

CHAPTER III

CO-OPERATION AND DIVISION OF LABOUR

In the preceding chapter we have seen that men work in order to enjoy; that their aim is, not "wealth," but happiness; and that their general desire for comfort and aversion to discomfort constantly impels them to act on the line of least resistance or greatest attraction. To the working of this simple principle we have attributed, not only the use of tools and their almost continuous improvement, not only the adoption and continuous extension of cooperation and division of labour, but also the very existence of society itself. Without some rudiments of social life, however imperfect, co-operation and division of labour is manifestly impossible; and, conversely, the very existence as well as the continuous expansion and development of social life may be attributed to the general advantages due to co-operation and division of labour.

In the illustration given to emphasise the fact that men work in order to enjoy, we assumed one man as working by and for himself, as undertaking all the different operations necessary for the production of food, and himself consuming it when in a fit state to satisfy his wants. Needless to say, however, this is seldom, if ever, the case, even in the most primitive communities. From the earliest times men have availed themselves of co-operation and division of labour; and every advance in social life, every extension of the social bonds, has been marked by a concurrent, though often unconscious, extension of this principle. If compelled to work isolated and unrelated, to depend entirely on the results of his own activities, to produce all the different commodities he requires, to make all his own tools, etc., the individual, however skilled and intelligent he may be, would even today find himself in a very sorry plight. It is only by co-operating with his fellows that the results of the activities of the individual can be made at all proportionate to his desires; or rather, it is only by co-operation that the activities of the community can be made to yield results at all proportionate to the desires of the individuals composing it: and co-operation involves division of labour, as division of labour involves co-operation.

Let us further consider this. The bread, the production of which we watched in the previous chapter, is obviously the result, not only of the ploughing of the land and all the subsequent operations, but also of some portion of the labour expended in making the plough and other instruments utilised in these operations, as also in making the tools by which these have been made, and so on. John Stuart Mill, it is true, although admitting that "if the tool-maker had not laboured, the corn and bread never would have been produced," and that "all these persons ultimately derive the remuneration of their labours from the bread or its price," raises objections to the labour of all these men being taken into consideration. "To estimate the labour, of which any given

commodity is the result," he says, "is far from a simple operation. The items in the calculation are very numerous; . . . but after mounting one or two steps in this ascending scale, we come into a region of fractions too minute for calculation."¹

1 "Principles of Political Economy," Book I., chap. ii.

Too minute for calculation they may be, and yet very necessary to be considered for purposes of Sociology or of Economics.

He continues: "Suppose, for instance, that the same plough will last, before being worn out, a dozen years. Only one-twelfth of the labour of making the plough must be placed to the account of each year's harvest. A twelfth part of the labour of making a plough is an appreciable quantity. But the same set of tools, perhaps, suffice to the ploughmaker for forging a hundred ploughs, which serve, during the twelve years of their existence, to prepare the soil of as many different farms. A twelve-hundredth part of the labour of making his tools is as much, therefore, as has been expended in producing one year's harvest of a single farm: and when this fraction comes to be further apportioned among the various sacks of corn and loaves of bread, it is seen at once that such quantities are not worth taking into the account for any practical purposes connected with the commodity."

Again we must reply that, though it may not be necessary to take such fractions into account "for any practical purpose connected with the commodity,"¹ yet it may be very necessary to consider them for purposes of Sociology or Economics, which, in truth, has not to consider "commodities," but the relations and inter-relations of the co-operating units forming society.

1 These minute fractions, however, have to be taken into account by every large producer, farmer or manufacturer, and do influence the cost of every commodity. In every large industrial concern a certain amount is annually "written off for depreciation of machinery, etc.;" and this item is taken into consideration when estimating the cost of production of any article,

To elucidate this point, let us assume a society of, say, 1,500 men, united for the sole purpose of producing food, say bread; each individual member working equal time, and, for the purposes of the present argument, with equal skill and industry. Naturally enough, all would not undertake the same sort of work. Some would be told off to prepare the soil; others to dig for coal and iron, or to fell timber, from which to fashion ploughs and other agricultural implements. Still others would dig for clay, make bricks, erect ovens, and so on. In each of these occupations the division of labour would offer additional advantages, and might be extended until the labour of one man was entirely devoted to the sharpening of tools, and that of another to the

cutting of bread into slices. But, obviously, provided all their labour be confined to bread-making, all would be the joint producers of the resultant bread; each would have contributed an equal share of the requisite labour; and each could reasonably and equitably expect to receive an equal share of the results of their united industry.

If, as Mill supposes, one plough would last twelve years, this simply means that for every twelve farmers one plough would have to be made annually. And if one set of tools will make one hundred ploughs, one set of tools would have to be made annually for every twelve hundred farmers. If it be further supposed that one man can make twelve ploughs a year, and another man one set of tools for making them, this only means that for every twelve hundred farmers, ten plough-makers and one toolmaker would be required. But the individual farmer would have contributed no greater share of the labour, would no more be the producer of the bread, than the tool-maker or the tool-sharpener — and that notwithstanding the fact that the labour of all the farmers may form an "appreciable" and the labour of all the tool-makers an "inappreciable" fraction of the total labour necessary to the production of the bread.

If we look into society and note how production is now carried on, we shall find very few individuals who contribute an "appreciable" part toward the production of anything. Here is a box of matches for which one penny has been paid. It is certainly no exaggeration to say that the labour of hundreds of persons have contributed towards its production. The component parts have come from different parts of the world; they have had to be grown, prepared, shipped, and handled times beyond number. The cotton had to be grown and spun; the minute piece of tape woven and dyed; the phosphorous extracted from bones; the paper made and printed; the different coloured inks prepared, and so on: each operation distinct from the other and involving countless subsidiary operations. Whom, then, are we to consider the actual producer of this box of matches? The man whose name happens to be printed on the box, who in all probability never saw it or handled any of its component parts? Or all those who have in any way contributed toward its production, and to its being in our hands ready to minister to our requirements? Obviously the latter. And each has to get his share of the one penny we have paid for it, no matter how "inappreciable" this fraction may be.

Similarly it could be shown that today the share of any individual worker in the production of any given article amounts to a most insignificant fraction. Each such article is the concrete result of the labour of hundreds of co-operating workers. And one of the main economic problems with which we are confronted is, how to secure to each co-operating worker his fair share of the results of their united industry.

Division of labour is, in fact, but the manifestation or continuance in social life of the

underlying principle of adaptation and specialisation traceable in all phenomena of the development of organic life. What the cell is in organisms, the individual is in society, using this term in its broadest sense. Just as all growth and development of organisms involves and is due to the specialisation of different cells, and groups of cells, and their adaptation to certain functions; so, too, the growth and development of society involves and is due to the specialisation of individual men, and groups of men, and their adaptation to certain functions. Just as in the lowest forms of organic life we find individual cells existing, isolated, unrelated, and independent; and in the lower forms of organised life we find the individual cell, or group of cells, retaining the power of maintaining their normal existence even when severed from the group of which they formed a part; so, too, in the more primitive forms of social life, the individual man retains the power of maintaining his normal existence even when severed from the family, tribe, or society of which he formed a part. And just as this power of individual cells becomes less and less as the organism becomes more and more complex, and the individual cells of which it is composed become more and more specialised and adapted to perform certain functions only; so, too, the individual man loses this power in proportion as society becomes more and more complex, and the units of which it is composed become more and more inter-related and inter-dependent. As the great German biologist, Ernest Haeckel,¹ to whose writings we would recommend such of our readers as would further pursue this train of thought, expresses it —

1 "Pedigree of Man and Other Essays," p. 130.

"Our own body, like that of every higher animal, is an organised state, built up of millions of little citizens, the cells. These citizens lead to some extent an independent life. They form in their division of labour different ranks and classes of workers; such are the nervous system, the muscular system of our body, and so forth. The unity of life of the human individual, visible to outward eyes as the simple outcome of a personality, is, in truth, a highly complex resultant, compounded of the collective functions of all those little citizens, the cells, and of the organs composed of these in specialised forms. If any of these citizens perform their duties imperfectly, or become unfit for work, we fall ill; and if the unified regular co-working of all, essential to life, comes to an end, we die."

For the purpose of these essays it is unnecessary to dwell on this analogy, the full import of which, however, will become more and more clear as we proceed in our studies of social life.

Division of labour, then, as already pointed out, is but a necessary consequence of the physiological constitution of man, of what may somewhat vaguely be called "human nature"; it is the direct result of the general tendency of mankind to gratify their desires at the least cost of discomfort and exertion. To attribute it, as does Adam

Smith,¹ to a certain propensity in human nature, to "the propensity to truck, barter and exchange one thing for another," is manifestly to put the cart before the horse, to mistake an effect for a cause. For this "propensity to truck, barter and exchange" is but a necessary consequence, in fact, but an extension of the division of labour, as we shall endeavour to show in the rest of this chapter, in which we shall trace the development of this principle, and consider some of its more immediate results.

1 "Harmonies of Political Economy," p. 97.

Let us first confine our attention to a primitive community, or family, the various members of which work together, and jointly consume the results of their united activities. At first we may suppose each individual member capable of providing for all his own wants, and as working isolated and independent of the rest. Gradually, however, division of labour would naturally and inevitably be adopted; and, once established, the tendency would be for each individual to devote his activities mainly, if not at first exclusively, to one special branch of industry.

By so doing, each would naturally acquire greater skill and aptitude in his own particular department, by which the comforts at the command of all would again tend to be increased. But as the sub-division of labour was extended, and the specialisation of the individual to perform certain duties only, became an established feature of their industrial life, the individual would gradually become more unfitted to supply all his own wants, and the co-operation of several would become a necessary condition of their normal existence. In other words, their normal existence would come to be based upon and to depend upon exchange; not, however, on the exchange of commodities, but of services. In this sense, and in this sense only, may we accept Bastiat's dictum, that "Exchange is Political Economy — is Society itself — for it is impossible to conceive Society as existing without Exchange, or Exchange without Society."¹

Let us now assume two such communities, or families, living separate and independent of each other, and the same causes to which the adoption of the division of labour in each separate community, or family, is due, would impel the separate families to form relations one with the other. The members of the one might be better instructed, or possess special aptitude, for weaving, those of the other for grinding corn; and by a reciprocal exchange of services, the members of the one family might weave the yarn, those of the other grind the corn, for both families, to their mutual advantage. Or the one might have special aptitude or special advantages for the production of clothing, the other for the production of bread. Neither, of course, would be willing to give up the results of his own exertions without some return; hence bread would be exchanged for clothing, clothing for bread, until the one family

might come to derive all its clothing from the other, whom in return it would supply with bread.

This latter system of co-operation would be known as truck, barter, trade, or commerce; but in its essence, in principle, it is in no way different from the former: the form alone has changed. On ultimate analysis, all exchange of material commodities, all barter, trade, and commerce, is merely an exchange of services: one individual, family, community, or nation, rendering certain services to another individual, family, community, or nation, in return for certain counter-services.

In the illustration just given there is no necessity to assume that the two families would unite to form one community; they might still live apart, each keeping its possessions distinct from the other, and each solely intent on ministering to its own wants. In course of time there might be a number of such families, each following different industrial operations, and all exchanging services, or commodities, one with the other. And here it is important to note that just as the individual members of the family in our first illustration became, in consequence of the division of labour, more and more dependent one on the other, so likewise, and for the same reasons, these different families would tend to become more and more dependent and inter-dependent, the well-being and prosperity of the one becoming more and more bound up and dependent on the well-being and prosperity of the rest. The advantage due to this mode of industrial life would, however, ensure its gradual extension. Not only individuals and families, but communities — groups of families — and nations — groups of communities — would come to exchange services (commodities) one with the other, until it resulted in the world-wide commerce of the present day. But, however extended, however different in methods, the underlying principle always remains the same: services are rendered by the one in return for counter-services by the other.

The co-operating members of any society, in so far as they are contributors or working members, are all engaged in rendering services one to the other: and this is the essence, the animating principle, of all social life.

This simple but fundamental conception will, we think, be found to throw a flood of light on all social phenomena, and greatly to facilitate the study of Economics. The animating principle of all social life, no matter how far its ramifications may extend, consists of the exchange of service for service. Of course, as long as our social relations are imperfect, as long as they are allowed to be determined by habit and

custom, not based on reason and equity, many disorganising, dislocating elements must come into play. Some few may claim and be able to enforce service from their fellows without rendering any counterservices; but such disturbing influences, however prominent in the present, would manifestly be impossible in an equitable state of society. And one of the chief aims of the study of Economics is to enable us to determine what these disturbing influences are; by what social habits, customs, laws, and institutions they are maintained; and how they can most effectually and most speedily be put an end to — a subject on which we may have more to say in a subsequent chapter.