Valley, as in other places, is the fact that it is allowed to stand too long before the first cutting is taken. It seems to be the common practice to let meadows stand until the blooming period of timothy is well over, with the result that the clover is too far advanced for the best hay even, and the chances for a good second growth for seed crop are reduced almost to the vanishing point. Even for hay, much better results would be secured if the meadows were cut when the clover is in full bloom, and for seed it should be cut even sooner. If you have sufficient clover meadow, it is a good plan to pasture part of it, up to about the middle of June, and then run the mower over it with the cutter bar set high to remove the roughage. This allows the second growth to get a good early start, and usually gives a better yield of seed. It has the further advantage of making the seed crop less liable to attack from the clover midge, which sometimes does great damage to the later crops.

When growing clover seed for market or for home use, it is of the utmost importance to see that it is as free as possible from weed seeds, or its market value will be greatly lowered or entirely destroyed. In order to produce pure seed, it is necessary, first, to select a well-prepared, clean piece of land, preferably following a well-cared-for hoed crop. Then sow the cleanest available seed and follow this up by carefully hand-pulling or spudding any weeds that may appear in the seed crop.

THE SEED CONTROL ACT A BENEFIT.

The Seed Control Act now requires all timothy, alsike, red clover and alfalfa seed sold by seed merchants to be plainly marked with one of the four grades fixed by the Act, namely, Extra No. 1, No. 1, No. 2, and No. 3. Extra No. 1 is hardly a commercial grade, as the standard is so high that only an occasional lot of seed reaches it. To grade Extra No. 1, seed must be pure as to kind, clean, sound, of good color, and be absolutely free from the seeds of the weeds classed noxious under the Seed Control Act. It may contain a trace of weed seeds of secondary importance, such as Foxtail. No. 1 seed must contain not more than five noxious weed seeds per ounce, and a total of not more than 100 weed seeds of all kinds per ounce. No 2 seed may contain 20 noxious weed seeds, and a total of 200 weed seeds of all kinds per ounce. No. 3 seed may contain 80 noxious weed seeds, and 400 weed seeds of all kinds per ounce. These standards apply to timothy, red clover and alfalfa seed. With alsike they are the same, only that twice as many noxious weed seeds are allowed in each grade, while the total of all kinds is the same. Any seed coming below the No. 3 standard is prohibited from sale.

These grades make it possible for farmers and retail merchants to buy their seeds more intelligently. Farmers intending to grow clover for seed should buy nothing lower than No. 1, for the difference in price will be repaid many times in the higher value of the resulting crop. On some markets there is a spread of $3 between No. 1 and No. 2 seed at present, and it should be the aim of every grower to select his seed and weed his crop, so that his seed can be made to grade No. 1, if possible, or at least No. 2. The longer the Act is in force, the less demand there will be for No. 3 seed and the greater spread in price between the higher grades. The farmer who sows dirty seed or tries to grow clover seed on dirty land will soon be without a market, as seed below No. 3 standard cannot be sold in Canada, and our export market for it is fast being cut off.

THRESHING DIFFICULTY.

One of the difficulties which the farmers of this district have to contend with in growing clover seed at present, but one which should soon be remedied, is the scarcity of clover-hullers. In the Province of Quebec, the Provincial Department of Agriculture has encouraged the production of clover seed by purchasing a huller, which is rented to the farmers in districts where a sufficient number have saved seed to make it worth while sending the machinery. In Eastern Ontario there are no clover-hullers as yet, and it would be difficult for an individual farmer to secure one; but there should be no trouble if a number of farmers in a district would agree to grow seed. At any rate, the Seed Branch will promise you this: If the farmers in any district will club together and save a total of 150 or 200 acres of clover for seed, we will do our best to assist in having a huller brought from Western Ontario to thresh it.

But the lack of a huller need not prevent any one from growing seed, for the threshing can be done quite satisfactorily by an ordinary grain thresher [illegible] fitted up. The work is slower and the seed cannot be so well hulled and cleaned for market, but this is a matter of comparatively small importance if the seed is free from weeds. [illegible] it is necessary to thresh with an ordinary machine the work can be done more thoroughly and easily in cold, frosty [illegible]

[illegible] SEED.

During the past few years the [illegible]

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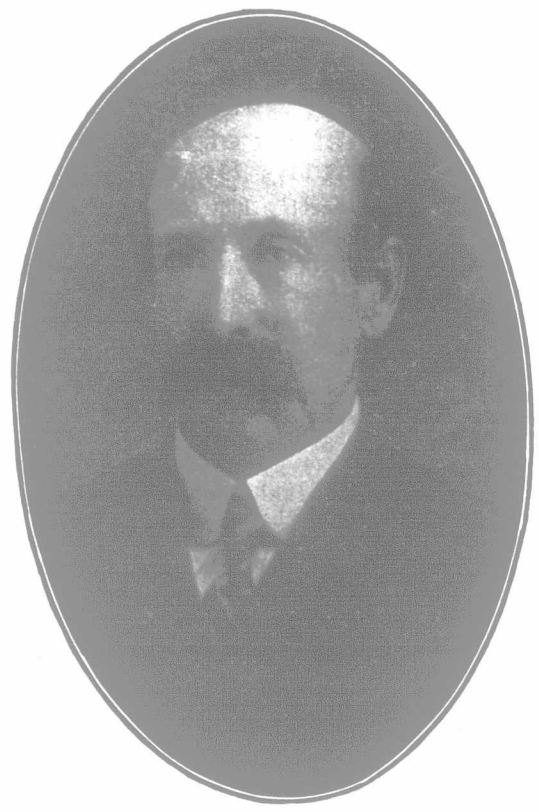
seed has been so high that there has been a strong temptation to save timothy for seed, and many crops that were originally cut for hay hate afterwards been threshed. It should be remembered, however, that the last two years have been very abnormal in the great timothy-seed-producing area of the United States, resulting in a small crop of lower quality than usual. When normal conditions return, the price will be so much lower that it will not pay to grow timothy seed in this district, except on land that is too low or is otherwise unsuitable to be brought under the regular crop rotation. It is useless to try to grow timothy seed for the Canadian market on land that is not practically free from weeds. A considerable portion of the timothy seed saved in this district during the last two years has been badly contaminated with ox-eye daisy seed, which disqualifies it for the trade. Ordinarily, timothy seed of good quality, and almost absolutely free from weed seeds of any kind can be purchased through the trade at a reasonable price, so that there is not the same necessity for farmers to grow their own timothy seed that there is for them to grow clover seed.



Seager Wheeler.

The Damage Done by Weeds:

"Weeds are serious pests in a variety of ways, according to their kind," says H. C. Lang, B.Sc., in the Transactions of the Highland and Agricultural Society: "(1) by crowding cultivated crops and robbing them of food, moisture, light, air and heat; (2) by acting as parasites, or by climbing among and dragging down the crop; (3) by stopping up drains, hindering proper cultivation, and rendering harvesting operations difficult; (4) by giving rise to tainted milk and meat, or acting as direct poisons to stock; (5) by reducing the value of commercial seeds, flour, etc.; (6) by harboring injurious insects and fungi; and hence (7) causing considerable cash losses to the farmer or gardener."

Growing the $1000 Prize Wheat.

Seager Wheeler, of Rosthern, Saskatchewan, furnishes "The Farmer's Advocate" of Winnipeg, Man., an interesting account of how he grew the Marquis wheat that won the highest honors and $1,000 in gold at the New York Land Show, last autumn. He prefaces the story with a useful account of pioneering experience, his plan of farming and method of seed-grain improvement. He is not one of the get-rich-quick-and-easy style of Western farmers, but an old-timer, who came from Ventnor, Isle of Wight, England, early in 1885, trailing it from Moosejaw to Saskatoon, and working out with a farmer for a couple of years. He cut wheat with cradles and hay with the scythe, binding by hand and using hand rakes. After working for the C. P. R. a couple of years, he homesteaded near Clark's Crossing, and did his breaking with oxen, and started out by getting good grain, grass and potato seed from the Indian Head Experimental Farm. He disputes the notion that it is necessary to change seed every few years, having better barley, potatoes and brome grass now than he had twenty years ago, without a change. After some years, he settled in what he considered a better location, at Rosthern, and began planting trees, with a view to permanent farming and home-making. He says: "I always aim to do things thoroughly. I am a book farmer and an indoor farmer, as well. We often hear uncomplimentary remarks passed about such men, but show me the farmer who does not read, and I will show you a poor farmer. Problems are worked out in the arm-chair beside the fire as well as by observing during the day outside. I take one daily, three weekly, and five farm papers, besides other good reading material.

"A few years ago I became a member of the Canadian Seed-growers' Association, and would say that the West would be more prosperous if hundreds more would join and engage in the work. There is room for thousands. The object of the association is to help farmers to grow pure seed, and encourage them in every way, keeping records and in due time issuing certificates of registration for seed grown according to their rules and regulations. At the time I became a member, I was working along lines of my own, but as soon as I became acquainted with the association I noted that it was systematic, something that I was looking for. From that time to the present I have noted a great improvement. It is wonderful how grain will respond to careful treatment."

He has practiced hand selection, and makes use of seed plots, growing roots and summer-fallowing regularly. He uses a homemade roller behind his gang plow, which packs the furrows and holds moisture. Then follows a surface-packer and a plank drag like the King road drag, to level the field and put the soil in perfect condition for the germination of weed seeds. He uses the drag on breaking, as well as spring and fall plowing, and, in fact, would not undertake to farm without it. The wheat winning this prize was grown on land broken fourteen years ago, and sown with Marquis wheat. He says: "Good seed was obtained from the Rosthern Experimental Farm, some from Steele-Briggs Co., and a small five-pound sample from Dr. Chas. E. Saunders, at the Experimental Farm, Ottawa. This latter being pedigreed seed, I sowed it on my seed plot. The yields were as follows: Dr. Saunders' small sample, on an area of about one-twentieth of an acre, yielded at the rate of 80¾ bushels per acre. I cannot expect to duplicate this on a large acreage. The other two lots, on larger areas, did not go so high, but stood 45 bushels or better. These

Part of the Marquis Wheat Crop

the hundred pounds that carried off highest honors at New York last fall.