CHAPTER I

Of the Division of Labour

The greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is anywhere directed, or applied, seem to have been the effects of the division of labour.

The effects of the division of labour, in the general business of society, will be more easily understood, by considering in what manner it operates in some particular manufactures. It is commonly supposed to be carried furthest in some very trifling ones; not perhaps that it really is carried further in them than in others of more importance; but in those trifling manufactures which are destined to supply the small wants of but a small number of people, the whole number of workmen must necessarily be small; and those employed in every different branch of the work can often be collected into the same workhouse,

1 [This phrase, if used at all before this time, was not a familiar one. Its presence here is probably due to a passage in Mandeville, *Fable of the Bees*, pt. ii. (1720), dis. vi. p. 311, 'Cæs., . . . When once men come to be governed by written laws, all the rest comes on space. No number of men, when once they enjoy spate, and no man needs to fear his neighbour, will be long without learning to divide and subdivide their labour. Here I don't understand you. Cæs. Man, as I have hinted before, naturally loves to imitate what he sees others do, which is the reason that savage people all do the same things; this hinders them from mending their condition, though they are always wishing for it: but if one will wholly apply himself to the making of bows and arrows, whilst another provides fowls, a third builds huts, a fourth makes garments, and a fifth utensils, they not only become useful to one another, but the callings and employments themselves will, in the same number of years, receive much greater improvements, than if all had been precociously followed by every one of the five. Here I believe you are perfectly right; and the truth of what you say it is nothing so conspicuous as it is in war-making, which is come to a higher degree of perfection than it would have been arrived at yet, if the whole had always ressembled the employment of one person; and I am persuaded that even the plenty we have of clocks and the division that has been made of that art into many branches. The index contains, 'Labour. The usefulness of dividing and subdividing it.' Joseph Harris, *Essay upon Money and Credit*, 1755, p. 1, § 12, treats of the 'usefulness of distinct trades,' or 'the advantages arising to mankind from their being dispersed to different occupations,' but does not use the phrase 'division of labour.']

2 [Ed. reads 'Improvements.']
and placed at once under the view of the spectator. In these great manufactures, on the contrary, which are destined to supply the great wants of the great body of the people, every different branch of the work employs so great a number of workmen, that it is impossible to collect them all into the same workhouse. We can seldom see more, at one time, than those employed in one single branch. Though in such manufactures, therefore, the work may really be divided into a much greater number of parts, than in those of a more trifling nature, the division is not so obvious, and has accordingly been much less observed.

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 the 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 straightens 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 manufactury 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 forty, 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.

The effect is similar in all trades and also in the division of employments.

In every other art and manufacture, the effects of the division of labour are similar to what they are in this very trifling one; though, in many of them, the labour can neither be so much subdivided, nor reduced to so great a simplicity of operation. The division of labour, however, so far as it can be introduced, occasions, in every art, a proportionable increase of the productive powers of labour. The separation of different trades and employments from one another, seems to have taken place, in consequence of this advantage. This separation too is generally carried furthest in those countries which enjoy the highest degree of industry and improvement; what is the work of one man in a rude state of society, being generally that of several in an improved one. In every improved society, the farmer is generally nothing but a farmer; the manufacturer, nothing but a manufacturer. The labour too which is necessary to produce any one complete manufacture, is almost always divided among a great number of hands. How many different trades are employed in each branch of the linen and woollen manufactures, from the growers of the flax and the wool, to the bleachers and smoothers of the linen, or to the dyers and dressers of the cloth! The nature of agriculture, indeed, does not admit of so many subdivisions of labour, nor of so complete a separation of one business from another, as manufactures. It is impossible to separate so entirely, the business of the grazier.

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1 [Ed. i. ed. 'Though in them.']
2 [Another and perhaps more important reason for taking an example like that which follows is the possibility of exhibiting the advantage of division of labour in statistical form.]
3 [This parenthesis would alone be sufficient to show that there are wrong who believe Smith did not include the separation of employments in 'division of labour'.]
4 [In Adam Smith's Lectures, p. 164, the business is, as here, divided into eighteen operations. This number is doubtless taken from the Biographical, tom. v. (published in 1752), i.e. Biographie. The article is ascribed to M. Delisle, 'qui decidait la fabrication de l'epingle dans les ateliers ménés des ouvriers,' p. 907. In some factories the division was carried further. E. Chambers, Cyclopaedia, vol. ii., 2nd ed., 1738, and 4th ed., 1741, p. 569, Pin, makes the number of separate operations twenty-five.]
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from that of the corn-farmer, as the trade of the carpenter is commonly separated from that of the smith. The spinner is almost always a distinct person from the weaver; but the ploughman, the harrower, the sower of the seed, and the reaper of the corn, are often the same. The occasions for those different sorts of labour returning with the different seasons of the year, it is impossible that one man should be constantly employed in any one of them. This impossibility of making so complete and entire a separation of all the different branches of labour employed in agriculture, is perhaps the reason why the improvement of the productive powers of labour in this art, does not always keep pace with their improvement in manufactures. The most opulent nations, indeed, generally excel all their neighbours in agriculture as well as in manufactures; but they are commonly more distinguished by their superiority in the latter than in the former. Their lands are in general better cultivated, and having more labour and expence bestowed upon them, produce more in proportion to the extent and natural fertility of the ground. But this superior degree of produce is seldom much more than in proportion to the superiority of labour and expence. In agriculture, the labour of the rich country is not always much more productive than that of the poor; or, at least, it is never so much more productive, as it commonly is in manufactures. The corn of the rich country, therefore, will not always, in the same degree of goodness, come cheaper to market than that of the poor. The corn of Poland, in the same degree of goodness, is as cheap as that of France, notwithstanding the superior opulence and improvement of the latter country. The corn of France is, in the corn provinces, fully as good, and in most years nearly about the same price with the corn of England, though, in opulence and improvement, France is perhaps inferior to England. The corn-lands of England, however, are better cultivated than those of France, and the corn-lands

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the climate of England as that of France. But the hard-ware and the coarse woollens of England arc beyond all comparison superior to those of France, and much cheaper too in the same degree of goodness. In Poland there are said to scarce any manufactures of any kind, a few of those coarser household manufactures excepted, without which no country can well subsist.

The advantage is due to three circumstances.

This great increase of the quantity of work which, in consequence of the division of labour, the same number of people are capable of performing, is owing to three different circumstances; first to the increase of dexterity in every particular workman; secondly, to the saving of the time which is commonly lost in passing from one species of work to another; and lastly, to the invention of a great number of machines which facilitate and abridge labour, and enable one man to do the work of many.

1 Improved dexterity.

First, the improvement of the dexterity of the workman necessarily increases the quantity of the work he can perform; and the division of labour, by reducing every man's business to some one simple operation, and by making this operation the sole employment of his life, necessarily increases very much the dexterity of the workman. A common smith, who, though accustomed to handle the hammer, has never been used to make nails, if upon some particular occasion he is obliged to attempt it, will scarce, I am assurred, be able to make above two or three hundred nails in a day, and those too very bad ones. A smith who has been accustomed to make nails, but whose sole or principal business has not been that of a nailer, can seldom with his utmost diligence

1 Ed. 1 reads 'because the silk manufacture does not suit the climate of England.']

1 In Lectures, p. 164, the comparison is between English and French 'tours,' i.e., small metal articles.

1 Ed. 1 places 'in consequence of the division of labour' here instead of in the line above.

4 For la diligence du travail et la perfection de l'ouvrage, elles dépendent entièrement de la multitude des ouvriers réunis. Lorsqu'une manufacture est nombreuse, chaque opération occupe un homme différent. Tel ouvrier ne fait et ne fera de sa vie qu'une seule et unique chose; tel autre une autre chose; et il arrive que chacune s'execute bien et promptement, et que l'ouvrage le mieux fait soit encore celui qu'il a à meilleur marché. D'allérer le goût et la façon à perfectionnement nécessairement entre un grand nombre d'ouvriers, parce qu'il est difficile qu'il ne s'en rencontre quelques-uns capables de réflechir, de combiner, et de traverser enfin le sentier moyen qui laisse les mettre au-dessus de leurs semblables; le moyen ou d'épargner la main-d'œuvre, ou d'alléger le temps, ou de surpasser l'industrie, soit par une machine nouvelle, soit par une manœuvre plus commode.'—Encyclopédie, tom. 1. (1751), p. 717. xiv. Art. All three advantages mentioned in the text above are included here.

5 In Lectures, p. 266, 'a country smith not accustomed to make nails will work very hard for three or four hundred a day and those too very bad.']
make more than eight hundred or a thousand nails in a day. I have seen several boys under twenty years of age who had never exercised any other trade but that of making nails, and who, when they exerted themselves, could make, each of them, upwards of two thousand three hundred nails in a day.\(^1\) The making of a nail, however, is by no means one of the simplest operations. The same person blows the bellows, stirs or mends the fire as there is occasion, heats the iron, and forges every part of the nail: in forging the head too he is obliged to change his tools. The different operations into which the making of a pin, or of a metal button,\(^8\) is subdivided, are all of them much more simple, and the dexterity of the person, of whose life it has been the sole business to perform them, is usually much greater. The rapidity with which some of the operations of those manufactures are performed, exceeds what the human hand could, by those who had never seen them, be supposed capable of acquiring.

\(a\) saving of time. Secondly, the advantage which is gained by saving the time commonly lost in passing from one sort of work to another, is much greater than we should at first view be apt to imagine it. It is impossible to pass very quickly from one kind of work to another; that is carried on in a different place, and with quite different tools. A country weaver,\(^3\) who cultivates a small farm, must lose a good deal of time in passing from his loom to the field, and from the field to his loom. When the two trades can be carried on in the same workhouse, the loss of time is no doubt much less. It is even in this case, however, very considerable. A man commonly saunters a little in turning his hand from one sort of employment to another. When he first begins the new work he is seldom very keen and hearty; his mind, as they say, does not go to it, and for some time he rather trifles than applies to good purpose. The habit of sauntering and of indolent careless application, which is naturally, or rather necessarily acquired by every country workman who is obliged to change his work and his tools every half hour, and to apply his hand in twenty different ways almost every day of his life; renders him almost always slothful and lazy, and incapable of any vigorous application even on the most pressing occasions. Independent

\(^1\) In Lectures, p. 166. 'A boy used to it will easily make two thousand and those incomparably better.'

\(^3\) In Lectures, p. 355. It is implied that the labour of making a button was divided among eighty persons.

\(^8\) [The same example occurs in Lectures, p. 166.]

and (3) application of machinery. Invented by workmen.

Thirdly, and lastly, every body must be sensible how much labour is facilitated and abridged by the application of proper machinery. It is unnecessary to give any example.\(^1\) I shall only observe, therefore,\(^2\) that the invention of all those machines by which labour is so much facilitated and abridged, seems to have been originally owing to the division of labour. Men are much more likely to discover easier and readier methods of attaining any object, when the whole attention of their minds is directed towards that single object, than when it is dissipated among a great variety of things. But in consequence of the division of labour, the whole of every man's attention comes naturally to be directed towards some one very simple object. It is naturally to be expected, therefore, that some one or other of those who are employed in each particular branch of labour should soon find out easier and readier methods of performing their own particular work, wherever the nature of it admits of such improvement.

A great part of the machines made use of in those manufactures in which labour is most subdivided, were originally the inventions of common workmen, who, being each of them employed in some very simple operation, naturally turned their thoughts towards finding out easier and readier methods of performing it. Whoever has been much accustomed to visit such manufactures, must frequently have been shown very pretty machines, which were the inventions of such workmen, in order to facilitate and quicken their own particular part of the work. In the first fire-engines,\(^4\) a boy was constantly employed to open and shut alternately the communication between the boiler and the cylinder, according as the piston either ascended or descended. One of those boys, who loved to play with his companions, observed that, by tying a string from the handle of the valve which opened this communication to another part of the machine, the valve would open and shut without his

\(^1\) [Examples are given in Lectures, p. 167. 'Two men and three horses will do more in a day with the plough than twenty men without it. The miller and his servant will do more with the water mill than a dozen with the hand mill, though it too be a machine.]

\(^2\) [Ed. I read 'I shall, therefore, only observe'.]

\(^4\) [Ed. I read 'machines employed'.]

\(^3\) [Ed. I read 'of common'.]

\[^4\] [i.e., steam-engines.]
assistance, and leave him at liberty to divert himself with his play-
fellows. One of the greatest improvements that has been made upon
this machine, since it was first invented, was in this manner the dis-
coveiy of a boy who wanted to save his own labour. by machine-
makers and philosophers.

All the improvements in machinery, however, have
by no means been the inventions of those who had
occasion to use the machines. Many improvements
have been made by the ingenuity of the makers of the machines,
when to make them became the business of a peculiar trade; and
some by that of those who are called philosophers or men of specu-
lation, whose trade it is not to do anything, but to observe every
thing; and who, upon that account, are often capable of combin-
ing together the powers of the most distant and distin-
ct objects. In the progress of society, philosophy or speculation becomes, like every
other employment, the principal or sole trade and occupation of a
particular class of citizens. Like every other employment too, it is
subdivided into a great number of different branches, each of which
affords occupation to a peculiar tribe or class of philosophers; and
this subdivision of employment in philosophy, as well as in every
other business, improves dexterity, and saves time. Each individual
becomes more expert in his own peculiar branch, more work is
done upon the whole, and the quantity of science is considerably
increased by it.

1 This pretty story is largely, at any rate, mythical. It appears to have grown out of
a misreading (not necessarily of Smith) of the following passage: "They used before to
work with a buoy in the cylinder enclosed in a pipe, which buoy rose when the steam
was strong, and opened the injection, and made a stroke; by these they were capable
of only giving six, eight or ten strokes in a minute, till a boy, Humphrey Peace, who
attended the engine, added (what I called coggon) a catch that the beam Q always
opened. With this, it would go fifteen or sixteen strokes in a minute. But this being
perplexed with catchs and strings, Mr. Henry Bright, in an engine he had built at
Newcastle-on-Tyne in 1714, took them all away, the beam itself simply supplying all
much better."— J. T. Desaguliers, Course of Experimental Philosophy, vol. ii., 1741,
p. 513. From pp. 469, 470, it appears that hand labour was originally used before the
"buoy" was devised.

2 [In Locke, p. 160, the invention of the plough is conjecturally attributed to a farmer
and that of the hand-mill to a slave, while the invention of the water-wheel and
the steam engine is credited to philosophers. Mandeville is very much less favourable
to the claims of the philosophers: They are very seldom the same sort of people, those
that invent arts and improvements in them and those that inquire into the reason of
things; this latter is most commonly practised by such as are idle and indolent, that
are fond of retirement, hate business and take delight in speculation; whereas none succeed
careers in the first that are active, daring and industrious men, such as will put their
hand to the plough, try experiments and give all their attention to what they are about.—
Fable of the Bees, pt. ii. (1729), dial. iii., p. 151. He goes on to give as examples the
improvements in soap-boiling, grain-drying, etc.]

3 [The advantage of producing particular commodities wholly or chiefly in the

4 Hence the universal equality of
a well-ordered society.

It is the great multiplication of the productions of all
the different arts, in consequence of the division of
labour, which occasions, in a well-governed society,
that universal opulence which extends itself to the lowest ranks of
the people. Every workman has a great quantity of his own work
to dispose of beyond what he himself has occasion for; and every
other workman being exactly in the same situation, he is enabled to
exchange a great quantity of his own goods for a great quantity, or,
what comes to the same thing, for the price of a great quantity of
theirs. He supplies them abundantly with what they have occasion
for, and they accommodate him as amply with what he has occasion
for, and a general plenty diffuses itself through all the different
ranks of the society.

Observe the accommodation of the most common
artificer or day-labourer in a civilized and thriving
country, and you will perceive that the number of
people of whose industry a part, though but a small
part, has been employed in procuring him this accommoda-
tion, exceeds all computation. The woollen coat, for example, which
covers the day-labourer, as coarse and rough as it may appear, is the
produce of the joint labour of a great multitude of workmen. The
shepherd, the sorter of the wool, the wool-comber or carder, the
dyer, the scribbler, the spinner, the weaver, the fuller, the dressers,
with many others, must all join their different arts in order to
complete even this homely production. How many merchants and
carriers, besides, must have been employed in transporting the
materials from some of those workmen to others who often live in a very
distant part of the country? How much commerce and navigation
in particular, how many ship-builders, sailors, sail-makers, rope-
makers, must have been employed in order to bring together the
different drugs made use of by the dyer, which often come from the
remotest corners of the world! What a variety of labour too is
necessary in order to produce the tools of the meanest of those work-
men! To say nothing of such complicated machines as the ship of
the sailor, the mill of the fuller, or even the loom of the weaver, let
countries most naturally fitted for their production is recognized below, p. 480, but
the fact that division of labour is necessary for its attainment is not noticed. The fact
that division of labour allows different workers to be put exclusively to the kind of
work for which they are best fitted by qualities not acquired by education and practice,
such as age, sex, size and strength, is in part ignored and in part denied below, pp. 19,
20. The disadvantage of division of labour or specialization is dealt with below, vol. ii.,
pp. 302-304.]
us consider only what a variety of labour is requisite in order to form that very simple machine, the shears with which the shepherd clips the wool. The miner, the builder of the furnace for smelting the ore, the feller of the timber, the burner of the charcoal to be made use of in the smelting-house, the brick-maker, the brick-layer, the workmen who attend the furnace, the mill-wright, the forger, the smith, must all of them join their different arts in order to produce them. Were we to examine, in the same manner, all the different parts of his dress and household furniture, the coarse linen shirt which he wears next his skin, the shoes which cover his feet, the bed which he lies on, and all the different parts which compose it, the kitchen-gate at which he prepares his victuals, the coals which he uses of for that purpose, dug from the bowels of the earth, and brought to him perhaps by a long sea and a long land carriage, all the other utensils of his kitchen, all the furniture of his table, the knives and forks, the earthen or pewter plates upon which he serves up and divides his victuals, the different hands employed in preparing his bread and his beer, the glass window which lets in the heat and the light, and keeps out the wind and the rain, with all the knowledge and art requisite for preparing that beautiful and happy invention, without which these northern parts of the world could scarce have afforded a very comfortable habitation, together with the tools of all the different workmen employed in producing those different conveniences; if we examine, I say, all these things, and consider what a variety of labour is employed about each of them, we shall be sensible that without the assistance and co-operation of many thousands, the very meanest person in a civilized country could not be provided, even according to what we very falsely imagine, the easy and simple manner in which he is commonly accommodated. Compared, indeed, with the more extravagant luxury of the great, his accommodation must no doubt appear extremely simple and easy; and yet it may be true, perhaps, that the accommodation of an European prince does not always so much exceed that of an industrious and frugal peasant, as the accommodation of the latter exceeds that of many an African king, the absolute master of the lives and liberties of ten thousand naked savages.  

1 [This paragraph was probably taken hastily from the MS. of the author’s lectures. It appears to be founded on Mait’s England’s Treasure by foreign Trade, chap. iii., at end: Locke, Civil Government, § 43; Mandeville, Fable of the Bees, pt. i., Remark P. and ed. 1723, p. 182, and perhaps Hazlitt, Essay upon Money and Credit, pt. ii., § 22. See Lectures, pp. 161-162 and notes.]

CHAPTER II

Of the Principle which gives Occasion to the Division of Labour

This division of labour, from which so many advantages are derived, is not originally the effect of any human wisdom, which foresees and intends that general opulence to which it gives occasion.  

It is the necessary, though very slow and gradual, consequence of a certain propensity in human nature which has in view no such extensive utility; the propensity to truck, barter, and exchange one thing for another.

This propensity is found in man alone. Whether this propensity be one of those original principles in human nature, of which no further account can be given; or whether, as seems more probable, it be the necessary consequence of the faculties of reason and speech, it belongs not to our present subject to enquire. It is common to all men, and to be found in no other race of animals, which seem to know neither this nor any other species of contracts. Two greyhounds, in running down the same hare, have sometimes the appearance of acting in some sort of concert. Each turns her towards his companion, or endeavours to intercept her when his companion turns her towards himself. This, however, is not the effect of any contract, but of the accidental concurrence of their passions in the same object at that particular time. Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog.  

Nobody ever saw one animal by its gestures and natural cries signify to another, this is mine, that yours; I am willing to give this for that.

1 [I.e., it is not the effect of any conscious regulation by the state or society, like the ‘law of Strangers’, that every man should follow the employment of his father, referred to in the corresponding passage in Lectures, p. 168. The denial that it is the effect of individual wisdom recognizing the advantage of exercising special natural talents comes loose down, p. 20.]

2 [It is by no means clear what object these could be in exchanging one bone for another.]
When an animal wants to obtain something either of a man or of another animal, it has no other means of persuasion but to gain the favour of those whose service it requires. A puppy fawns upon its dam, and a spaniel endeavours by a thousand attractions to engage the attention of its master who is at dinner, when it wants to be fed by him. Man sometimes uses the same arts with his brethren, and when he has no other means of engaging them to act according to his inclinations, endeavours by every servile and fawning attention to obtain their good will. He has not time, however, to do this upon every occasion. In civilized society he stands at all times in need of the co-operation and assistance of great multitudes, while his whole life is scarce sufficient to gain the friendship of a few persons. In almost every other race of animals each individual, when it is grown up to maturity, is entirely independent, and in its natural state has occasion for the assistance of no other living creature. But man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favour, and show them that it is for their own advantage to do for him what he requires of them. Whoever offers to another a bargain of any kind, proposes to do this. Give me that which I want, and you shall have this which you want, is the meaning of every such offer; and it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their respect to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages. Nobody but a beggar clams to depend chiefly upon the benevolence of his fellow-citizens. Even a beggar does not depend upon it entirely. The charity of well-disposed people, indeed, supplies him with the whole fund of his subsistence. But though this principle ultimately provides him with all the necessaries of life which he has occasion for, it neither does nor can provide him with them as he has occasion for them. The greater part of his occasional wants are supplied in the same manner as those of other people, by treaty, by barter, and by purchase. With the money which one man gives him he purchases food. The old cloaths which another bestows upon him he exchanges for other old cloaths which suit him better, or for

1 [Disprinted 'entirely' in ed. 1, 2. 'Entirely' occurs a little lower down in all eds.]
from habit, custom, and education. When they came into the world, and for the first six or eight years of their existence, they were perhaps, very much alike, and neither their parents nor playfellows could perceive any remarkable difference. About that age, or soon after, they come to be employed in very different occupations. The difference of talents comes then to be taken notice of, and widens by degrees, till at last the vanity of the philosoper is willing to acknowledge scarce any resemblance. But without the disposition to truck, barter, and exchange, every man must have procured to himself every necessary and convenience of life which he wanted. All must have had the same duties to perform, and the same work to do, and there could have been no such difference of employment as could alone give occasion to any great difference of talents. As it is this disposition which forms that difference of talents, so remarkable among men of different professions, so it is this same disposition which renders that difference useful. Many tribes of animals acknowledged to be all of the same kind, derive from nature a much more remarkable distinction of genius, than what, antecedent to custom and education, appears to take place among men. By nature a philosopher is not in genius and disposition half so different from a street porter, as a mastiff is from a greyhound, or a greyhound from a spaniel, or this last from a shepherd's dog. Those different tribes of animals, however, though all of the same species, are of scarce any use to one another. The strength of the mastiff is not in the least supported either by the swiftness of the greyhound, or by the sagacity of the spaniel, or by the docility of the shepherd's dog. The effects of those different geniuses and talents, for want of the power or disposition to barter and exchange, cannot be brought into a common stock, and do not in the least contribute to the better accommodation and convenience of the species. Each animal is still obliged to support and defend itself, separately and independently, and derives no sort of advantage from that variety of talents with which nature has distinguished its fellows. Among men, on the contrary, the most dissimilar geniuses are of use to one another; the different produces of their respective talents, by the general disposition to truck, barter, and exchange, being brought, as it were, into a common stock, where every man may purchase whatever part of the produce of other men's talents he has occasion for.

1 [Perhaps it omitted in eds. 2 and 3, and restored in the errata to ed. 4.]
2 [Lea's, pp. 170-171.]

CHAPTER III

That the Division of Labour is Limited by the Extent of the Market

As it is the power of exchanging that gives occasion to the division of labour, so the extent of this division must always be limited by the extent of that power, or, in other words, by the extent of the market. When the market is very small, no person can have any encouragement to dedicate himself entirely to one employment, for want of the power to exchange all that surplus part of the produce of his own labour, which is above and above his own consumption, for such parts of the produce of other men's labour as he has occasion for.

Various trades cannot be carried on except in towns. There are some sorts of industry, even of the lowest kind, which can be carried on no where but in a great town. A porter, for example, can find employment and subsistence in no other place. A village is by much too narrow a sphere for him; even an ordinary market town is scarce large enough to afford him constant occupation. In the town houses and very small villages which are scattered about in so desert a country as the Highlands of Scotland, every farmer must be butcher, baker and brewer for his own family. In such situations we can scarce expect to find even a smith, a carpenter, or a mason, within less than twenty miles of another of the same trade. The scattered families that live at eight or ten miles distance from the nearest of them, must learn to perform themselves a great number of little pieces of work, for which, in more populous countries, they would call in the assistance of those workmen. Country workmen are almost every where obliged to apply themselves to all the different branches of industry that have so much affinity to one another as to be employed about the same sort of materials. A country carpenter deals in every sort of work that is made of wood; a country smith in every sort of work that is made of iron. The former is not only
a carpenter, but a joiner, a cabinet maker, and even a carver in wood, as well as a wheelwright, a ploughwright, a cart and waggon maker. The employments of the latter are still more various. It is impossible there should be such a trade as even that of a tailor in the remote and inland parts of the Highlands of Scotland. Such a workman at the rate of a thousand nails a day, and three hundred working days in the year, will make three hundred thousand nails in the year. But in such a situation it would be impossible to dispose of one thousand, that is, of one day's work in the year.

Water-carrigeage. As by means of water-carrigeage a more extensive market is opened to every sort of industry than what land-carrigeage alone can afford it, so it is upon the sea-coast, and along the banks of navigable rivers, that industry of every kind naturally begins to subdivide and improve itself, and it is frequently not till a long time after that those improvements extend themselves to the inland parts of the country. A broad-wheeled waggon, attended by two men, and drawn by eight horses, in about six weeks time carries and bring back between London and Edinburgh near four ton weight of goods. In about the same time a ship navigated by six or eight men, and sailing between the ports of London and Leith, frequently carries and brings back two hundred ton weight of goods. Six or eight men, therefore, by the help of water-carrigeage, can carry and bring back in the same time the same quantity of goods between London and Edinburgh, as fifty broad-wheeled waggonons, attended by a hundred men, and drawn by four hundred horses.

Upun two hundred tons of goods, therefore, carried by the cheapest land-carrigeage from London to Edinburgh, there must be charged the maintenance of a hundred men for three weeks, and both the maintenance, and what is nearly equal to the maintenance, the wear and tear of four hundred horses as well as of fifty great wagons. Whereas, upon the same quantity of goods carried by water, there is to be charged only the maintenance of six or eight men, and the wear and tear of a ship of two hundred tons burthen, together with the value of the superior risk, or the difference of the insurance between land and water-carrigeage. Were there no other communication between those two places, therefore, but by land-carrigeage, as no goods could be transported from the one to the other, except

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1 The superiority of carrigeage by sea is here considerably less than in Lectures, p. 123, but is still probably exaggerated. W. Playfair, ed. of Worth of Nations, 1809, vol. 1, p. 59, says a waggon of the kind described could carry eight tons, but, of course, some allowance must be made for thirty years of good improvement.

2 [Bib. x reads 'which is at present carried on.']

3 [Playfair, op. cit., p. 30, says that equalising the out and home voyages goods were carried from London to Calcutta by sea at the same price (10s. per cwt.) as from London to Leeds by land.]

4 [Bib. x reads 'are.']

5 [Bib. x reads 'very considerable commerce.']

6 [This shows a confusion in the wave-producing capacity of the tides.]
surface, as well as by the multitude of its islands, and the proximity of its neighbouring shores, extremely favourable to the infant navigation of the world; when, from their ignorance of the compass, men were afraid to quit the view of the coast, and from the imperfection of the art of ship-building, to abandon themselves to the boisterous waves of the ocean. To pass beyond the pillars of Hercules, that is, to sail out of the Straits of Gibraltar, was, in the ancient world, long considered as a most wonderful and dangerous exploit of navigation. It was late before even the Phenicians and Carthaginians, the most skilful navigators and ship-builders of those old times, attempted it, and they were for a long time after the only nations that did attempt it.

Improvements first took place in Egypt. Of all the countries on the coast of the Mediterranean sea, Egypt seems to have been the first in which either agriculture or manufactures were cultivated and improved to any considerable degree. Upper Egypt extends itself northerly above a few miles from the Nile and in Lower Egypt that great river breaks itself into many different canals, which, with the assistance of a little art, seem to have afforded a communication by water-carriage, not only between all the great towns, but between all the considerable villages, and even to many farm-houses in the country; nearly in the same manner as the Rhine and the Meuse do in Holland at present. The extent and casiness of this inland navigation was probably one of the principal causes of the early improvement of Egypt.

Bengal and China. The improvements in agriculture and manufactures seem likewise to have been of very great antiquity in the provinces of Bengal in the East Indies, and in some of the eastern provinces of China; though the great extent of this antiquity is not authenticated by any histories of whose authority we, in this part of the world, are well assured. In Bengal the Ganges and several other great rivers form a great number of navigable canals in the same manner as the Nile does in Egypt. In the Eastern provinces of China too, several great rivers form, by their different branches, a multitude of canals, and by communicating with one another afford an inland navigation much more extensive than that either of the Nile or the Ganges, or perhaps than both of them put together. It is remarkable that

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neither the ancient Egyptians, nor the Indians, nor the Chinese, encouraged foreign commerce, but seem all to have derived their great opulence from this inland navigation.

while Alton, Tartary and Siberia, and also Bavaria, Austria and Hungary are backward.

All the inland parts of Africa, and all that part of Asia which lies any considerable way north of the Buxine and Caspian seas, the ancient Soythia, the modern Tartary and Siberia, seem in all ages of the world to have been in the same barbarous and uncivilized state in which we find them at present. The sea of Tartary is the frozen ocean which admits of no navigation, and though some of the greatest rivers in the world run through that country, they are at too great a distance from one another to carry commerce and communication through the greater part of it. There are in Africa none of those great inlets, such as the Baltic and Adriatic seas in Europe, the Mediterranean and Buxine seas in both Europe and Asia, and the gulphs of Arabia, Persia, India, Bengal, and Siam, in Asia, to carry maritime commerce into the interior parts of that great continent: and the great rivers of Africa are at too great a distance from one another to give occasion to any considerable inland navigation. The commerce besides which any nation can carry on by means of a river which does not break itself into any great number of branches or canals, and which runs into another territory before it reaches the sea, can never be very considerable; because it is always in the power of the nations who possess that other territory to obstruct the communication between the upper country and the sea. The navigation of the Danube is of very little use to the different states of Bavaria, Austria and Hungary, in comparison of what it would be if any of them possessed the whole of its course till it falls into the Black Sea. [1 2 3]

[1] The real difficulty is that the mouths of the rivers are in the Arctic Sea, so that they are separated. One of the objects of the Siberian railway is to connect them.
[3] The passage corresponding to this chapter is comprised in one paragraph in Lecture, p. 172.]
There are no public institutions for the education of women, and there is accordingly nothing useless, absurd, or fantastical in the common course of their education. They are taught what their parents or guardians judge it necessary or useful for them to learn; and they are taught nothing else. Every part of their education tends evidently to some useful purpose; either to improve the natural attractions of their person, or to form their mind to reserve, to modesty, to chastity, and to economy; to render them both likely to become the mistresses of a family, and to behave properly when they have become such. In every part of her life a woman feels some convenience or advantage from every part of her education. It seldom happens that a man, in any part of his life, derives any convenience or advantage from some of the most laborious and troublesome parts of his education.

Ought the public, therefore, to give no attention, it may be asked, to the education of the people? Or if it ought to give any, what are the different parts of education which it ought to attend to in the different orders of the people? and in what manner ought it to attend to them?

In some cases it ought, in others it need not.

In the progress of the division of labour, the employment of the far greater part of those who live by labour, that is, of the great body of the people, comes to be confined to a few very simple operations; frequently to one or two. But the understandings of the greater part of men are necessarily formed by their ordinary employments. The man whose whole life is spent in performing a few simple operations, of which the effects too are, perhaps, always the same, or very nearly the same, has no occasion to exert his understanding, or to exercise his invention in finding out expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become. The torpor of his mind renders him, not only incapable of relishing or bearing a part in any rational conversation, but of conceiving any generous, noble, or tender sentiment, and consequently of forming any just judgment concerning many even of the ordinary duties of private life. Of the great and extensive interests of his country he is altogether incapable of judging; and unless very particular pains have been taken to render him otherwise, he is equally incapable of defending his country in war. The uniformity of his stationary life naturally corrupts the courage of his mind, and makes him regard with abhorrence the irregular, uncertain, and adventurous life of a soldier. It corrupts even the activity of his body, and renders him incapable of exerting his strength with vigour and perseverance, in any other employment than that to which he has been bred. His dexterity at his own particular trade seems, in this manner, to be acquired at the expense of his intellectual, social, and martial virtues. But in every improved and civilized society this is the state into which the labouring poor, that is, the great body of the people, must necessarily fall, unless government takes some pains to prevent it.

It is otherwise in the barbarous societies, as they are commonly called, of hunters, of shepherds, and even of husbandmen in that rude state of husbandry which precedes the improvement of manufactures, and the extension of foreign commerce. In such societies the varied occupations of every man oblige every man to exert his capacity, and to invent expedients for removing difficulties which are continually occurring. Invention is kept alive, and the mind is not suffered to fall into that drowsy stupidity, which, in a civilized society, seems to benumb the understanding of almost all the inferior ranks of people. In those barbarous societies, as they are called, every man, it has already been observed, is a warrior. Every man too is in some measure a statesman, and can form a tolerable judgment concerning the interest of the society, and the conduct of those who govern it. How far their chiefs are good judges in peace, or good leaders in war, is obvious to the observation of almost  

[Ed. 1 reads 'the minds of men are not.']
INSTITUTIONS FOR THE

every single man among them. In such a society indeed, no man can
well acquire that improved and refined understanding, which a few
men sometimes possess in a more civilized state. Though in a rude
society there is a good deal of variety in the occupations of every
individual, there is not a great deal in those of the whole society.
Every man does, or is capable of doing, almost every thing which
any other man does, or is capable of doing. Every man has a con-
considerable degree of knowledge, ingenuity, and invention; but scarce
any man has a great degree. The degree, however, which is com-
monly possessed, is generally sufficient for conducting the whole
simple business of the society. In a civilized state, on the contrary,
though there is little variety in the occupations of the greater part
of individuals, there is an almost infinite variety in those of the
whole society. These varied occupations present an almost infinite
variety of objects to the contemplation of those few, who, being
attached to no particular occupation themselves, have leisure and
inclination to examine the occupations of other people. The con-
templation of so great a variety of objects necessarily exercises their
minds in endless comparisons and combinations, and renders their
understandings, in an extraordinary degree, both acute and com-
prehensive. Unless those few, however, happen to be placed in some
very particular situations, their great abilities, though honourable to
themselves, may contribute very little to the good government or
happiness of their society. Notwithstanding the great abilities of
those few, all the nobler parts of the human character may be, in
a great measure, oblitered and extinguished in the great body of
the people.

The education of the common people requires, perhaps, in a civilized and commercial society, the
attention of the public more than that of people of some rank and fortune. People of some rank and
fortune are generally eighteen or nineteen years of age before they enter upon that particular business,
profession, or trade, by which they propose to distinguish themselves in the world. They have before
that full time to acquire, or at least to fit themselves for afterwards acquiring, every accomplishment which can
recommend them to the public esteem, or render them worthy of
it. Their parents or guardians are generally sufficiently anxious that
they should be so accomplished, and are, in most cases, willing

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enough to lay out the expense which is necessary for that purpose.
If they are not always properly educated, it is seldom from the want
of expense laid out upon their education; but from the improper
application of that expense. It is seldom from the want of masters;
but from the negligence and incapacity of the masters who are to
be had, and from the difficulty, or rather from the impossibility
which there is, in the present state of things, of finding any better.
The employments too in which people of some rank or fortune
spend the greater part of their lives, are not, like those of the
common people, simple and uniform. They are almost all of them
extremely complicated, and such as exercise the head more than the
hands. The understandings of those who are engaged in such
employments can seldom grow torpid for want of exercise. The
employments of people of some rank and fortune, besides, are
seldom such as harass them from morning to night. They generally
have a good deal of leisure, during which they may perfect them-
selves in very branch either of useful or ornamental knowledge of
which they may have laid the foundation, or for which they may
have acquired some taste in the earlier part of life.

It is otherwise with the common people. They have
little time to spare for education. Their parents can
scarcely afford to maintain them even in infancy. As soon as they are able
to work, they must apply to some trade in which they can
earn their subsistence. That trade too is generally so simple and
uniform as to give little exercise to the understanding; while, at the
same time, their labour is both so constant and so severe, that it
leaves them little leisure and less inclination to apply to, or even
to think of anything else.

But though the common people cannot, in any
civilized society, be so well instructed as people of
some rank and fortune, the most essential parts of
education, however, to read, write, and account,
can be acquired at so early a period of life, that the
greater part even of those who are to be bred to the lowest
occupations, have time to acquire them before they can be employed
in those occupations. For a very small expense the public can facilitate,
can encourage, and can even impose upon almost the whole body
of the people, the necessity of acquiring those most essential parts
of education.

1 [Ed. r. reads 'from'.]