

Some Thoughts For Grain Growers.

In view of the close proximity of the Manitoba Grain Growers' Convention (Feb. 28-Mar. 1) the following excerpts from W. R. Motherwell's presidential address to the Saskatchewan men, are presented.

The average quality of the crop just garnered, so far as it was affected by climatic conditions is the highest since 1902. But it is alarming to note by the Inspection Department's report the increased tendency of our staple product, wheat to go off grade as a result of smut and noxious weeds. And when we consider that both these enemies are controllable, it makes the situation all the more regrettable. Up to December 10th nearly 14 per cent of our total output of wheat went rejected, while during the month of January the daily Inspection reports showed a fluctuating percentage of rejected wheat all the way from 15 to 33. This serious inroad on the profits of the producer last season may be accounted for in several ways, the sum of which make a very startling aggregate indeed.

1st. Carelessness in treating the seed with fungicides or not treating at all.

2nd. The thoughtless perseverance on the part of some farmers in continuing to sow poor seed.

3rd. The probable adulteration of the bluestone and formalin used in pickling.

4th. The tendency of some seasons to be worse than others in the development of fungus growths.

In connection with this serious menace to our future prospects as a grain producing province, it is pleasing to note the special efforts the Dominion Department of Agriculture and the railway companies are making by what is now known as the "Seed Grain Special." This movement was much needed, and might appropriately be referred to as the first great agricultural revival in Saskatchewan.

The following extract from my last year's annual address is, I submit, more than ever deserving of your attention at the present time:

"For the past two or three years there has been a constantly growing feeling among Western producers that our wheat grades are too high and require, at least, readjustment, and this feeling has developed now into a settled conviction.

Previous to five years ago the laxity of our grading and the almost entire disregard for standards became so notorious that many of our best thinkers among both producers, dealers and exporters, came to the conclusion that something radical had to be done to preserve the deservedly high character of our wheat as grown, or our reputation abroad would suffer irreparable loss and injury. The Western Grain Standards Board, Winnipeg Grain Exchange and Western M. P's and Senators vied with each other in having such amendments made to the Inspection Act as abolished difficulties complained of and gave us the present high standards fixed by Act of Parliament and to which we now find ourselves unable to attain, except on very occasional years.

There is surely a medium between these two extremes that will do, on the one hand, ample justice to our well-earned and world-wide reputation for growing the very best grade of hard milling wheat and on the other hand not exclude ourselves from the attainment of our own classification."

At the present rate of, progress five years hence should see practically the whole southern half of Saskatchewan settled and the surplus export of wheat approaching the 100 million mark.

The Grain Growers' Association came into existence under dire and exceptional circumstances, and the general opinion of the disinterested onlooker has been that by its influence we have been privileged to correct many abuses and perform much good.

Portable Granaries.

EDITOR FARMER'S ADVOCATE:

Having seen an article on the above topic from the pen of N. Wolverton in a recent number of the Farmer's Advocate, and as I have had some experience along the same line, I thought I would give the public a few pointers, as my style of construction was a good deal different from his.

It is a well known fact that with competition as keen as it is, we must aim to produce grain, as well as other things, cheap, if not, we are out of the race.

I made ten of the above kind of granaries some four years ago. Some of mine were round, galvanized iron tanks, 8 feet across and 7 feet high. This size holds 260 bushels. I have others of the same style, only they are 10 feet 6 inches across and 8 feet high and this style holds 600 bushels. There is a double floor in the bottom and an elliptic door in the side near the bottom to get the grain out. I will not go into detail of this

kind, as I do not like them. The only feature in their favor is that they are light to move and they will not burn.

I will give you a short synopsis of the construction of a granary that is the most serviceable and up-to-date for convenience in handling grain. Take five pieces of tamarac timber, 6x6 in., 12 ft. long and cut three of them to 11 ft. Then

sleigh runner all off one foot back at one end. In the two long ones bore two holes 18 in. back from the end that is sloped with a 2-inch auger and dress out to make a mortise to put a chain through by which to draw. Then put the two with holes 10 ft. 1 in. apart to the outside of each and take them out of wind. This extra inch will make up for the studs and all lumber is an inch extra in length. Fifteen inches deep in a granary this size will make 100 bushels. Divide the space for the other three and see that they are level on top, also the square ends straight. Now tack a board near each end to keep them in their place. This being done, cut your side studs to the length out of 2x6 in. stuff. The center ones would be better to be 2x8 in. to keep them from springing. The best length is 7 ft. 8 in. for the corners and 5 in. longer for the ones that will be spiked to the side of the sills. Now cut your plates, 10 ft. 1 in., out of 2x6 in. stuff, space the same as the sills and spike the studs to them and raise. When up spike firmly to sills, except the corners, which will be nailed on top. Then take some narrow boards and cut them 3 ft. long and nail them on the other side of the studs, even with the top of the sills, then nail the other end firmly to the sills. Now lay a tier of 1/2-inch lumber first, then a floor of rough lumber surfaced and break the joints. This makes a much better floor than flooring and very little more expensive. Now put on your cross-end plates, 6 in. back from the end, so as to let the end studs go up to the rafters. Put on your rafters now of 2x4 in. stuff with a 1/2 pitch. When the rafters are on, put in your end studs. Let them run up to the rafters and spike very firm at bottom to sill. Now brace the frame by taking 1x3 in. pieces long enough to reach from one corner at bottom to the other at top. Let these into the studs, so as to be level on the outside and let into sill at bottom and studs at the top and nail very firmly. Now cover this on the outside with 1/2-inch lumber, tar paper and low grade siding. I have tried building granaries with siding alone and have come to the conclusion that it is no good. Put one sash in the gable for light and also to take out to let the spout of the machine in. At the other end let the ends of the siding project out in one space 1 in. on each side to receive shiplap boards, cut as bin boards. This will be the door and should be 6 ft. high. Put on roof boards, cornice and shingle. Be sure that the cornice is close fitting, so that no snow will blow in. Put one tie across the granary under the plates in the center. A hole can be cut in one of the bin boards and a shingle put on the inside of it to keep the grain in, now have a spout made with a shut-off in it to be put on with screw nails. When you start to draw just let the grain run into the wagon or sleigh box till it stops running, then take out the boards and shovel the grain into the box. One man can load a load this way in five minutes or less. The day is past for hauling grain in bags, in fact, there is not time to go that slow.

This granary having only sills and no joists is, therefore, lower down, which is an advantage, and it is also stronger. It being square, holds more for the material that is in it and the bulk of the grain is nearer the door.

If any of your readers contemplate going into the portable granary business, they can glean enough from Mr. Wolverton's and this to enable them to construct one. Any person who runs a rig to do his own threshing, I would strongly advise him to try one, as they are the coming way of handling grain. They save a great deal of labor when it is dear and hard to be got. Three men and two teams, with board, cost about \$15 and that is saved.

If I were building one to hold oats I would make it 12 ft. square, as two teams will move that size with ease. Ten feet is large enough for wheat, as it takes too far drawing of stooks to fill a larger one.

There is not the same advantage to be derived from this kind of granary if the grain is stacked, as if it is threshed stooked.

We have had no bother in threshing to get the straw far enough away from the granary to burn, if we wish to burn it.

W. SAUNDERSON.

DAIRYING

Manitoba Dairy Convention.

The Convention of Manitoba dairymen at the Agricultural College recently, marked the beginning of a new era for this industry in Manitoba. The students in attendance helped matters and the attendance of interested parties despite the searching wind showed conclusively that a systematic campaign was all that is needed to boost the work along. Markets are still unsatisfactory for the small creamery, several anomalies exist, such as butter being brought from other places at an equal or larger price than the article could be got for in Manitoba of equal quality. Such things may be remedied, once a cheese and butter board is established. One of the prime necessities is to gain the confidence of the producers of the raw material, the farmers, who have been bitten so severely in the past, but who now have opportunities at several creameries not heretofore available.

W. J. Kuneman of Giroux, Man. gave a brief but practical talk on "Pressing, Dressing and Boxing Cheese," which contained advice and information helpful especially to the beginner. He emphasized the necessity of perfect cleanliness in cheese rings, and of using perfectly new press cloths. The boxing of the cheese and the handling of it upon the market should be given careful attention, and he suggested that all boxes should have the net weight of the cheese stencilled upon them.

As some time remained after the regular program of the afternoon had been carried out, Professor Ruddick filled the space profitably with a talk on Creamery Cold Storage, illustrating his remarks by diagrams on the blackboard. After expressing his pleasure at meeting with the Manitoba dairymen, and his approval of the new Dairy School and its appointments, he dealt with the subject he had chosen.

The Dairy Division at Ottawa makes Cold Storage a special branch of its instruction and has given much time and money to the perfecting of a satisfactory system. To test the efficacy of the different methods now in use, the Department of Agriculture had secured a skating rink, divided it into ten compartments and in each compartment had installed a different system of storage. The conditions surrounding the compartments were the same for all, and the same amount of ice had been put in each. Careful observations were then made and records kept of the length of time taken for the ice to melt in each compartment.

The cylinder system, which was in general use among dairymen, he had found to be satisfactory when given careful attention but it caused considerable work. The air circulation system had given the most favorable results in this testing of methods. By diagrams the professor showed how the warm air found an outlet from the top of the storage room into the ice chamber and then back again in a cooled condition through lower openings into the storage room. Circulating over the ice and through the cold room, the air was kept at an even temperature of about 36°. This is somewhat higher temperature than the cylinder system affords but is more even and less difficult to maintain.

The method of insulating walls with large "dead-air" spaces he considered an expensive one, and difficult to obtain, for the greatest care must be exercised in the building of the walls, so that there shall be no opening, however minute, for the entrance of outside air. Instead of air filling the wall space, Professor Ruddick recommended that the space be filled with shavings which are elastic and dry. If these are not obtainable, clean, dry, cut straw or chaff make good substitutes. Dry sawdust is hard to obtain, and when used as filling is apt to become musty, ferment and settle.

The floor he recommended was constructed of a layer of concrete four inches thick, above that from four to six inches of coal cinders, ashes or dry sand, then a layer of hollow square tile cemented in, and over all a shallow covering of concrete. The doors of a cold storage room had always presented a difficulty, but up to the present he had found the best results from a bevelled door padded on the edge with felt covered with canvas.

Wm. Champion of Reaburn, a member of the Dairymen's Association during the twenty years of its existence, explained the construction of an ice box for the home dairy, to be filled with water and allowed to freeze.