

A Timely Labor.

Just now, the farmer who is anxious to increase the yield per acre of his farm is busy getting his seed ready. Any farmer is prepared to admit the importance of sowing good seed, but it is only too self-evident that not very many take anything like the care they should to sow grain that is strictly clean, of fine vitality, and of strict purity.

Happy is the farmer who just now has a fine bin of his own grain from which to choose his seed. This should be carefully screened in an up-to-date mill. Even then, it will be all the better to make a second selection for seed purposes for next year. Time will be well spent in going over this second lot handful by handful, selecting only the grains that come nearest the type desired for harvest next autumn. What is true of the grain crop is many times truer of the potato and corn crop. It is a waste of time to sow seed that is not vital, and this is the season in which the vitality of seed should be discovered. That discovery is made too late when it is not made till the time of planting. A very simple method is to take a definite number of grains from the seed to be tested, and to plant them in a window box. Actual results will demonstrate the percentage of vitality.

All of this work is rendered doubly necessary when one buys his seed. Too great care cannot be exercised in buying seed from only reliable vendors. Even, however, when the farmer has exercised due precaution, he sometimes finds that his judgment of men's uprightness has been defective, and that the purchased seed is not up to the mark. It is far better for him to make this unwelcome discovery before he sows than after his grain is in the ground. In a matter so important as this, only the farmer's own first-hand, painstaking labor will avail.

The seed selected should be measured, labelled, and placed where it can be preserved and got at when it is wanted. The labelling is an important part of the process, as an unfortunate mixing of seed or the using of the wrong seed has resulted in annoyance and serious loss.

Paying attention to these directions will yield fine returns. It will mean a larger bin of grain, and a grain that will test high. It will mean, too, that the grain or roots, instead of "running out," will steadily improve. Indeed, in a very few seasons, this careful selecting of seed will produce a variety of grain so much better than the original that the owner will believe himself the discoverer of a new variety. The wide-awake farmer will be wise to begin as high up the good-seed ladder as he can, by selecting the best grain he can procure.

Cultivation has a great deal to do with results, but just now the farmer has the opportunity of selecting his seed. Cultivation will come later on.

York Co., Ont.

World's Wheat Statistics.

A French view of the world's wheat supply has been compiled by Achille Guillard, who claims that the word "famine" might be scratched out of the European dictionary. So settled is the supply that a rise of 4 frs. per cwt. in wheat suffices to astonish and alarm everyone. France consumes about 330,000,000 bushels of wheat, and produces almost as much, and usually imports from \$5,500,000 to 11,000,000 bushels. France has an import duty of 7 frs. per cwt.

England stands at the head of the countries which do not produce enough wheat for their requirements. The British production is given as 60,250,000, and her imports as 173,250,000 bushels. German production is 143,000,000 bushels, which leaves about 70,000,000 bushels to be imported. The United States stands at the head of producing countries, with 712,000,000 bushels. Russia produces 451,000,000, and India about two-thirds as much.

M. Guillard does not believe that famine will ever come again in Europe, as it has so often done in the past. The sources of the wheat supply may change, but the requisite quantity is produced year by year.

COST OF BREAD

All manner of statements regarding the cost of bread in protected countries have been made during the British general election—all designed to prove the particular belief of the partisan. Mr. Broomhall, the wheat statistician, has a letter in the press giving concrete figures as to Italy. Italy is a wheat-eating country, and in 1900 adopted a tariff on wheat of 12s. 7d. per quarter of 480 pounds. In the decade since, the following changes have occurred: The native crop has increased by ten per cent., importation of foreign wheat by 17 per cent., and the price of bread by 100 per cent. Italy raises four-fifths of her wheat, and imports one-fifth, principally from Russia. The Italian consumer now pays over £15,000,000 per annum on account of the wheat-import tax, of which £3,000,000 goes to the Government in relief of taxation, and £12,000,000 into the pockets of those who raise wheat. The wages of agricultural laborers are lower in Italy than in any other great country of Europe.

Cement Tile—Hydraulic Ram.

1. I have about two hundred rods of ditch which will require 6 or 7-inch tile. Would it be cheaper to purchase moulds and manufacture them myself of concrete? About what proportion of cement and coarse sand should be used?

2. Have a spring about 50 rods from buildings, with a large flow of water, which can be raised five feet or more above surface of ground. By using an hydraulic ram, can water be forced to buildings, buildings being about 15 feet above level of spring?

3. What would be the best method of raising water in order to give sufficient fall to drive ram? How would a concrete tank do, and how large in diameter?

4. Should the outflow be from bottom of tank, or from near top?

FARMER.

Ans.—1. Cement tile should not be made weaker than 1 of cement to 4 of sand, and they should be made as wet as possible. It is doubtful whether there would be anything to be gained by making such a small number of the cement tile, instead of buying the clay tile. You would have the outlay for your moulds, the getting of things in shape for the manufacture, and then, besides, there is considerable to learn about making cement tile properly, and therefore the tile made at first would not be up to standard, and would not be likely to give satisfaction, and might have to be discarded.

2. Water can be raised to the buildings by means of an hydraulic ram.

3. It is difficult to answer this question without knowing all the circumstances connected with the case. Under certain conditions the cement tank would be all right. The diameter of tank makes no difference to the efficiency of the ram, and should be determined according to conditions. A method often used to get fall is to dig a hole and put the ram at the bottom, the overflow being provided for through an open ditch or a tile below the ram.

4. In case a tank is used, the outflow should be from the top, as you have just that much more fall in the pipe, and it is really the fall in the pipe that counts with the ram.

W. H. D.

O. A. C., Guelph.

A Well-managed 45-acre Nova Scotia Farm.

The farm was just forty-five acres, and was situated in a locality where large farms were the rule; in fact, those 45 acres were attached at one time to one of those large farms, and, owing to the vicissitudes of life, were all that was left to the young man who owned it. It was at an age when friends were advising him to go into professional life (the legal profession being the one chosen), but a natural love for outdoor life, and a fondness for live stock of all kinds, induced him to remain on "the little bit of land" that was left to him when the claims of a bad business deal were cleared away.

The situation was good, being near to a first-class market for all kinds of farm produce, in the mining district of Eastern Nova Scotia. The owner was clear-headed and energetic, and wisely decided to adhere to the line of farming that would bring the quickest returns, and at the same time add to the fertility of the farm. Mixed farming was chosen, with dairying as an important part. It took considerable studying into all the conditions before this was decided upon, on account of the limited area that could be devoted to pasturage, but, after fifteen years' farming, the wisdom of this decision is verified. The farm was divided as follows: Five acres in woods, five in natural meadow, five in buildings and orchard; the remaining thirty acres were divided into four fields of about 7½ acres each, and kept under a four-year rotation, about as follows: First year, roots and corn; second year, grain; third year, grass; fourth year, pasture. Eight high-grade Jersey cows are kept on this small farm, and the heifer calves are reared, and as they are always sired by a pure-bred bull, find a ready sale as soon as they come into milk, or are used to keep up the efficiency of the herd at home. The five acres of meadow has been in hay for twenty-five years, and seems to do better every year. A large brook runs along one side of the meadow, and overflows its low banks in spring and fall freshets; and, to prevent washing, the land is never plowed, as otherwise might be done. About every second year this meadow receives a light top-dressing of barnyard manure, which, with the deposits left by the overflow, insures a heavy crop. Sometimes a dressing of commercial fertilizer, generally bone meal, is used instead of barnyard manure. The quantity of hay cut on this meadow averages fully three tons to the acre, and is a mixture of timothy, clover, bluepoint and brown-top (locally so called), and much relished by the cattle and horses. Occasionally this meadow is seeded early in the spring, before the frost is out, with timothy, alsike and red clover. After the hay is removed, and during the months of September and October, the milk cows are allowed on the meadow, and are greatly benefited thereby, and do not seem to hurt the next season's growth.

As soon as the cows are turned on this meadow, the summer pasture is plowed and thoroughly harrowed. Sometimes it is ridged up late in fall, but more often is left smooth. The manure is drawn to this field at intervals through the winter, and as soon as dry enough for the team to work in the spring, this land is disked or well harrowed with a sharp, spring-tooth harrow, and the land put in shape for roots and corn. A very small quantity of commercial fertilizer is used to give the crop a good start, and to help out the barnyard manure, which is somewhat limited in supply. The roots (chiefly turnips) are stored in the barn cellar, and the corn fed from the stook in late fall. After the roots and corn are harvested, the land is not worked any more until the following spring, when it is again disked and sown to grain, generally a mixture of oats, barley and peas; sometimes wheat is added. This is allowed to ripen, and, when threshed, is ground for feed, the straw being used to feed the dry cattle, considerable of it being fed to the horses in the idle season. As soon as the grain is removed off the field, it gets a good dressing of barnyard manure, and no animal is allowed on the field, which gives the young grass and clover a chance to grow somewhat before the winter sets in. Every year sees an improvement in the quality and quantity of hay following this rotation. If more land were available, two crops of hay would be raised on this land, but it is needed for pasture, which makes the fourth year in the rotation. At first a good deal of rough feed had to be purchased, in order to keep up the required number of live stock, but for the last six years everything needed was produced, except some wheat bran and a quantity of oil cake to balance the grain ration.

When the present proprietor took hold, there was an old orchard on the farm. This has been entirely renovated and mostly top-grafted, and, next to the dairy, is the best-paying proposition on the farm. The revenue of this farm is derived from butter, which is delivered weekly to private customers, and sold the year round for twenty-five cents per pound. A high standard of performance is set, and cows not coming within reasonable distance of that standard are turned into beef. So closely is this watched, that the owner can tell you to a cent what each cow is worth to him. The surplus cows are eagerly sought after by families in town who keep a cow for their own use, and always at remunerative figures.

The work done on this farm is done by a pair of grade Clyde mares that were purchased as three-year-olds fifteen years ago, and, besides doing all the work, also raise a colt year about, or, to be accurate, eleven colts in fifteen years. Those colts are sold when weaned, and add quite an item to the revenue-producing power of the farm.

Asked as to the advantages of a small farm, like the one in question, over a larger one, the owner replied: "Except in the busy season, I do all the work myself, so that the money earned can be kept at home, which, on a large farm, would have to be paid in wages; and that on a small farm, by giving his whole attention to the work in hand, he could make one acre produce more than two acres did on a large farm, when hired help was depended on."

As butter has to be delivered to customers every week, a point is made to have something else to go along to make up a load. Garden truck, grown in the orchard, principally—early potatoes, rhubarb, peas, strawberries, apples, all in their season, go to make up the item that has helped the farmer to build up a home that a city man might envy, and also lay up a snug sum for old age.

The poultry-yard is not neglected, and a nice flock of White Wyandottes are kept, and a supply of eggs are regularly sent to market. The chickens are hatched early in spring, and the pullets are brought along to encourage winter laying, while the cockerels and older birds are fattened for the market. This is the goodwife's part of the business, and she claims it is the best-paying part of the farm.

Space forbids going any further into detail, but this 45-acre farm is an object-lesson to the whole locality in which it is situated, and many of the larger farms are being cut down to allow their owners to dispense to a large extent with unsatisfactory hired help.

The greatest drawback to the owner of this small farm is that the small acreage under pasture does not allow him to keep sheep, as he believes—and rightly—that a small flock of sheep, well kept, would add greatly to the profits, without materially increasing the labor.

Pictou Co., N. S.

ANDREW McPHERSON.

P. H. Bowyer, M. P. P. (East Kent), has presented in the Ontario Legislature a bill designed to enact that every municipality shall impose a tax of \$1 on each dog, if one only is owned or harbored, \$2 on each additional dog, and \$5 on every bitch. The object of this bill, Mr. Bowyer stated, was to reduce the number of dogs, and especially aimed at the number of useless and vicious curs owned and harbored throughout the Province, a menace to the sheep industry and the people.