

## FARM.

## Agriculture and Wealth.

To the Editor "Farmer's Advocate":

The celebrated Benjamin Franklin said: "There seem to be but three ways for a nation to acquire wealth: The first is by war, as the Romans did, in plundering their conquered neighbors—this is robbery; the second by commerce, which is generally cheating; the third by agriculture, the only honest way, wherein man receives a real increase of the seed thrown into the ground, in a kind of continual miracle, wrought by the hand of God in his favor, as a reward for his innocent life and his virtuous industry."

If any reader should be disposed to challenge these statements of Franklin, he is asked to candidly consider them and try to make a mental inventory of the various vocations of man, think of his necessities, and of the means and the sources of their supply; and then say if the picture is overdrawn.

However important the places in the social scale occupied by the various other classes, each is yet dependent for distinctive existence upon the agriculturist. Without him, men in other employments could not have bread to eat. Or, suppose those now engaged in agriculture should cease to produce more than enough food to supply their own wants, it is plain that the other classes would be compelled to leave their chosen pursuits and till the soil to avoid starvation. And, indeed, in primitive conditions of society, such is really the case; each individual directly and literally earns his own bread before he eats it.

The non-producing classes do not furnish an equivalent in kind for the food they eat or the clothes they wear, and thus diminish instead of increasing the material wealth of a nation. True, these may contribute something of intrinsic value. The clergyman imparts moral and religious instruction; the physician ministers to the physical health; the teacher and journalist contribute intellectual food; and other useful callings their respective quota; but it remains true that the chief source of the material wealth of a nation is agriculture. And while the contributions of the other classes are more or less problematic, undefined and indefinable, those of the agriculturist are definite and indispensable. His labors yield real and direct returns, and if he pursues intelligent methods, those returns will generally be ample.

If the subject of labor remuneration were to be thoroughly and impartially investigated, it would undoubtedly appear that in proportion to the amount of education or preparatory training which the average farmer receives, his income is not only more certain but also larger than that of almost any other class.

Many farmers fail to keep accurate accounts of their resources of expenditures—indeed, do not keep accounts at all—hence have a very hazy idea of their business. To illustrate: A certain farmer of my acquaintance remarked with great positiveness, that he could retire to town with his family and live quite comfortably on the rent of his farm—\$300 per year. I am satisfied that a proper account of every item of his living expenses would have shown at least double that amount. So many items of income are overlooked by farmers. Some of these are the products of the orchard and garden, and the income derived from poultry. If accurate farm accounts were kept, these products would be found to aggregate a very considerable amount, in many instances a sum exceeding that named by the farmer as sufficient to maintain his family. Then, again, many farmers still obtain a supply of fuel from the wood lot reserved on their farms, which is often ignored or not sufficiently regarded, but which, nevertheless, constitutes a large source of wealth or of saving in outlay to the farmer.

These are some of the things which should be carefully considered by farmers contemplating retirement or change of vocation. But the principal sources of the farmer's wealth have not been named. I have wished to invite especial attention to items of wealth which are more apt to be disregarded. The more prominent resources are those of the fields, horses, cattle, sheep, hogs, and the dairy.

From practical experience in general farming and gardening, I would say that the total yearly receipts from a good 100-acre farm should be about \$1,500, or an average of \$15 per acre. In exceptionally favorable seasons a larger income than this should be realized. I am speaking of the income from all sources under good management. It is regrettable that many 100-acre farms, owing to slipshod and careless methods, perhaps do not show half this amount.

Think, however, of the vastness and importance of the agricultural wealth—actual and possible—of a nation like ours?

It may be objected that agriculture is not the only source of material wealth; there is the wealth of the ocean, seas and lakes (fisheries), also the wealth of mines and of forests. These are natural resources, and the fish in their native element, the minerals of the earth, and the timber of the forests exist as God created them, without any agency of man. But in their native and crude state they are valueless in a commercial sense. They receive their value from labor. We speak of commerce as a source of wealth; but on what do the mechanics live while constructing the ships or the railway trains which transport the marine elements of wealth, or those of the mine and the forest? On what do the thousands of workmen sub-

sist while securing and shaping these crude products? On bread made from the farmer's flour, and beef and pork which the farmer produces and sends to market. The raw materials of commerce are comparatively of little value. The value of steel is said to be augmented more than a thousand per cent. when fashioned into the mainspring of the watch. Think also of its increased value when converted into fine cutlery or surgical instruments. Much the same may be said in regard to the rarer metals, as gold and silver. Hence, it is evident that the merchant derives his profit not from the raw materials, but from the finished products of the workmen and the artists; and these in turn receive their sustenance from the hand of the agriculturist.

Thus it is apparent that the diversified trades and professions could not exist but for the surplus earnings of the farmer over and above his own necessities; hence the proud pre-eminence of agriculture over all other sciences and all other industries, that it commands the wealth of the world and determines the social condition of nations.

W. J. WAY.  
Kent Co., Ont.

## The Cultivation of the Sugar Beet.

Simon B. Heist, the proprietor of "Mount Maple Farm," who, as seen in the accompanying engraving, is just leaving to deliver the front load of sugar beets, is a typical Canadian farmer. Coming into possession of Mount Maple Farm, the old homestead of his father, Simon, who migrated from Germany and settled in Waterloo County in 1832, when all was a dense forest, cleared the land, improved the farm, and built the splendid barns and house that he and his almost grown-up family now enjoy. Ambition, courage, industry, frugality and thoughtfulness are the elements characteristic of the fathers and mothers who live in the enjoyment of plenty on our best Canadian farms. Typical of this class, he has been a real success in life, and now, though passing the prime of life, is a staying-power of influence greatly needed among the too much college-bred Canadian youth of to-day.

In the 1901 Government tests of the cultivation of sugar beets in the Province of Ontario, Mr. Heist cultivated one of the twenty-five plots sown in the county of Waterloo, and ever since has continued to cultivate from six to ten acres annually for the sugar factory at Berlin. His knowledge of the crop, therefore, is valuable, being based on experience.

As has become general, his method of harvesting is by the use of the beet-puller, to loosen the beets in the ground, and the table upon which the beets are thrown and topped. Although living six miles from the factory, it is his practice to deliver, daily, four large loads of over two tons each, with two broad-tired wagons.

My beet field, says Mr. Heist, is now my only summer-fallow, and with this crop my land is cleaned as perfectly as if summer-fallowed. I do not keep account in actual figures of the cost and profit of my farm crops, but my beet crop is the most profitable crop to me. It is a direct cash producer. Should I hire everything, and charge rent on land, and pay for my teaming, there would be a profit in cash, and my land is left in better condition than if summer-fallowed.

Farming, in all its branches, where practiced with success, is progressive, and undergoes, year by year, important changes. It is also extremely varied in different districts, sections and localities, resulting from variations in climate, soils, markets, etc. The successful farmer to-day is he who is shrewd to perceive the lines along which, in his location, with his surroundings and opportunities, he can apply his forces to the best advantage.

New branches in farming are continuously being emphasized and developed as varied and changing conditions give rise to them. Modern

dairying, the silo, and the bacon hog, are examples. Successes and failures alike are experienced, as correct and incorrect principles are observed. So it is in the beet-sugar industry, and the cultivation of the sugar beet, in which there is the right way and the wrong way. In proportion as the farmer is practical, success will follow, and substantial benefits will result to the individual and to the community in this as in other branches of agriculture to which our soil and climate are adapted.

## Harrowing Spring Crops.

To the Editor "Farmer's Advocate":

In talking agriculture with a friend who had had some experience in England, he told me the first year he came to this country he advised his uncle, with whom he was staying, to harrow his barley ground. This was after the crop was well up. With great reluctance, the uncle, who had never seen such a thing done, consented. With good solid iron harrows the barley was harrowed. Much of it was torn out, but the balance began to show wonderful growth, assuming a very dark green. The crop was thin somewhat on the ground, but the straw grew tall, and the heads lengthened out beyond anything seen in barley before. When threshed, the yield was fifty-five bushels to the acre. Would you advise farmers in such doings? Can any of your readers give any experience in harrowing spring grain? I have frequently harrowed fall wheat in the spring, but no spring crops. I have a mind, all being well, to try it next spring. My own crop of barley this year was forty-four bushels to the acre, but if I can add ten bushels more by harrowing, why not try it?

Do you approve of rolling crop immediately after sowing, or when well above the ground, or not at all? I find opinion is divided on this point.

JOS. OSBORNE.  
Lambton Co., Ont.

[Note.—If after sowing the seed in spring the land gets run together and packed solid by heavy rains, causing baking of the surface when dried by sun and wind, harrowing may often be done with excellent results in the case of any spring grain. It is well to harrow before the land gets hard, as the moving of the surface will then be more complete. We have seen even a crop of peas greatly benefited by harrowing, where the ground had become packed upon the hilltops, and one would naturally think that crop would suffer from such heroic treatment more than any other. If the moving of the surface soil and the admission of air benefits corn and roots, why not grain as well? The only objection to harrowing barley is that when it has been seeded with clover, the young plants may be destroyed to some extent, but it is a question whether, after all, a larger percentage of the clover may not survive and flourish than in the case of an air-tight seed-bed, and a cramped growth, owing to the packed condition of the surface soil. The principal benefit from rolling is its effect in crushing lumps, thus helping in the fining of the soil, though the compression of the soil particles may hasten germination, providing crusting of the surface does not follow. We believe the best plan is to roll immediately after sowing, and then harrow a few days later, either before or after the blades are above ground. If this treatment is not approved, then we would advise delaying the rolling till the blades are up, when, for the purpose of smoothing the surface for the harvester, it may be done, though, for the improvement of the growth of the crop, we think there is little, if any, benefit derived from rolling.]

I am well pleased with the "Farmer's Advocate," and think you have improved it greatly by changing it to a weekly. Enclosed find my renewal.

Quyon, Que.

A. C. DRAPER.



Harvesting Sugar Beets in Western Ontario.