own prosperity. There is not a man, perhaps, in the country, however exalted his situation, and however punctually hitherto his income may have been paid, who does not feel that the security of his property, the happiness of his family and friends, as well as the preservation of our national institutions, are closely connected with the condition, as to want or plenty, of the great mass of the people. Such a feeling arises from no theory, and is more frequently acted on than stated. The legislature, the government, the administrators of justice, the owners of land, the guardians of the poor, the great capitalists, live as it were in a perpetual struggle to repress or relieve poverty, or to punish the crimes to which it leads. On the other hand, those who labour for their subsistence, are called on to toil through the greater part of the day, and many of them find that excessive toil can scarcely procure them food. Their hearts are filled with discontent and repining at what some persons are prompt, without inquiry, to enforce on them, as the dispensations of Providence. The hopeless destitution which now characterises our industrious and skilful people, combined too with incessant calls on their industry, leads by no circuitous road to a regardlessness of the rights of other men, and even to scoffing at the justice of Providence—uprooting from their hearts the principles of honesty and virtue. All classes are deeply interested, therefore, in the inquiry into the causes of general poverty. This is the agitating topic for the present generation, before which, from its greater urgency, it seems likely, that the brawlings of party politicians and the ravings of selfish and intolerant fanatics will die away unheard and unnoticed.

By one party of reasoners, general poverty is attributed to natural and unalterable laws; by another it is said to be altogether the result of social institutions. To effect either good or ill, the latter have no power but what they derive from our assent; and it is therefore incumbent on us to distinguish between the effects of both, and not to call those evils the dispensations of Providence which we cause by our reverence for the decrees of men; and by our obedience to those who make the general welfare the mere stalking horse to their own ambition. Human society is not like a regiment of dragoons or a cotton manufactory, an instrument made and regulated by man. If the general welfare be not willed by Him who created and governs the world, legislators cannot achieve it; if it be, their interference is useless. The welfare of nations, or of mankind at large, is plainly no object attainable by human will; no purpose within human power to accomplish,—the means even by which it is to be accomplished being unknown to us; and no ambition is at once so monstrously absurd in principle and so injurious in its consequences, as that which aspires to regulate, not only the present, but the future condition of society.

Political Economists in our time, far from imitating the wise conduct of their master, have all participated in this infatuated ambition, and have all aspired to be legislators. They have also brought the science into disrepute by siding with those who call themselves the ministers of Providence, and who loudly proclaim the doctrine, that the poverty of the labourer is one of its dispensations. They have thus thrown doubts on the benevolence of the Author of Nature, and have weakened that conviction of his goodness and justice which is essential to our tranquillity, and which every other part of the universe seems to enforce. I have taken a different view from theirs, and cannot help believing that we shall always find in the increase of knowledge and extended division of labour,—the natural and necessary consequences of an increase of people,—a compensation, or even more than a compensation, for that decreasing fertility in soils, which is said by Political Economists and Statesmen, to add to the difficulty of procuring subsistence

as mankind multiply. On an assumption of this kind the latter class found the necessity for their interference; and the former describe as a natural phenomenon the present distribution of wealth; though it is in all its parts a palpable violation of that natural law which gives wealth to labour and to labour only; and though it is only maintained by an armed force, and by a system of cruel and bloody laws. I have taken a different view, which is, I think, confirmed by the condition of this country. Never were its people so numerous, and never were their productive powers so great as at present. Ever since our industry was released from the impediments of war, the complaint has been, that we possessed too much productive power. The markets here and abroad have been glutted with produce. Wheat has been rotting in Poland and other parts of the world, and the ground there has remained untilled because the Polish labourers could find no consumers for their produce; while the power of producing those commodities, for which the owners of wheat would gladly have exchanged it, has here been so great that its operation has very frequently been limited or wholly suspended; and those in whose hands this power lies have perished for want of that wheat which has rotted abroad. The distress our people suffer, therefore, and the poverty we all complain of, is not caused by nature, but by some social institutions, which either will not allow the labourer to exert his productive power, or which rob him of its fruits. I can never, therefore, join with those Political Economists, who seem even to be fond of calumniating Nature in order to uphold our reverence for the institutions of man. All the arguments they have urged in justification of their views, seem to be founded on the effects of some social institutions, which they assume to be natural laws. They stop short of first principles, and draw conclusions when they are acquainted with only half the circumstances on which a correct opinion can be founded. The laws regulating the production of wealth are a part of the creation, in which generally we trace only benevolence in the design and harmony in the execution; and I willingly therefore, adopt the language of Mr. Stewart, to express my belief, "that in the moral as in the material world, the farther we push our observations and the longer they are continued, the more we shall perceive of order and design in the universe;"—and I therefore can have no doubt that the science of Political Economy, which, from being imperfectly known, has thrown doubt, dismay, and terror over the minds of men, will be found when perfectly known, if I may apply to it the language of our most sublime poet, to—

"Justify the ways of God to man."

Thomas Hodgskin
Popular Political Economy
Four Lectures Delivered at the London Mechanics' Institution
1827