A TREATISE

ON

POLITICAL ECONOMY;

OR THE

PRODUCTION, DISTRIBUTION, AND CONSUMPTION

OF

WEALTH.

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CONTENTS.

BOOK I.

OF THE PRODUCTION OF WEALTH.

BOOK II.

OF THE DISTRIBUTION OF WEALTH.

BOOK III.

OF THE CONSUMPTION OF WEALTH.

glory and merit of invention and discovery in the field of industry. The charges of experiment, when defrayed by the government, are not subtracted from the national capital, but from the national revenue; for taxation never does, or, at least, never ought to touch any thing beyond the revenue of individuals. The portion of them so spent is scarcely felt at all, because the burthen is divided among innumerable contributors; and, the advantages resulting from success being a common benefit to all, it is by no means inequitable that the sacrifices, by which they are obtained, should fall on the community at large.

CHAPTER VII.

OF THE LABOUR OF MANKIND, OF NATURE, AND OF MACHINERY RESPECTIVELY.

By the term *labour* I shall designate that continuous action, exerted to perform any one of the operations of industry, or a part only of one of those operations.

Labour, upon whichever of those operations it be bestowed, is productive, because it concurs in the creation of a product. Thus the labour of the philosopher, whether experimental or literary, is productive; the labour of the adventurer or master-manufacturer is productive, although he perform no actual manual work; the labour of every operative workman is productive, from the common day-labourer in agriculture, to the pilot that governs the motion of a ship.

Labour of an unproductive kind, that is to say, such as does not contribute to the raising of the products of some branch of industry or other, is seldom undertaken voluntarily; for labour, under the definition above given, implies trouble, and trouble so bestowed could yield no compensation or resulting benefit: wherefore, it would be mere folly or waste in the person bestowing it. When trouble is directed to the stripping another person of the goods in his possession by means of fraud or violence, what was before mere extravagance and folly, degenerates to absolute criminality; and there results no production, but only a forcible transfer of wealth from one individual to another.

Man, as we have already seen, obliges natural agents, and even

than those which derive lustre from the deplorable exploits of military prowess. Among these will be preserved the names of *Olivier de Serres*, the father of French agriculture; the first who established an experimental farm; of *Duhamel*, of *Malsherbes*, to whom France is indebted for many vegetables now naturalized in her soil and climate: of *Lavoisier*, whose new system of chemistry has effected a still more important revolution in the arts; and of the numerous scientific travellers of modern times; for travels, with an useful object, may be regarded as adventures in the field of industry.

the products of his own previous industry, to work in concert with him in the business of production. There will, therefore, be no difficulty in comprehending the terms *labour* or *productive service* of nature, and *labour* or *productive service* of capital.

The labour performed by natural agents, and that executed by pre-existent products, to which we have given the name of capital, are closely analogous, and are perpetually confounded one with the other: for the tools and machines which form a principal item of capital, are commonly but expedients more or less ingenious, for turning natural powers to account. The steam engine is but a complicated method of taking advantage of the alternation of the elasticity of water reduced to vapour, and of the weight of the atmosphere. So that, in point of fact, a steam engine employs more productive agency, than the agency of the capital embarked in it: for that machine is an expedient for forcing into the service of man a variety of natural agents, whose gratuitous aid may perhaps infinitely exceed in value the interest of the capital invested in the machine.

It is in this light that all machinery must be regarded, from the simplest to the most complicated instrument, from a common file to the most expensive and complex apparatus. Tools are but simple machines, and machines but complicated tools, whereby we enlarge the limited powers of our hands and fingers; and both are, in many respects, mere means of obtaining the co-operation of natural agents.* Their obvious effect is to make less labour requisite for the raising the same quantity of produce, or, what comes exactly to the same thing, to obtain a larger produce from the same quantity of human labour.—And this is the grand object and the acme of industry.

Whenever a new machine, or a new and more expeditious process is substituted in the place of human labour previously in activity, part of the industrious human agents, whose service is thus ingeniously dispensed with, must needs be thrown out of employ. Whence many objections have been raised against the use of machinery, which has been often obstructed by popular violence, and sometimes by the act of authority itself.

To give any chance of wise conduct in such cases, it is necessary beforehand to acquire a clear notion of the economical effect resulting from the introduction of machinery.

A new machine supplants a portion of human labour, but does not diminish the amount of the product; if it did, it would be absurd to adopt it. When water-carriers are relieved in the supply of a city by any kind of hydraulic engine, the inhabitants are equally well supplied with water. The revenue of the district is at least as great, but it takes a different direction. That of the water-carriers is reduced, while that of the mechanists and capitalists, who furnish

* Generalization may at pleasure be carried still further; a landed estate may be considered as a vast machine for the production of grain, which is refitted and kept in repair by cultivation: or a flock of sheep as a machine for the raising of mutton or wool.

the funds, is increased. But, if the superior abundance of the product and the inferior charges of its production, lower its exchangeable value, the revenue of the consumers is benefited; for to them every saving of expenditure is so much gain.

This new direction of revenue, however advantageous to the community at large, as we shall presently see, is always attended with some painful circumstances. For the distress of a capitalist, when his funds are unprofitably engaged or in a state of inactivity, is nothing to that of an industrious population deprived of the means of subsistence.

Inasmuch as machinery produces that evil, it is clearly objectionable. But there are circumstances that commonly accompany its introduction, and wonderfully reduce the mischiefs, while at the same time they give full play to the benefits of the innovation. For,

1. New machines are slowly constructed, and still more slowly brought into use; so as to give time for those who are interested, to take their measures, and for the public administration to provide a remedy.*

2. Machines cannot be constructed without considerable labour, which gives occupation to the hands they throw out of employ. For instance, the supply of a city with water by conduits gives increased occupation to carpenters, masons, smiths, paviours, &c. in the construction of the works, the laying down the main and branch pipes, &c. &c.

3. The condition of consumers at large, and consequently, amongst them, of the class of labourers affected by the innovation, is improved by the reduced value of the product that class was occupied upon.

Besides, it would be vain to attempt to avoid the transient evil, consequential upon the invention of a new machine, by prohibiting its employment. If beneficial, it is or will be introduced somewhere or other; its products will be cheaper than those of labour conducted on the old principle; and sooner or later that cheapness will run away with the consumption and demand. Had the cotton spinners on the old principle, who destroyed the spinning-jennies on their introduction into Normandy, in 1789, succeeded in their object, France must have abandoned the cotton manufacture; every body would have bought the foreign article, or used some substitute; and the spinners of Normandy, who, in the end, most of them, found employment in the new establishments, would have been yet worse off for employment.

* Without having recourse to local or temporary restrictions on the use of new methods or machinery,-which are invasions of the property of the inventors or fabricators, a benevolent administration can make provision for the employment of supplanted or inactive labour in the construction of works of public utility at the public expense, as of canals, roads, churches, or the like; in extended colonization; in the transfer of population from one spot to another. Employment is the more readily found for the hands thrown out of work by machinery because they are commonly already inured to labour.

So much for the immediate effect of the introduction of machinery. The ultimate effect is wholly in its favour.

Indeed if by its means man makes a conquest of nature, and compels the powers of nature and the properties of natural agents to work for his use and advantage, the gain is too obvious to need illustration. There must always be an increase of product, or a diminution in the cost of production. If the sale-price of a product do not fall, the acquisition redounds to the profit of the producer; and that without any loss to the consumer. If it do fall, the consumer is benefited to the whole amount of the fall, without any loss to the producer.

The multiplication of a product commonly reduces its price, that reduction extends its consumption; and so its production, though become more rapid, nevertheless gives employment to more hands than before. It is beyond question, that the manufacture of cotton now occupies more hands in England, France, and Germany, than it did before the introduction of the machinery that has abridged and perfected this branch of manufacture in so remarkable a degree.

Another striking example of a similar effect is presented by the machine used to multiply with rapidity the copies of a literary performance,—I mean the printing press.

Setting aside all consideration of the prodigious impulse given by the art of printing to the progress of human knowledge and civilization, I will speak of it merely as a manufacture, and in an economical point of view. When printing was first brought into use, a multitude of copyists were of course immediately deprived of occupation; for it may be fairly reckoned, that one journeyman printer does the business of two hundred copyists. We may, therefore, conclude, that 199 out of 200 were thrown out of work. What followed? Why, in a little time, the greater facility of reading printed than written books, the low price to which books fell, the stimulus this invention gave to authorship, whether devoted to amusement or instruction, the combination, in short, of all these causes, operated so effectually as to set at work, in a very little time, more journeymen printers than there were formerly copyists. And if we could now calculate with precision, besides the number of journeymen printers, the total number of other industrious people that the press finds occupation for, whether as type-founders and moulders, paper-makers, carriers, compositors, bookbinders, booksellers, and the like, we should probably find, that the number of persons occupied in the manufacture of books is now 100 times what it was before the art of printing was invented.

It may be allowable to add, that viewing human labour and machinery in the aggregate, in the supposition of the extreme case, viz. that machinery should be brought to supersede human labour altogether, yet the numbers of mankind would not be thinned; for the sum total of products would be the same, and there would probably be less suffering to the poorer and labouring classes to be apprehend-

ed; for in that case the momentary fluctuations, that distress the different branches of industry, would principally affect machinery, which, and not human labour, would be paralyzed; and machinery cannot die of hunger; it can only cease to yield profit to its employers, who are generally farther removed from want than mere labourers.

But however great may be the advantages, which the adventurers in industry, and even the operative classes, may ultimately derive from the employment of improved machinery, the great gain accrues to the consumers, which is always the most important class, because it is the most numerous; because it comprehends every description of producers whatever; and because the welfare of this class, wherein all others are comprised, constitutes the general well-being and prosperity of a nation.* I repeat, that it is the consumers who draw the greatest benefit from machinery; for though the inventor may indeed for some years enjoy the exclusive advantage of his invention, which it is highly just and proper he should, yet there is no instance of a secret remaining long undivulged. Nothing can long escape publicity, least of all what people have a personal interest in discovering, especially if the secret be necessarily confided to the discretion of a number of persons employed in constructing or in working the machine. The product is thenceforward cheapened by competition to the full extent of the saving in the cost of production; and thenceforward begins the full advantage to the consumer.—The grinding of corn is probably not more profitable to the miller now than formerly; but it costs infinitely less to the consumer.

Nor is cheapness the sole benefit that the consumer reaps from the introduction of more expeditious processes: he generally gains in addition the greater perfection of the product. Painters could undoubtedly execute with the brush or pencil the designs that ornament our printed calicoes and furniture papers, but the copperplates and rollers employed for that purpose give a regularity of pattern, and uniformity of colour, which the most skilful artist could never equal.

The close pursuit of this inquiry through all the arts of industry would show, that the advantage of machinery is not limited to the bare substitution of it for human labour, but that, in fact, it gives a positive new product, inasmuch as it gives a degree of perfection before unknown. The flatting-mill and the die execute products, that the utmost skill and attention of the human hand could never accomplish.

In fine, machinery does still more; it multiplies products with which it has no immediate connexion. Without taking the trouble to reflect, one perhaps would scarcely imagine that the plough, the harrow, and other similar machines, whose origin is lost in the night

* Paradoxical as it may appear, it is nevertheless true, that the labouring class is of all others the most interested in promoting the economy of human labour; for that is the class which benefits the most by the general cheapness, and suffers most from the general dearness of commodities.

of ages, have powerfully contributed to procure for mankind, besides the absolute necessaries of life, a vast number of the superfluities they now enjoy, whereof they would otherwise never have had any conception. Yet, if the different dressings the soil requires could be no otherwise given, than by the spade, the hoe, and other such simple and tardy expedients, if we were unable to make available in agricultural production those domestic animals, that, in the eye of political economy, are but a kind of machines, it is most likely that the whole mass of human labour, now applicable to the arts of industry, would be occupied in raising the bare necessary subsistence of the actual population. Thus, the plough has been instrumental in releasing a number of hands for the prosecution of the arts, even of the most frivolous kind; and what is of more importance, for the cultivation of the intellectual faculties.

The ancients were unacquainted with water or wind-mills. In their time, the wheat their bread was made of, was pounded by the labour of the hand: so that perhaps no less than twenty individuals were occupied in pounding as much wheat as one mill can grind.* Now a single miller, or two at the most, is enough to feed and superintend a mill. By the aid, then, of this ingenious piece of mechanism, two persons are as productive as twenty were in the days of Cæsar. Wherefore, in every one of our mills, we make the wind, or a current of water, do the work of eighteen persons; which eighteen extra persons are just as well provided with subsistence; for the mill has in no respect diminished the general produce of the community: and whose exertions may be directed to the creation of new products, to be given by them in exchange for the produce of the mill; thereby augmenting the general wealth of the community.†

CHAPTER VIII.

OF THE ADVANTAGES AND DISADVANTAGES RESULTING FROM DIVISION OF LABOUR, AND OF THE EXTENT TO WHICH IT MAY BE CARRIED.

We have already observed that the several operations, the combination of which forms but one branch of industry, are not in general undertaken or performed by the same person; for they commonly

* Homer tells us, in the Odyssey, b. xx., that twelve women were daily employed in grinding corn for the family consumption of Ulysses, whose establishment is not represented as larger than that of a private gentleman of fortune of modern days.

† Since the publication of the third edition of this work, M. de Sismondi has published his *Nouveaux Principes d'Economie Politique*. This valuable writer seems to have been impressed with an exaggerated notion of the transient evils

require different kinds of talent; and the labour requisite to each is enough to take up a man's whole time and attention. Nay, in some instances, a single one of these operations is split again into smaller subdivisions, each of them sufficient for one person's exclusive occupation.

Thus, the study of nature is shared amongst the chemist, the botanist, the astronomer, and many other classes of students in philosophy.

Thus, too, in the application of human knowledge to the satisfaction of human wants, in manufacturing industry, for instance, we find different classes of manufacturers employed exclusively in the fabric of woollens, pottery, furniture, cottons, &c. &c.

Finally, in the executive part of each of the three branches of industry, there are often as many different classes of workmen as there are different kinds of work. To make the cloth of a coat, there must have been set to work the several classes of spinners, weavers, dressers, shearers, dyers, and many other classes of labourers, each of whom is constantly and exclusively occupied upon one operation.

The celebrated Adam Smith was the first to point out the immense increase of production, and the superior perfection of products referable to this division of labour.* He has cited among other

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and a faint one of the permanent benefits of machinery, and to be utterly unacquainted with those principles of the science, which place those benefits beyond controversy. (*a*)

* *Beccaria*, in a public course of lectures on political economy, delivered at Milan in the year 1769, and before the publication of Smith's work, had remarked the favourable influence of the division of labour upon the multiplication of products. These are his words: "*Ciascuno prova coll' esperienza, che, applicando la mano e l'ingegne sempre allo stesso genere di opere e di prodotti, egli piu facilli, piu abondanti e migliori ne travo i resultati, di quello, che se ciascuno isolatamente le cose tutte a se necessarie soltanto facesse: onde altri pascono le pecore, altri ne cardano le lane, altri le tessonoe: chi coltiva biade, chi ne fa il pane: chi veste, chi fabrica agli agricoltorie la voranti; crescendo e concatenandosi le arti, e dividendosi in tal maniera, per la commune e privata utilità gli nomini in varie classi e condizioni.*" . "We all know, by personal experience, that, by the continual application of the corporeal and intellectual faculties to one peculiar kind of work or product, we can obtain the product with more ease, and in greater abundance and perfection, than if each were to depend upon his own exertions for all the objects of his wants. For this reason, one man feeds sheep, a second cards the wool, and a third weaves it: one man cultivates wheat, another makes bread, another makes clothing or lodging for the cultivators and mechanics: this multiplication and concatenation of the arts, and division of mankind into a variety of classes and conditions, operating to promote both public and private welfare."

However, I have given Smith the credit of originality in his ideas of the division of labour; first, because, in all probability, he had published his opinions from his chair of professor of philosophy at Glasgow before Beccaria, as it is

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(*a*) Our author, in his recent argument with Malthus, upon the subject of the excess of manufacturing power and produce, appears to me to have completely vindicated his own positions against the attacks of Sismondi and Malthus; and to have exposed the fallacy of the appalling doctrine, that the powers of human industry can ever be too great and too productive.—*Vide Letters à M. Malthus*

examples, the manufacture of pins. The workmen occupied in this manufacture execute each but one part of a pin. One draws the wire, another cuts it, a third sharpens the points. The head of a pin alone requires two or three distinct operations, each performed by a different individual. By means of this division, an ill-appointed establishment, with but ten labourers employed, could make 48,000 pins per day, by Smith's account. Whereas, if each person were obliged to finish off the pins one by one, going through every operation successively from first to last, each would probably make but 20 per day, and the ten workmen would produce in the whole but 200, in lieu of 48,000.

Smith attributes this prodigious difference to three causes:

1. The improved dexterity, corporeal and intellectual, acquired by frequent repetition of one simple operation. In some fabrics the rapidity with which some of the operations are performed exceeds what the human hand could, by those who had never seen them, be supposed capable of acquiring.

2. The saving of the time which is commonly lost in passing from one species of work to another, and in the change of place, position, and tools. The attention, which is always slowly transferred, has no occasion to transport itself and settle upon a new object.

3. The invention of a great number of machines, which facilitate and abridge labour in all its departments. For the division of labour naturally limits each operation to an extremely simple task, and one that is incessantly repeated; which is precisely what machinery may most easily be made to perform.

Besides, men soonest discover the methods of arriving at a particular end, when the end is approximate, and their attention exclu-

well known he did the principles that form the ground-work of his book; but chiefly because he has the merit of having deduced from them the most important conclusions. (1)

(1) [*All* the fundamental doctrines contained in the Inquiry into the Wealth of Nations, were comprehended in Dr. Smith's course of political lectures, delivered at Glasgow as early as the year 1752; "at a period surely," says Dugald Stewart, "when there existed no French (and he might have added, nor Italian) performance on the subject, that could be of much use to him in guiding his researches." A short manuscript, drawn up by Dr. Smith in the year 1755, fully establishes his exclusive claim to the most important opinions detailed in his treatise on the Wealth of Nations, which did not appear until the beginning of the year 1776. "A great part of the opinions enumerated in this paper, (he observes,) is treated of at length in some lectures which I have still by me (1755,) and which were written in the hand of a clerk who left my service six years ago. They have all of them been the constant subject of my lectures, since I first taught Mr. Craigie's class, the first winter I spent in Glasgow, down to this day, without any considerable variation.—They had all of them been the subject of lectures which I read in Edinburgh the winter before I left it, and I can adduce innumerable witnesses, both from that place and from this, who will ascertain them sufficiently to be mine." Vide Mr. Stewart's Account of the Life and Writings of Adam Smith, LL. D. read before the Royal Society of Edinburgh, January 21 and March 18, 1793.]

American Editor.

sively directed to it. Discoveries, even in the walk of philosophy, are for the most part referable, in their origin, to the subdivision of labour; because it is this subdivision that enables men to devote themselves to the exclusive pursuit of one branch of knowledge; which exclusive devotion has wonderfully favoured their advancement.*

Thus the knowledge or theory necessary to the advancement of commercial industry for instance, attains a far greater degree of perfection, when different persons engage in the several studies; one of geography, with the view of ascertaining the respective position and products of different countries; another of politics, with a view to inform himself of their national laws and manners, and the advantages and disadvantages of commercial intercourse with them; a third of geometry and mechanics, by way of determining the preferable form of the ships, carriages, and machinery of all kinds, that must be employed; a fourth of astronomy and natural philosophy, for the purposes of navigation, &c. &c.

Thus, too, the application of knowledge in the same department of commercial industry will obviously arrive at a higher degree of perfection, when divided amongst the several branches of internal, Mediterranean, East and West Indian, American, wholesale and retail, &c. &c.

Moreover, such a division is no obstacle to the combination of operations not altogether incompatible, more especially if they aid and assist each other. There is no occasion for two different merchants to conduct, one the trade of import for home consumption, and the other the trade of export of home products; because these operations, far from clashing, mutually facilitate and assist each other. (*a*)

The division of labour cheapens products, by raising a greater quantity at the same or less charge of production. Competition soon obliges the producer to lower the price to the whole amount of the saving effected; so that he derives much less benefit than the consumer; and every obstacle the latter throws in the way of that division is an injury to himself.

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* But though many important discoveries in the arts have originated in division of labour, we must not refer to that source the actual products that have resulted, and will to eternity result, from those discoveries. The increased product must flow from the productive power of natural agents, no matter what may have been the occasion of our first becoming acquainted with the means of employing those agents. *Vide supra*, Chap. IV.

(*a*) The combination of operations which at first sight appears to be distinct, is far more practicable in what our author calls the branch of application, than in either the theoretical or the executive branch. A general merchant, by means of clerks and brokers, will combine a vast variety of different commercial operations, and yet prosper. Why? Because his own peculiar task is that of superintendence of commercial dealings; which superintendence may be extended over a greater surface of dealing without incongruity, being on a closer inspection, but a repetition of the same operation. T.

Should a tailor try to make his own shoes as well as his coat, he would infallibly ruin himself.* We see every day people acting as their own merchants, to avoid paying a regular trader the ordinary profit of his business; to use their own expression, with the view of pocketing that profit themselves. But this is an erroneous calculation; for this division of labour enables the regular dealer to execute the business for them much cheaper than they can do it themselves. Let them reckon up the trouble it costs them, the loss of time, the money thrown away in extra charges, which is always proportionally more in small than in large operations, and see if all these together do not amount to more than the two or three per cent. that might be saved on every paltry item of consumption; even supposing them not to be deprived of what little advantage they might expect, by the avarice of the cultivator or manufacturer they would have to deal directly with, who will of course impose, if he can, upon their inexperience.

It is no advantage, even to the cultivator or manufacturer himself, except under very particular circumstances, to intrude upon the province of the merchant, and endeavonr to deal directly with the consumer without his intervention. He would only divert his attention from his ordinary occupation, and lose time that might be far better employed in his own peculiar line; besides being under the necessity of keeping up an establishment of people, horses, carriages, &c. the expenses of which would far exceed the merchant's profit, reduced as it always must be by competition.

The advantages accruing from division of labour can be enjoyed in respect of particular kinds of products only; and not in them, until their consumption has exceeded a certain point of extension. Ten workmen can make 48,000 pins in a day; but would hardly do so, unless where there was a daily consumption of pins to that amount; for, to arrive at this degree of division of labour, one workman must be wholly and exclusively occupied in sharpening the points, while the rest are severally engaged, each in a different part of the process. If there be a daily demand for no more than 24,000, he must needs lose half his day's work, or change his occupation, in which case, the division of labour will be less extensive and complete.

For this reason, divisions of labour cannot be carried to the extreme limit, except in products capable of distant transport and the consequent increase of consumption; or where manufacture is carried on amidst a dense population, offering an extensive local consumption. For the same reason, too, many kinds of work, the products of which are destined to instantaneous consumption, are executed by the same individual, in places where the population is limited. In a small town or village, the same person is often barber, surgeon, doctor,

*The low price of sugar in China is probably occasioned, in part, by the circumstance of the grower leaving to a separate class the extraction of the sugar from the cane. This operation is performed by itinerant sugar pressers, who go from house to house, offering their services, and provided with an extremely simple apparatus. *Vide* Macartney's Embassy, vol. iv. p. 198.

and apothecary; while in a populous city, and there only, these are not merely separate and distinct occupations, but some of them are again subdivided into several branches; that of the surgeon, for instance, is split into the several occupations of dentist, oculist, accoucher, &c.; each of which practitioners, by confining his practice to a single branch of this extensive art, acquires a degree of skill, which, but for this division, he could never attain.

The same circumstance applies equally to commercial industry. Take the village grocer; the consumption of his groceries is so limited, as to oblige him to be at the same time haberdasher, stationer, innkeeper, and who knows what, perhaps even news-writer and publisher; whereas in large cities, not only grocery at large, but even the sale of a single article of grocery, is a great commercial concern. At Paris, London, and Amsterdam, there are shops, where nothing else is sold but the single article tea, oil or vinegar; and it is natural to suppose that such shops have a much better assortment of the single article, than those dealing in many different commodities at once. Thus, in a rich and populous country, the carrier, the wholesale, the intermediate, and the retail dealer conduct each a separate branch of commercial industry, and conduct it with greater perfection as well as greater economy. Yet they all benefit by this economy; and that they do so, if the explanations already given are not convincing, experience bears irrefragable testimony; for consumers always buy cheapest where commercial industry is the most subdivided. *Ceteris paribus*, a commodity brought from the same distance is sold cheaper at a large town or fair, than in a village or hamlet.

The limited consumption of hamlets and villages, besides obliging dealers to combine many elsewhere distinct occupations, prevents many articles from finding a regular sale at all seasons. Some are not presented for sale at all, except on market or fair days; on such days the whole week's or perhaps year's consumption is laid in. On all other days, the dealer either travels elsewhere with his wares, or finds some other kind of occupation. In a very rich and very populous district, the consumption is so great, as to make the sale of one article only, quite as much as a trader can manage, though he devote every day in the week to the business. Fairs and markets are expedients of an early stage of national prosperity; the trade by caravans is a still earlier stage of international commerce; but even these expedients are far better than none at all.*

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*The country markets of France not only exhibit extreme inertness in particular channels of consumption; but a very cursory observation is sufficient to show, that the sale of products in them is very limited, and the quality of what are sold very inferior. Besides the local products of the district, one sees nothing there, except a few tools, woollens, linens, and cottons of the most inferior quality. In a more advanced stage of prosperity, one would find some few objects of gratification of wants peculiar to a more refined state of existence: some articles of furniture combining convenience and elegance of form; woollens of some variety of fineness and pattern; articles of food of a more expensive kind, whe-

From the necessity of the existence of a very extended consumption, before division of labour can be carried to its extreme point, it follows, that such division can never be introduced in the manufacture of products, which, from their high price, are placed within the reach of few purchasers. In jewellery, especially of the better kinds, it is practised in a very limited degree; and such division being, as we have seen, one cause of the invention and application of ingenious processes, it is not surprising that such processes are least often met with in the preparation of products of highly finished workmanship. In visiting the workshop of a lapidary, one is often dazzled with the costliness of the materials, and the skill and patience of the workman; but it is only in the grand manufactories of articles of universal consumption, that one is astonished with the display of ingenuity employed to give additional expedition and perfection to the product. In looking at an article of jewellery, it is easy to form an idea of the tools and processes, by means of which it has been executed; whereas few people, on viewing a common stay-lace, would suppose it had been made by a horse or a current of water, which is actually the case.

Of the three branches of industry, agriculture is the one that admits division of labour in the least degree. It is impossible to collect any great number of cultivators on the same spot, to use their joint exertions in the raising of one and the same product. The soil they work upon is extended over the whole surface of the globe, and obliges them to work at considerable distance from each other. Besides, agriculture does not allow of one person being continually employed in the same operation. One man cannot be all the year ploughing or digging, any more than another can find constant occupation in gathering in the crop. Moreover, it is very rarely that the whole of one's land can be devoted to the same kind of cultivation, or that the same kind of cultivation can be continued on the same spot for many successive years. The land would be exhausted; and, supposing the cultivation of the whole property to be uniform, yet even then, the preparing and dressing of the whole ground, and the getting in of the whole of the crops, would come on at the same time, and the labourers be unoccupied at other periods of the year.*

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ther on account of their preparation or the distance they may have been brought from; a few works of instruction or tasteful amusement; a few books besides mere almanacs and prayer-books. In a still more advanced stage, the consumption of all these things would be constant and extensive enough to support regular and well-stocked shops in all these different lines. Of this degree of wealth examples are to be found in Europe, particularly in parts of England, Holland, and Germany.

* It is not common to meet with such large concerns in agriculture, as in the branches of commerce and manufacture. A farmer or proprietor seldom undertakes more than four or five hundred acres; and his concern, in point of capital and amount of produce, does not exceed that of a middling tradesman, or manufacturer. This difference is attributable to many concurrent causes; chiefly to the extensive area this branch of industry requires; to the bulky nature of the

Moreover, the nature of his occupation and of agricultural products makes it highly convenient for the cultivator to raise his own vegetables, fruit, and cattle, and even to manufacture part of the tools and utensils employed in his house-keeping; though in the other channels of industry, these items of consumption give exclusive occupation to a number of distinct classes.

Where concerns of industry are carried on in manufactories, in which one and the same master manufacturer conducts the product through all its stages, he can never establish any great subdivision of the various operations, without great command of capital. For such division requires larger advances of wages, of raw materials, and of tools and implements. Where eighteen workmen manufacture but twenty pins each per day, that is to say, in all 360 pins, weighing scarcely an ounce of metal, the daily advance of an ounce of fresh metal is enough to keep them in regular work. But if, in consequence of division of labour, these same eighteen persons can be brought, as we know they can, to produce 86,400 pins, the daily supply of raw material requisite for their regular employ will be 240 ounces weight of metal; consequently a much more considerable advance will be called for. If we further take into calculation, that there is an interval of probably a month or more, from the purchase of the metal by the manufacturer to the period of his reimbursement by the sale of his pins, we shall find that he must necessarily have at all times on hand, in different stages of progressive manufacture, 30 times 240 ounces of metal; in other words, the portion of his capital vested in raw material alone will amount to the value of 450 lbs. of metal. In addition to which, it must be observed, that the division of labour cannot be effected without the aid of various implements and machines, that form themselves an important item of capital. Thus, in poor countries, we frequently find a product carried through all its stages, from first to last, by one and the same workman, from mere want of the capital requisite for a judicious division of the different operations.

We must not however suppose, that, to effect this division of labour, it is necessary the capital should be placed all in the hands of a single adventurer, or the business conducted all within the walls of one grand establishment. A pair of boots undergoes a variety of processes, whereof all are not executed by the bootmaker alone; the grazier, the tanner, the currier, all others, who immediately or remotely furnish any substance or tool used in the making of boots, contribute to the raising of the product; and though there is a very considerable subdivision of labour in the making of this article, the

produce, and consequently difficulty of collecting it at one point from the distant parts of the farm, or sending it to very remote markets; to the nature of the business itself, which is not susceptible of any regular and uniform system, and requires in the adventurer a succession of temporary expedients and directions, suggested by the difference of culture, of manuring and dressings, and the variety of each labourer's occupations, according to the seasons, the change of weather &c.

greater part of the joint and concurrent producers may have very little command of capital.

Having detailed the advantages of the subdivision of the various occupations of industry, and the extent to which it may be carried, the view of the subject would be incomplete, were we to omit noticing, on the other hand, the inconveniences that inseparably attend it.

A man, whose whole life is devoted to the execution of a single operation, will most assuredly acquire the faculty of executing it better and quicker than others; but he will, at the same time, be rendered less fit for every other occupation, corporeal or intellectual; his other faculties will be gradually blunted or extinguished; and the man, as an individual, will degenerate in consequence. To have never done any thing but make the eighteenth part of a pin, is a sorry account for a human being to give of his existence. Nor is it to be imagined that this degeneracy from the dignity of human nature is confined to the labourer, that plies all his life at the file or the hammer; men, whose professional duties call into play the finest faculties of the mind, are subject to similar degradation. This division of occupations has given rise to the profession of attorneys, whose sole business it is to appear in the courts of justice instead of the principals, and to follow up the different steps of the process on their behalf. These legal practitioners are, confessedly, seldom deficient in technical skill and ability; yet it is not uncommon to meet with men, even of eminence in this profession, wholly ignorant of the most simple processes of the manufactures they every day make use of; who, if they were set to work to mend the simplest article of their furniture, would scarcely know how to begin, and could probably not drive a nail, without exciting the risibility of every carpenter's awkward apprentice; and if placed in a situation of a greater emergency, called upon, for instance, to save a drowning friend, or to rescue a fellow-townsman from a hostile attack, would be in a truly distressing perplexity; whereas a rough peasant, inhabiting a semi-barbarous district, would probably extricate himself from a similar situation with honour.

With regard to the labouring class, the incapacity for any other than a single occupation, renders the condition of mere labourers more hard and wearisome, as well as less profitable. They have less means of enforcing their own rights to an equitable portion of the gross value of the product. The workman, that carries about with him the whole implements of his trade, can change his locality at pleasure, and earn his subsistence wherever he pleases: in the other case, he is a mere adjective, without individual capacity, independence, or substantive importance, when separated from his fellow-labourers, and obliged to accept whatever terms his employer thinks fit to impose.

On the whole, we may conclude, that division of labour is a skilful mode of employing human agency, that it consequently multiplies the productions of society; in other words, the powers and the enjoy-

ments of mankind; but that it in some degree degrades the faculties of man in his individual capacity. (*a*) (1)

CHAPTER IX.

OF THE DIFFERENT METHODS OF EMPLOYING COMMERCIAL INDUSTRY, AND THE MODE IN WHICH THEY CONCUR IN PRODUCTION.

COMMODITIES are not all to be had in all places indifferently. The immediate products of the earth depend upon the local varieties of soil and climate; and even the products of industry are met with only in such places as are most favourable to their production.

Whence it follows that, where products, whether of industry or of the earth, do not grow naturally, they can not be introduced or produced in a perfect state, and fit for consumption, without undergoing a certain modification; that is to say, that of transport or conveyance.

This transfer gives occupation to what has been called commercial industry.

External commerce consists of the supply of the home market with foreign, and of foreign markets with home products.*

Wholesale commerce is the buying of large quantities and re-selling to inferior dealers.

Retail commerce is the buying of wholesale dealers, and re-selling to consumers.

*Products that are bought to be re-sold, are called *merchandise;* and merchandise bought for consumption is denominated *commodities.* (*b*)

(*a*) This consideration makes it peculiarly incumbent upon the government of a manufacturing nation to diffuse the benefits of early education, and thus prevent the degeneration from being intellectual as well as corporeal. T.

(*b*) This distinction has been discarded in the translation, for the sake of simplification; the general term products being sufficiently intelligible and specific. T.

(1) ["The extensive propagation of light and refinement," says DUGALD STEWART, "arising from the influence of the press, aided by the spirit of commerce, seems to be the remedy to be provided by nature against the fatal effects which would otherwise be produced, by the subdivision of labour accompanying the progress of the mechanical arts: nor is any thing wanting to make the remedy effectual, but wise institutions to facilitate general instruction, and to adapt the education of individuals to the stations they are to occupy. The mind of the artist, which, from the limited sphere of his activity, would sink below the level of the peasant or the savage, might receive in infancy the means of intellectual enjoyment and the seeds of moral improvement; and even the insipid uniformity of his professional engagements, by presenting no object to awaken his ingenuity or to distract his attention, might leave him at liberty to employ his faculties on subjects more interesting to himself, and more extensively useful to others."]

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