

derived immediately from the division of labor, are but a part of the total advantage which is attributable to what we have termed the organization of industry. In addition to those already indicated, we find, under the larger title, a vast gain of productive power resulting from the introduction of the principle of competition, the creation of *esprit de corps*, and the direction given to the mass of laborers by the few clear, strong spirits, which, under such a system, dominate the industrial operations of the community.

(a) Competition can only be introduced as an active force where the opportunity for exact and easy comparison of results exists. Where each one of a number of persons is performing every day a large number of miscellaneous duties, now a little of this, then a little of that, it is difficult or impossible to measure the achievements of the several persons so employed, bring them to a scale, and assign credit or blame. But when those duties are so distributed that each person is charged with the performance of a certain, definite task, comparison becomes possible.

(b) The creation of *esprit de corps* within trades and professions becomes a tremendous force in industry. Competition operates upon the laborer, through the employer's desire to get the most out of each workman, and through the laborer's desire to obtain and retain employment. The principle now invoked operates on the laborer, perhaps not less powerfully, through the public sentiment of the craft, establishing standards of workmanship and laws of conduct which tend to lift each workman to the level of the best.

85. (c) **Mastership in Industry.**—But the most important of the sources of gain in productive power, now under consideration, is found in that mastership of industry which is created by the division of labor. That division can not proceed to its natural limits without giving rise to the subordination of the mass of the laboring population to a select and comparatively small body of employers, who assume the responsibilities and direct the agencies of production.

Whether this gain is accomplished at a certain social and political cost, is a question the economist is not called upon to

discuss. That question belongs to the social philosopher or the statesman. The economist, as such, is guilty of an unwarrantable presumption if he undertake to measure the quantity of economic advantage which would offset the smallest ethical or physiological injury. He does all that he is called upon to do, all that he can undertake to do without impairing the scientific value of his results, when he traces causes to their effects within the field of economics alone.

Looking at the matter in its purely economic aspect, it is clear that the gain in question is not realized without an initial loss, inasmuch as the laborer, under the wages system, necessarily has a less direct and certain interest in the product of his industry, than the man who labors on his own account. But this loss is compensated, many times over, by the gain to production which results from the impulse and direction given to industry by the thought-power and will-power of the ablest minds in the community.

CHAPTER III.

CAPITAL : ITS ORIGIN AND OFFICE.

86. THE third great agent in the production of wealth is Capital. The capital of a community is that part of its wealth (excluding land and natural agents, considered as unimproved*) which is devoted to the production of wealth.

Some writers, indeed, insist that the climate of a country, so far as it especially favors production, is to be reckoned as a part of the capital of that country. I prefer to say that the beneficent distribution of heat and moisture, by the gratuitous action of nature, is a favorable condition of production, but is not capital. A sound system of jurisprudence, which secures the impartial administration of justice; a sound organization of the political body, which maintains peace

* The reason for this exception will appear when we come to treat of the rent and price of land.

and order, are most favorable conditions of production; they lead to a vast creation of values; they are better than much capital to the people enjoying them; but they are not capital.

87. The Origin of Capital.—The origin of capital is so familiar that it need not be dwelt upon at length. A simple illustration may suffice. Let us take the case of a tribe dwelling along the shore, and subsisting upon fish caught from the rocks which jut into the sea. Summer and winter together, good seasons and bad, they derive from this source a scanty and precarious subsistence. When the fish are plentiful, the people live freely, even gluttonously. When their luck is bad, they submit to privations which involve suffering, sometimes famine.

Now let us suppose that one of these fishermen, moved by a strong desire to better his condition, undertakes to lay by a store of fish. Living as closely as will consist with health and strength, he denies himself all superfluity, even at the height of the season, and by little and little accumulates in his hut a considerable quantity of dried food. This is wealth. Whether it shall become capital or not depends upon the use which is to be made of it.* If destined to be merely a reserve against hard times, it remains wealth, but does not become capital.

But our fisherman, in laying by his store of fish, has higher designs than to equalize the food consumption of the year. As the dull season approaches, he takes all the food he can carry and goes into the hills, where he finds trees whose bark can be detached by sharp stones. Again and again he returns to his work in the hills, while his neighbors are painfully striving to keep themselves alive. At the end of the dull season he brings down to the water a canoe, so light that it can be borne upon his shoulders, so buoyant that he can paddle in it out to the "banks," which lie two or three miles from shore, where in one day he can get as many fish as he could catch from off the rocks in a week.

* "All labor expended for a distant end falls under the head of capital."—ROSCHER.

88. The Professional Boat-BUILDER.—The canoe is capital; the fisherman is a capitalist. He can now take his choice of three things. He may go out in his canoe and bring home supplies of fish which will allow him to marry and rear a family in comfort, and with his surplus hire some of his neighbors to build him a hut, their women to weave him blankets, and their children to bring water from the spring and wait upon his family. Secondly, he may let out the canoe to some one who will be glad to get the use of it on payment of all the fish which one family could fairly consume, and himself stay at home in complete idleness, basking in the sun, and on stormy days seeking refuge in his hut. Thirdly, he may let out the canoe and himself turn to advantage the knowledge and experience acquired in its construction by making more canoes.

The last is the course he decides to take. Again and again he reappears upon the shore, bringing a new canoe, for the use of which a score of his neighbors clamorously compete. And later canoes, be it noted, are made with a smaller effort and sacrifice on the part of the builder. He has become familiar with the groves where the trees are largest and the trunks most clear of branches. He has acquired a knack which makes it almost a pleasure to strip off the vast rolls of tough elastic bark. He never spoils his half-completed work, now, by an ill-directed blow. Moreover, his toil is reduced to a minimum, for he has hired men to carry his burdens and do the heavy labor.

89. The Increase of Capital.—But soon the canoe-builder's profits are threatened. Thus far, in the possession of exceptional skill and knowledge, he has been a monopolist, and has reaped a monopolist's gains. Now, however, stimulated by the sight of such great wealth gathered (that is, so great a *command of other people's labor* acquired) by one man, others begin to enter the field.

As an essential condition, each must save and accumulate enough food to support him while making his first boat, that is, must accumulate a certain amount of capital. This, however, is less difficult than it was in the case of the original

builder, first, because fish have come, through the multiplication of boats, to be much more easily obtained; secondly, because there are fewer experiments to make; thirdly, because certainty and nearness of success will inspire the labors of ten men where one will be moved to great sacrifice and exertion by a prospect that is distant and doubtful. Moreover, some of the shrewdest of the assistants of the old boat-builder, who have watched him at work, and whom he has trusted more and more to do even the nicer parts of his task, begin to desert him and to set up for themselves. The rent of boats falls rapidly; the old master, who has become rich and self-important, and perhaps a little lazy with years, goes out of the business.

90. First Effects of Competition.—For a time, while the number of boats increases rapidly, the quality suffers deterioration; two fishermen are drowned upon the banks by the breaking up of boats in a sudden squall. The boat-builders in fault are condemned by the general assembly of the tribe to support the widows and orphan children. The rage for mere cheapness is checked. Boats are now tested before they are used, and some ambitious builders find themselves driven out of the trade by the failure of their work.

And it is important to be noted that the profits of boat-building are rapidly reduced. The first boat built repaid the cost of its construction in a few weeks. The boats now made only repay the cost of their construction in the course of months. Yet, the men who make boats still get a better livelihood than those who use them; while those who use boats get a better livelihood, even after paying the rent, than those who still fish off the rocks.

91. What Will They Do with It?—Now let us suppose that the manufacture of boats has proceeded so far that there is one serviceable boat for every four adult males of the tribe. At this point, one of two widely divergent courses may be adopted, with very important results to the future of the community.

First, the multiplication of boats goes forward until each man is provided with a boat in which he can catch enough

fish, in two or three hours a day, to keep him and his family, summer and winter, good seasons and bad. The creation of capital has at least led to this result: it has put famine out of the question. There is always an abundance of fresh fish, on the banks, and of cured fish even in the meanest hut. The rest of the time is spent in idleness or sport.

Secondly, the manufacture of boats stops at the point where fish for the whole tribe can be provided by one-fourth of its members, toiling early and late upon the banks. The remaining members, those who, through youth or self-indulgence, have failed to provide themselves with boats, those who through misfortune have lost their boats and have become discouraged, those who by physical weakness or natural or acquired infirmity are least fitted to undertake the rugged duty of the fisherman, and those who have been intimidated by tales or by experience of hardships, or by the sight of the bodies of drowned fishermen rolled ashore after a storm—these all betake themselves, in one capacity or another, to the service of the fishermen, the capitalist-employers (Par. 304) of the tribe. Only so many boat-builders remain as are needed to repair and keep up the existing stock. The house-builder now takes the place of the boat-builder. No one is satisfied to live in the sort of hut which would once have been thought good enough for the chief. Menial servants become numerous. The fashioning of ornaments and trinkets takes up a vast amount of labor.

92. New Economic Desires.—Soon a new want emerges. A plant with bright flowers is discovered among the hills and brought home as a curiosity. It is raised, as a rather distinguished thing, in front of houses of especial pretension. By cultivation it undergoes more or less change, particularly in the development of large tubers which are found to be highly palatable and nutritious. The absurd name, potatoes, is applied to these tubers. As affording a change from the everlasting sea-food of the fathers, they are relished greatly, and soon a number of persons are breaking up ground to plant and cultivate these tubers, which are exchanged, on liberal terms, for fish taken on the banks.

The introduction of a vegetable diet marks the beginning of a revolution in the life of the community. After this, any thing is possible. The taste for a diversified diet, once felt, knows no limits. Agriculture has begun, involving the necessity of capital in a hundred forms. New foods are followed by new fibers; manufactures spring into being, and all the potentiality of the modern nation now resides in a tribe which a generation ago lived wholly on fish caught from rocks along the shore.

93. The Law of Capital.—It is not necessary to trace further the increase of capital. At every step of its progress, capital follows one law. It arises solely out of saving. It stands always for self-denial and abstinence. At the first beginning, savings are made slowly and painfully; and the first items of capital have a power in exchange (an ability, that is, to command the labor of those who have not capital), corresponding to the difficulty with which they are secured. The bow, the spear, the canoe, the spade, much as they cost, pay for themselves in a few days. Subsequent increments of capital are gained at a constantly diminishing sacrifice,* and receive a constantly diminishing remuneration, until, in the most advanced countries, buildings are erected and machines constructed which only pay for themselves in ten, twelve or even twenty years.

At every stage, we note, too, that capital releases labor power which was formerly occupied in providing for the wants of the community according to its then prevailing standard of living. At every stage, the members of the community make their choice, whether they will apply the labor power, thus released, to the production of wealth, in other branches, or will content themselves with living as well as before, upon easier terms, giving up the newly acquired leisure to idleness or sport.

94. Subsistence.—The office of capital has been perhaps abundantly shown in the account given of its origin. Capital, as

* Prof. Marshall remarks that the whole continent of Asia, with its thousand millions of inhabitants, has less power of saving than England has.

we have seen, is that portion of wealth* which is employed in the production of new forms of wealth.

At first, capital is limited to the means of subsistence for the producer. It was not easy in the first stage of industrial progress, to lay by enough of the game or the fish of one season to last until the next. For want of such a store of food many a tribe perished. Many another was kept in a low, miserable condition, unable to shift its seat to more promising localities, and continually depleted by famine and disease. But when once a tribe, by exceptional good fortune, or through prudence and self-control, acquired a reserve sufficient for a full year's subsistence, it became in a degree master of its conditions. It could shift its seat to better hunting or fishing grounds. It could pursue its avocations systematically and economically, doing that which should be esteemed most productive in the long run, not, as before, hurriedly and wastefully, under the stress of immediate want. The physical strength of its members was kept at the highest point by ample and regular diet.

An ample year's subsistence forms the most important advance which a people ever make in their progress towards industrial prosperity. No subsequent step costs one-half, or a tithe as much. Many peoples never find themselves able quite to accomplish this. The people of British India can hope for no more, in good years, than to be carried through into the next; while, once in every four or five years, a famine following a short crop sweeps away millions by sheer starvation, or by the fevers which feed upon half-famished populations. Even in Ireland, there was known, half a century ago, a period two or three months long, preceding harvest, which was called by the peasantry "the starving season."

95. Tools.—The next purpose, in logical, and generally, also, in historical order, for which capital is accumulated, is the acquisition of tools. I use the word here in its largest sense, including all apparatus, utensils and machinery. The knife, the bow, the spear, the canoe, the net, are the tools of a cer-

* Excluding land and natural agents, considered as unimproved.

tain stage of industrial society. The spade, the cart, the plow, the distaff, the forge, are the tools of a later stage. The loom, the lathe, the printing press, the trip-hammer, the railroad and the ship, may, with equal propriety, be called the tools of to-day. The buildings which protect machinery from the weather, and the shops in which trade and manufactures are carried on, are, in this sense, tools.

96. Materials.—The third form which capital takes is that of Materials. The word, as here used, covers all kinds of wealth which are devoted to the production of wealth in any other way than as subsistence for the laborer, or as tools to increase his power in production. In a primitive state, materials play a small part. The bait for the hook among the tribe of fishermen; the corn saved for seed in a planting community, are the most prominent materials of early industry. In a later age a large part of all the accumulated wealth of a community exists in this form.

Ultimately, indeed, these materials will be wrought partly into tools, partly into the means of subsistence. A part, also, may come to be devoted to purposes of luxury or display, and, hence, cease to be capital at all. But at any given time, the capital of a community may be classed under these three heads: Subsistence, Tools, Materials.

97. The Three Forms of Capital.—In a certain sense these three may be resolved into one, Subsistence; as, indeed, all the forms of subsistence itself may be resolved into one, Food. Thus, the first simple tools of the barbarous community may be said to be exactly represented by the subsistence required by the laborers engaged in making the tools. The first materials produced by the aid of these tools may be said to be represented by the subsistence of the laborers using the tools, added to that of the laborers who made the tools. And so of the more elaborate tools and the more various and costly materials of after ages: all may be said to represent the subsistence of the laborer while engaged in the act of production.

Likewise all the forms of subsistence, food, clothing, shelter and fuel, may, in theory, be reduced to one, food. The clothing of the laborer, for example, represents the food which he con-

sumed while he was gathering the fibers of the wild grasses and weaving them into a blanket. The hut represents the food consumed during its erection. The fuel represents the food consumed while the laborer was gathering fagots in the forest.

98. One of the advantages of this classification is, that it directs the attention to the part performed by tools, machinery and apparatus, in the production of wealth. Look into many text books on Political Economy, and you will find capital spoken of as if its main, or even its sole office, were to furnish subsistence to the laborer. Yet two nations may be equally provided with subsistence, while the superiority of one of them in the possession of tools may give it a prodigious advantage over the other in the power of producing wealth. One man with simple tools may do the work of ten men equally well fed, but having only their hands to work with. Ten men with the wood-working, cotton and wool-working, or metal-working machinery of to-day, run by steam or water power, may easily do the work of a thousand, with distaff, chisel, saw and axe.

CHAPTER IV.

THE PRODUCTIVE CAPABILITY OF A COMMUNITY.

99. We have spoken, in succession, of land power, labor power and capital power. The productive capability of any community is determined by these three elements, in the degrees in which they are severally found to exist there.

While the land remains in the condition of increasing returns (Par. 50), as in the Eastern States of the American Union during their earlier history, production may be large, per head of population, with but a small amount of capital available. Even after cultivation has reached the condition of diminishing returns (Par. 51), the energy, intelligence and skill of the laboring class, and the thorough organization of industry, may wrest a comparatively high rate of produce from the reluctant soil; or, in spite of an ignorant, clumsy