

interest by the thousands that visited the exhibition, for many would not credit there could be such a fine display made. This and many other parts of the exhibit deserve more extended notice.

On our return, between Campbellton and Rivière du Loup, in the Province of Quebec, we noticed that the fields of grain were principally cut and lying in small bundles ready to be tied into sheaves. In some fields we saw several men, women and children reaping the grain with reaping hooks; some of the reapers reap on their knees. Some of the grain was still green; it consisted of oats and wheat principally. This was on the 8th of October. The crops in the Maritime Provinces had been secured, and ours in the west had been in our barns a month ago.—*From the Farmer's Advocate.*

THE POTATO CROP.

[The following paper in last month's *Chambers' Journal* is stated by the *North British Agriculturist* to be from the pen of an experienced agriculturist in the west of Scotland.]

It is to the grower rather than to the consumer that the fact of violent fluctuations in the value of potatoes chiefly appeals. The total expenses in the case of potatoes sent from such districts as Yorkshire or from Scotland to the metropolis are probably not over-estimated at from 30s. to 40s. per ton. When, therefore, the price to the retailer in the London market is £6, the amount reaching the farmer will be about £4 per ton. Should the price in the metropolitan market, however, fall to 75s., the farmer will find his return reduced from 80s. to 35s. per ton, thus showing that a relief of 37 per cent., to the consumer implies a reduction to the farmer of 56 per cent., in the value of his crop. It has even happened, in the case of potatoes sent for sale to some distance, that the selling price has been entirely swallowed up by the inevitable charges.

The great fluctuation in the value of potatoes as a farmers' crop is, of course, owing to the extreme uncertainty of its soundness and weight per acre one year with another. In this way the supply in any one season may be much short of the demand, or may greatly exceed it. It is, however, an unwarrantable inference to judge that the year of a plentiful and sound crop is necessarily the most profitable one for the grower. This may be illustrated by reference to the crops of the two past years. The crop of 1881 was unprecedentedly large and sound. On fairly well-managed farms it was 8 to 10 ton per acre of "dressed" potatoes. The following year on the same farms, the "marketable ware," owing to disease, did not probably exceed 4 to 5 ton per acre. The price per ton for crop 1881 was,

however, a good deal less than half of what has been realized for the produce of last year. The comparison may be shown thus:—1882, 5 ton per acre at 80s., £20; 1881, 10 ton per acre at 30s., £15; total, £5. Thus, a considerable difference in favor of the season of a meagre and diseased crop is brought out. And this is not all the advantage; for in 1881 there would be greater expense to the farmer in handling and carting the bigger crop, as well as a greater drain upon the soil's fertility.

With the information at our disposal through Government returns and otherwise, it is not possible to state exactly what is an annual average supply of potatoes for the purpose of human food. We know the acreage grown, and we may, with tolerable accuracy, estimate the average return of sound roots per acre; but it is always uncertain how much of the crop may be used in cattle feeding or sent to the starch manufactory. In such a year as the present, we are perhaps safe in assuming that an exceedingly small proportion of the sound roots will be used otherwise than as human food. Judging from the prices during the past winter, it may with confidence be said that the supply from crop 1882 was not equal to the demand. On the other hand, a great deal less than the crop of 1881 is all that could be disposed of at a price which would be remunerative to the grower. Of crop 1881, it is reckoned that about 1,000,000 ton were exported, chiefly to America; besides this a great quantity was consumed by cattle; and still the surplus was too large to allow the price to rise to a remunerative figure, except in the case of farms near the large centres of population, where cost of carriage was small. The British demand for this article of diet may, therefore, be said to be somewhere between the quantity grown in 1881 and that grown in 1882. The total acreage of potatoes in the United Kingdom in these years may be stated roundly as 1,333,000. If the marketable roots of 1881 averaged 8 ton per acre, the crop of that year would be nearly 11,000,000 ton. Deducting 1,000,000 ton probably exported, and another 1,000,000 ton consumed by cattle, we have 9,000,000 ton as the quantity of sound potatoes available for human food of crop 1881. But from this we must deduct seed for the following year. We reckon this at only 500,000 ton of marketable roots; the quantity would not be enough for seed purposes; but it must be remembered that a considerable breadth is always seeded by "seconds" (small potatoes), which are unfit for the market for food purposes. Making these deductions, we reckon the quantity of crop 1881 used for human food to have been 8,500,000 ton. This,

then, may be considered the maximum quantity which the population of the kingdom care to use, even when potatoes are at the cheapest—when they can be had at the price of cattle food.

Crop 1882, including Ireland, where a disease was very prevalent, is probably not under-estimated at 9 ton per acre of sound, marketable roots, or a total weight of 4,000,000 ton. Deducting, as before, 500,000 ton for seed, and reckoning all the rest to be used for human food, we find the quantity to be 3,500,000 ton of sound roots as the food supply from crop 1882.

From the experience, then, of the past two years, it would appear that 8,500,000 ton is too large a supply for our wants—more than will be remunerative to the grower; and 3,500,000 ton is so small an allowance that the London price is raised much above the intrinsic value of the article, as compared with other staple food products. With wheat at £11 to £12 per ton, potatoes are too dear at from £7 to £8 per ton, judged of by their value as human nutriment. Probably, we are not far from the truth in reckoning 5,000,000 ton to be the measure of the nation's annual demand. For this quantity, a fair price might be obtained by the grower.

We have not taken imports of potatoes into account in the above calculation. We find, however, that, during the past twelve years, there have been annual importations, varying from 38,000 ton in 1870—which is the smallest quantity—to nearly 500,000 ton in 1880, which is the largest importation during the period mentioned. It is probably safe to reckon that three-fourths of our imported potatoes are early varieties, and are used in this country between June and September, before the main portion of our own crop is ready for use. This being the case, the foreign competition in this product of our agriculture is seen to be of extremely little account.

It has not yet been found profitable to raise potatoes as food for stock. The average cost of producing 10 ton of potatoes would be sufficient to grow double the amount of turnips; and the latter is preferable, as costing less for labor and manure, and being more cheaply stored. It is not in cattle feeding that farmers can hope for a profitable outlet for the potato crop, when it happens to be superabundant. The value of the potato crop as a preparation for the growth of wheat yearly diminishes, as the growing of wheat is found to be itself unprofitable.

What is meantime wanted in the interest of the farmers is the means of annually growing just such a weight of potatoes as will be sufficient for consumption on our tables. To arrive at this, two things are requisite—first, a means of