THE FARM.

Notes on the Clover Seed Crops.

While in Western Ontario looking up the prospects of the corn crops for the Seed Branch, I was afforded an opportunity for looking into the clover seed trade, which was at its height. Even as early as October 20th, one large seedsman at Simcoe had already bought and recleaned some 4,000 bushels of red clover seed. The fine October weather had made threshing in the field possible, and a good deal of the seed was hauled from the field direct to the huller.

A few years ago it was thought that clover seed must lay out until late fall or early winter to get the straw rotten before it could be hulled, and that even then it must be hulled during cold weather. With the modern hullers run by steam power, it is quite possible to do even better work than in the old style, and it avoids the great danger of having part of the seed sprouted before being housed, which greatly diminished its vitality.

The crop of Western Ontario, on the whole, was a good one. Some lots had been shipped from the Georgian Bay districts, and everywhere the buyers reported the seed freer from noxious weed seed than for some years, and the crop a good average one. Some pastured fields were yielding five bushels per acre; some only three bushels. From seed produced after a hay crop, yields of from one to three bushels per acre were reported. There were some pieces of this year's seeding which had been allowed to go to seed which also promised well.

The alsike crop, which was practically marketed at the time, was also good this year, and above the average for purity. It would appear that the rapid and luxuriant growth of the clover overcame much of the weed life by smothering it, and a better grade of seed was produced.

There were many samples, however, with more or less of weed impurities in it. Of those mentioned in the Seed Control Act of 1905, ribgrass or buckhorn and ragweed seeds were most common. Curled dock showed up to some extent.

It was very gratifying to notice the effect the new Seed Control Act was having on the trade. The country was being scoured by local and foreign buyers. Three outside buyers were from the U. S. buying for the Toledo market. They were taking lots that our buyers were rejecting. Most of the leading seed firms of Ontario had their buyers out, and, notwithstanding the keen competition, they were examining lots of seed as never before for weed-seed impurities, and were discriminating in favor of good seed from 50c. and in some cases to $1 per bushel; $6 to $6.50 was the common price, but for some choice goods $7.10 or more had been offered the growers.

It was claimed by the seedsmen that the prices paid were rather more than the future would guarantee, as the market was largely a speculative one, being influenced by the Toledo market, where they were short in their supplies. The effect of this discrimination in price in seeds on account of purity will mean that the farmers generally will endeavor to carry out the advice given them to do as much weeding in the field as possible, where weeding counts the most. Often a great deal of foul seed could be kept from contaminating the main crop, by using the scythe in the field where the seeding had killed out and cut the weeds on those places before they went to seed. Very often it would pay to hand pull certain plants which were not too numerous.

Another lesson the farmer is learning is to rotate his crops, so that his seed crop will come on a comparatively clean field, as where the seeding is done after a hoe crop or summer-fallow.

A number of the local seed vendors and buyers for the larger seed firms were visited, and asked as to how they thought the Act would affect the trade. In nearly every case they were in favor of its provisions, and were glad to receive any explanations as to how it applied. In many cases the small dealer intimated he was going out of the business altogether, as he could not afford to take any risks. This will put the trade in the hands of fewer dealers, who will be responsible men and more careful of the goods they handle. Some were setting aside farmers' lots they believed to be quite pure for the spring trade. They were all making more or less careful examination of seed for impurities, and anything at all suspicious was being sent forward for recleaning. Some of the leading seedsmen were interviewed, and they were grading their seed so as to conform to the provisions of the Act. Quite a number of samples of red clover, alsike and timothy were sent to the Seed Laboratory for investigation, and the results have confirmed quite largely the general observations already made about the purity of the seed this year. If only seed merchants, seed vendors, buyers and growers will co-operate to wage an unremitting war against weeds, it is hard to say what might be accomplished in the next few years. I believe the movement has begun.

T. G. RAYNOR.

Likes the Reading Glass.

I received your letter and reading glass; I am well satisfied with both of my premiums, and thank you very much.

THOMAS GRAHAM.

York Co., Ont.

Likes Gasoline Power.

I have taken your valuable paper for one year now, and am well pleased with it. Especially in the line of questions and answers I have received much information. I noticed in last week's issue enquiry was made about farm power. I had the same problem to solve last summer. I asked several friends and neighbors for advice, and no one advised me to put up a windmill except windmill salesmen. I was advised and finally decided to have a gasoline engine, and might say I am highly pleased with it. I have a two-horse-power, with which I run a light cutting-box, fanning mill, washing machine, cream separator, churn and pump. The pump is eighty yards from engine, and is run with a light cable, pumping water to house and barn to a height of 80 feet from bottom of well, and works satisfactorily. It is the most convenient power I have seen. For grinding grain a larger engine would be needed. The cost of fuel for running for what I have used it is about $1.00 a month.

I. B. W.

Waterloo Co., Ont.

Joseph Thompson, Chilliwack, B. C.

Winner of first prize for best exhibit of swine at the Dominion Exhibition, New Westminster, B.C., 1905.

Cuba's Facilities for Producing Cheap Sugar.

As showing the marvellous advantages Cuba possesses for the cheap production of cane sugar, the following from an interview with John Western, of Detroit, Mich., published from a Michigan paper in the American Sugar Industry and Beet Sugar Gazette, is pertinent:

"In Cuba the best cane land is selling at $25 an acre, easily accessible to railway and mill. It is plowed at little expense. A piece of cane, with a joint in it, is jammed into the ground, and in a year is part of a big cane swamp, six feet tall. The cane is cut in three-foot lengths, piled in ricks like our country hayricks, and taken to the mill. The returns show from 30 to 60 tons to the acre. The price is good. The mill can make a profit at one cent a pound; it actually makes 200 per cent. by selling it as high as 2½ cents a pound. Result: Cuba shipped 1,000,000 tons of sugar last year; will ship 1,200,000 tons this year, more than any other sugar-producing district in the world.

Mr. H. M. Vasey, Ladner, B. C.

Owner first-prize herd Shorthorns, Dom. Exhibition, '05.

LIVE STOCK.

Problems of the Feed Bin.

II.

Some years ago we remarked to a man who was considering whether to buy wheat, bran or corn meal for his cattle that he had better get some of each and mix them. "Yes," he assented, readily, "I guess that would be the best plan; the meal will give the weight, and the bran will make up the bulk." Now, there was some reason in his argument; a diluent such as bran is advisable to use in conjunction with heavy feeds like corn meal, pea meal and oil cake, which, if fed alone, lie so heavy on the stomach that the digestive juices cannot act readily upon them, hence are liable to cause digestive troubles. But the primary reason why we advised the man to combine corn and bran is found in their composition—each supplies in excessive proportion the elements in which the other is deficient.

Right here is a good place to explain the principle upon which rations are calculated. There are four things taken into consideration in figuring out rations. The first is the total amount of digestible dry matter in the daily allowance per animal. Attempts have been made to prescribe the exact amount of digestible dry matter that should be fed to animals of certain weight for certain purposes. This always seems to us a big mistake. The amount of digestible dry matter that various animals can use to advantage varies widely, and what would stall one beast would be quite below the amount that another of the same weight could consume with profit. Every feeder must be a law unto every animal in his charge regarding the total quantity of feed, and also the proportion of that feed which shall consist of concentrates, i. e., meals, bran, etc. The second and a much more important factor to be considered is the total weight of digestible protein in the ration. Protein is a general name for the elements which in one way or another go to make growth of bone, muscle and blood, and likewise enter largely into the composition of milk. The chief and most important constituents of the protein are called albuminoids, which are practically the only tissue-builders. Other constituents in the protein are called amides; these are incapable of producing growth, though it is thought they act as auxiliaries to the albuminoids, and to a certain extent conserve them for the purpose of tissue-building. It is a debatable question whether much account should be taken of these amides or not. Some chemists ignore them, and in balancing the tissue-builders with