

and brain. They give strength, it may be, but it is only by tickling the nerves, as it were, and hence the strength is temporary, and leaves the system more debilitated than it found it. It also increases the temptation to repeat the dose.

I wish young men could fully understand and appreciate the views I have here faintly and imperfectly, but yet in all sincerity and honesty, set forth. I wish they could fully know that all the extra warmth and strength they obtain by drawing out nervous energy, any faster than it is naturally drawn out by those articles of food and drink which are properly converted into blood, to nourish the body, is at the future expense of that nervous system and other machinery which furnish it.

For, suppose that correct views on this subject were to cut off every conscientious young man from the use, not only of all exciting—i. e., over-exciting drinks, but also from all kinds of medicine, however small or trifling, would they not be gainers by it in the end? Admit that it should be found out, gradually, that many of what are called condiments or seasonings, were also medicinal substances; and that they were, each in its turn, abandoned—what then? Who wishes to gratify his natural fondness for excitement, at the expense of an impaired constitution for himself and his posterity? Who does not, on the contrary, wish to do right and reap the consequences? But I might go entirely beyond the region of selfishness, and appeal to your sense of duty to God and man—to God, I mean, and the human race. Have you a right to gratify yourself—your nervous sensibilities I mean—at the expense of your health, or at the hazard of impairing the constitutions of those who may come after you?—*New York Evangelist.*

Agriculture.

SPRING WORK.

(Continued from page 141.)

BARLEY.

This grain being principally used for malting purposes, is not so important a crop to the country as some others. The land for barley requires to be well worked with the plough, harrow and roller, and by rights, should be ploughed in autumn, so that by the action of frost it may be made perfectly friable. For a matter of experiment, the editor, a few years ago, in cultivating fifteen acres of barley land ploughed a portion of the field twice, and the other portion three times, and another four times; that which was ploughed twice yielded 30 bushels, that three times 40 bushels, and that four times 50 bushels per acre. No portion of the land was ploughed only once, but if it had been, it doubtless would not have yielded more than 20 bushels per acre. Between each ploughing, the land was harrowed lengthwise and crosswise of the furrow, by which means the most perfect state of tilth was produced. Two pecks of seed should be sown per acre; and it is useless to sow this crop upon land unless it be rich, and in a high state of cultivation.

CULTIVATION OF OATS.

There are few crops so easily cultivated as oats, yet, to get a large yield, it requires that the land should be in the highest state of fertility. This crop is usually grown for the purposes of provender, for which it is peculiarly adapted for horses. Of late years an increased demand and value have been imparted to this grain, through the establishment of a great number of oat mills. A small proportion of the product of those establishments is exported to England, but the greater bulk is consumed by the home population, thus taking the place of wheat flour. In many points of view, oatmeal is a more nutritious article of diet than wheat flour, and as the crop is much more easily cultivated than wheat, its consumption as an article of food for man is a matter of much importance to the country. The oat crop may be very considerably increased, without materially lessening the amount of wheat grown in the Province; and, therefore, whether it be consumed at home or is exported, it is so much real gain to the country. If 100,000 barrels of oatmeal-flour be manufactured and consumed in the country, it is obvious that it would be a means of increasing the exports of wheat flour 100,000 barrels, and would thus enrich the country, by providing a means for paying for the imports at the rate of £100,000 per annum. If a saving of this kind can be made, and, besides, an equal quantity of oatmeal exported, both of which are quite practicable, this crop would then become

on the list of exports, of third rate importance. Much of the low interval lands of the country, that is quite too rich and wet for winter wheat, would grow most abundant crops of oats; and if lands like these were much more extensively brought into cultivation, and seeded down with the cultivated grasses, and occasionally broken up and sown with two or more successive crops, and the oats converted into oatmeal, a much greater quantity might be that means be produced than what was supposed might be done in the foregoing calculation.

On land that is well-adapted for wheat and clover, it would be very unwise to sow a greater quantity of oats than would be sufficient to supply the horses and other stock on the farm. When oats are sown as provender upon land that is not in a high state of fertility, it is an excellent practice to sow about twenty-five per cent. of the quantity of seed with peas. The peas, having broad leaves, will extract much of their food from the atmosphere; and besides, they will shade the ground to a considerable extent, and thereby tend to increase, rather than lessen, the yield of oats.—From ten to twelve bushels of very superior quality of peas may be grown per acre among the oats, without seriously affecting the average product of the latter crop which may be separated from the oats by the use of riddles for the purpose, or they may be ground together and consumed as food for stock. The average yield of oats, in the best cultivated districts, does not exceed forty bushels per acre; and if the whole wheat crop of the country were taken into the calculation, it is highly probable that the average, extending over a number of years, would not exceed thirty bushels per acre. During a period of eight or ten years, the cash value of oats does not exceed one shilling and threepence per bushel, at which average the crop is worth only about £2 per acre, which will scarcely pay the rent and cost of cultivation.—Those farmers, however, who cultivate this crop with a view of making it a paying one, are not satisfied with a less average than fifty bushels per acre; and by such farmers who cultivate their land upon correct principles, from seventy to eighty bushels per acre are, in favorable years for vegetation, produced. The heaviest crop of oats of which we have any knowledge were grown upon a ten acre field, which had been in pasturage upwards of twenty years from the period it had been brought into a state of cultivation, which was broken up as soon as the land could be ploughed in the spring, and sown with three bushels of oats per acre. The field in question yielded one hundred and twenty bushels per acre, of an excellent sample of grain.

In sowing this crop, two things should be observed; first, that the ground should be rich in decomposed vegetable matter, and, secondly, it should be sown very early in the spring, so that the ground may be shaded before the approach of the hot, dry weather, which most usually occurs in the latter part of June and during the month of July. If the land be not sufficiently rich to produce fifty bushels per acre, then it should be seeded down with clover and timothy, and allowed to remain in that state, in pasturage, till it becomes so; and if it be exceedingly rich, four bushels of seed may be safely sown per acre, which will secure a thick and full growth of straw, without risk of the crop being lodged.

SOWING GRASS SEEDS.

Many experiments have been made in this country with the cultivated grasses that are in high repute in Great Britain, and other countries in Europe, but they have almost invariably failed in giving that satisfaction that was anticipated from them, before they were made. In fact, the perennial grasses of Europe will not endure the rigour of a Canadian winter, and therefore it is useless to recommend them to public favor. Lucerne will, in most cases, live through winter, if sown upon a dry, deep, and porous soil; but then it bears no comparison to red clover, either as an article for silage, or for hay. A much greater quantity of herbage may be obtained from a given quantity of land of the former than of the latter; but it is exceedingly probable, that the latter does possess more nutritive properties for horned cattle and horses; besides, the lucerne exhausts the soil to a greater extent than any other of the varieties of clover, and its roots cannot be broken with an ordinary plough.

The grasses best suited for Canada, are clover and timothy. They should almost invariably be sown together, and the proportions in which the seed should be mixed, before being sown, will much depend upon the character of the soil, and the object for which the crop is intended. As a general rule, the plants of clover and timothy should be about equal; but if the growing of