

XVI.

LAND AND ITS FEATURES.

WHEN a farmer gets what he calls a fair price for a bushel of potatoes, say 40 cents, he finds, when he thinks it out, that he has paid or has to pay say 5 cents for the use of the land on which the crop was grown; 15 cents for seed, fertilizers, and replacing his tools; 15 cents for labor in planting, hoeing, and digging; and has left 5 cents "profit," which is his own pay for his skill in managing the crop and taking the risks of it. Or a cotton-mill corporation which gets 7 cents a yard for its sheetings finds that the use of land and water-power has cost it $\frac{1}{4}$ cent a yard; the use of its mill and machinery and the cotton it uses, all of which are expenditures of capital, 5 cents; wages, $1\frac{1}{2}$ cents; leaving for cost of administration and net profits $\frac{1}{8}$ of a cent.

"Unto each, its own." By means of Exchange, with money for its chief instrument, the result of

Production becomes the subject of Distribution, and each factor which *contributes* to the product is entitled to its share when that product, or its returns in money, is *distributed*. Having now learned the meaning of value and price, the nature of money, and the functions of banking, we come to the consideration of the several factors in Production and their payment in the Distribution of product. The principal factors are Land, Capital, Labor, Brains, contributed by the Land-owner, the Capitalist, or wealth-owner, the Laborer, or hand-worker, the Director of production, or brain-worker, who are paid by Rent, Interest, Wages, Profits. Any or all of these may be combined: a farmer who owns his farm, who does not have to borrow capital for seed and tools, and who does his own work, does not have to pay out to anybody else any part of his 40 cents, except for taxes and insurance; but all the same the crop must pay him rent, interest, wages, as well as profits, or his farming "does not pay." Taxes, insurance, and the like, we shall see later on, are an indirect payment for the factors in production above noted.

The one great exception to the general truth

that all wealth comes from work is LAND, the use of which is paid for by *Rent*—that is, the amount *rendered* by the user to the owner. For capital is but stored labor, and the Director also labors, though with his brains instead of his hands. Land is the contribution of nature, valuable in exchange because it is limited in quantity and various in quality. Air every man may have, and it is all alike; therefore no man buys it. This is not so with land, which, in the economic sense, includes all property connected with the earth, as water-power, or shooting rights, or shore rights, or the right to fish in privately owned waters; in brief, anything that is “rented,” not of human origin. It is usual to speak of the rent of a house or a factory, but economists confine the word to that part of the payment which is for the land itself, the building being really a form of capital, paid for by interest. Rental is perhaps a better word for rent *and* the payment for the use of buildings. Land and the fixtures upon it are often spoken of as realty or real property, to distinguish them from personalty or movable property. Land is the primal source of all product extracted by labor: it is the mother of wealth.

When men "possessed the earth," and "the land was all before them where to choose," they found that there was, in fact, a choice, for some land was better for their purpose than other land. The wandering tribes of herdsmen sought the best pasturage, and sometimes fought for its possession. As men became civilized and tillers of the soil, they settled, whether in ancient India or in ancient Germany, in village communities. Each community owned its tract of land, *marked* off into three *marks*—the common or untilled land, the village mark where each family had its house, and the arable mark, usually divided into three great strips or fields (one for a heavy crop, one for a light crop, one lying fallow, in rotation). Of these three fields each family had a portion, which seems to have been redistributed at intervals of years. The community was the general owner, but it allotted particular pieces to particular families for their houses permanently, it seems, for their tillage subject to change. The Hebrew provision (Leviticus xxv. 8) that all village land should be returned to its original owners in the fiftieth year of jubilee, but that city house-land could be permanently sold, shows traces of the same sys-

tem, but it does not seem to have lasted many generations beyond the conquest of Canaan. Under the feudal system, which fixed men on the soil, the occupier of land paid a tax or license or military service to the feudal owner, and competitive rent, depending on the productiveness of land, did not yet exist.

Later on, as civilization progressed, land came more definitely into individual ownership, and men sold their holdings or let them for rent. But the community, or, as chieftainship developed, the lord of the manor, always held a superior ownership, which has come down to our day in the doctrine of "eminent domain." In Great Britain the Queen, in this republic the sovereign people, is supposed to own *all* the soil, private lands as well as public lands; and it is by virtue of this that the State takes or grants to railroads the right of way through private lands, on payment of compensation fixed by a court, even though the owner does not want to sell.

The law and custom as to the descent of land have great influence on the economic condition of a country. In France the Code Napoleon, requiring the division of all landed property (except the

equivalent of one child's share) equally among the children, is said to have "changed the face of the landscape;" it certainly promoted the tendency to small holdings, which has given France 5,500,000 farms, 5,000,000 of them under one hectare (six acres) each. Entail—the right to fix the ownership of lands through successive generations—is now abolished in most civilized countries, but the practice of primogeniture, or descent by oldest son when no will is left, and the great legal costs in conveying land, have combined to keep the land of Great Britain and Ireland in few hands. Out of 72,000,000 acres, not common or waste lands, with a rental valuation of \$650,000,000, one half (40,000,000 acres) is owned by 2238 people; 41 have holdings of over 100,000 acres each, aggregating 9,000,000 acres, 10,888 holdings of over 10,000 acres, and 314,703 include all of one or more acres. In this country land is plenty and transfer is easy, and most of the States prohibit devises beyond 21 years from the death of heirs living, and divide intestate (unwilled) property equally among children. The United States, accordingly, had, in 1880, 4,008,907 farms, comprising 536,081,835 acres and averaging 134 acres each, of which

only 139,241 are under 10 acres and 28,578 over 1000 acres. The individual ownership of land, and its division into many holdings not too small to pay, has usually been found to be the most productive system, though the introduction of machinery on a huge scale on the great farming plains of the West is producing new results.

Land is not only limited in quantity, but it is limited also in quality or power of production. Its natural productiveness may be raised by careful tillage and use of fertilizers, so that an acre which would naturally produce only 8 bushels of potatoes may produce 12. But a point is presently reached where it costs more labor to raise the extra bushel of potatoes than the bushel is worth; at this point, if ten men have been working on a potato-field, the labor of an eleventh man will not get one-tenth more, and so each worker averages less. This principle is known as "the law of diminishing returns." It holds also in machinery to some extent, for it costs more coal to get the twentieth knot of speed out of a fast steamship than for any two or three knots at less speed, but in manufacture more machines can commonly be made until there are enough to produce all that is

wanted. But land cannot be increased in quantity, and the law of diminishing returns is a peculiar difficulty. It led to the doctrine of Malthusianism, named from the English economist Malthus, which holds that population, increasing in much greater proportion than food, will finally outrun food, so that most of the human race must starve to death unless population is checked. But, as a matter of fact, the increase of food product has outrun the increase of population, and each generation since Malthus's day has had more to eat than that before it. And it is now claimed that by treating the soil as a laboratory instead of as a farm, and obtaining the free nitrogen of the air by means of plants such as Indian-corn, we can increase the supply of food almost indefinitely.

Thus far, better farming has increased remarkably the agricultural product per acre. England, in the fourteenth century, used nearly all its arable land to support 2,500,000 people, an acre producing only 8 bushels of wheat from 2 bushels of seed; in the eighteenth, 7,500,000 were supported more comfortably, the product being 20 bushels; less land is now cultivated, but the product is nearly 30 bushels. France, in the seventeenth

and eighteenth centuries, with a population rising from 12,000,000 to 19,000,000, obtained only 9 bushels to the acre, and every third year went hungry; her product, with double the population, is now $15\frac{1}{2}$ bushels, which, with her imports, enables each person to consume more than 21 instead of less than 14 bushels per year.

While the original value of land is a boon of nature, a piece of land acquires an added value in two ways; first, through its direct improvement by cultivation, so that it becomes in this sense "a manufactured tool" improved in use—"the great savings-bank" through which each generation bequeaths a large part of its gains to the next; secondly, through its indirect advance with the progress of society and the new demands as "the country grows up to it." The thin, warm soils near watercourses—first cultivated, as Henry C. Carey points out, by new settlers, because more accessible—are made more and more productive by the use of fertilizers; the richer soil of swamps or forests must be drained or cleared by the labor of men; in our Western States many lands depend on artificial irrigation for almost their whole productive capacity. All these are examples of

direct improvement by the individual cultivator. Where a man owns his farm, this work is so much capital put into his land instead of into the savings-bank. It may thus be said that the final value of a piece of land on which rent is to be paid is made up of three elements, contributed by (1) nature, (2) society, (3) the individual improver.

The increase in the value of a piece of land caused by "society," usually called the "unearned increment" because it is not earned by the holder of the land, comes partly from the increased demand for product as a community develops, partly from the safety in producing which grows with law and order under good government, but chiefly, in the case of agricultural lands, by the ease of access which, in bringing a market near to a piece of land by means of good roads and of railways, practically brings the land to the market, and increases the return by decreasing the cost of transportation. In the case of the small pieces of land productive for manufacturing purposes, and in the smaller pieces productive as stores and shops for business purposes, the value added by society becomes greater and greater. When we come to city lands used for residences, not business pur-

poses, the natural element of value sinks almost out of sight, productiveness is not considered, and accessibility and fashion, purely social or mental elements, are the chief elements of value. The city of Chicago, where 500 acres were offered in 1841 for \$5300, has now a land valuation of over \$50,000,000, mostly from "unearned increment." Land in the heart of London is said to have increased a thousandfold in value in 150 years. The amount of land withdrawn from production for residence use is not, in this country, very large; the 8,955,812 dwelling-houses (housing $5\frac{6}{7}$ persons each, being 9,945,916 families averaging $5\frac{4}{7}$ persons each), and other buildings in the United States, would occupy under 500 square miles, or less than half the State of Rhode Island, and the auxiliary ground would probably take but a fraction of Connecticut.

It has been pointed out by Adam Smith and other economists that the general price of land is low when interest is high, that is, when capital is scarce. The reason is that productive land can be used only by development through capital; and when capital is not easily to be had, either because manufacture is diverting it from agricult-

ure, or for other reasons, the land cannot be worked to full advantage and has for the time less value.

The census estimate (1880) of the total property (\$43,642,000,000) in the United States assigns \$10,197,000,000 to farms, of which four-fifths is supposed to be land-value; \$9,881,000,000 to business and residence real estate, including water-power, of which one-half to two-thirds is land-value; besides \$5,536,000,000 to railroads and equipment, and \$2,000,000,000 to churches and public buildings. The value of the land, as improved, would be thus over \$15,000,000,000, or above a third of our total property. It is asserted by investigators of the subject that "universally the market value of the aggregate of land and that of the aggregate of productive capital are equal."

The total area of the United States, omitting Alaska, is 2,970,000 square miles, with an average of $17\frac{1}{4}$ persons to the square mile. Of this about one-half, 1,500,000, is considered arable land; 837,500 is already occupied as farms (437,500 improved and 400,000 as yet unimproved). Alaska, with its 531,409 square miles, brings the total area to 3,500,000 square miles. Of this, the United

States has held, unallotted, as public lands, 2,890,000 square miles, or 1,850,000,000 acres, of which 750,000,000 had been surveyed by June 30, 1880. This cost about \$322,000,000, of which over \$200,000,000 had been got back by sales. Up to that date 169,000,000 acres had been sold, including pre-emptions and homestead commutations, 55,000,000 taken up for homesteads, 61,000,000 granted for educational bounties, 78,000,000 for military and naval services, and 45,000,000 patented under railroad land-grants.

About 200,000,000 acres of surveyed land remained to be disposed of, estimated with the unsurveyed lands to be worth about \$1,150,000,000. It is this great body of land, inviting settlement under homestead laws offering every settler a 160 acre farm, which has made the United States the prosperous nation it now is, despite all mistakes made by man in legislation; and the great work of our statesmen must be to prepare the country for the times when we shall no longer have this advantage.