

Agricultural Education.

A public meeting, which was well attended, was held in the Convocation Hall of Wesley College on Wednesday evening. Mr. Geo. Steele, M.P.P., Glenboro, was in the chair, and in his usual humorous style presented the speakers of the evening in a most dramatic manner.

PROF. GRIDDALE.

The first to be called was Mr. G. H. Griddale, B. Agr., Ottawa, who had as his subject "What is Agricultural Education?" This, he declared, could be summed up as the development of those faculties of the human mind that are employed by the farmer in his every-day work.

In the development of these faculties, the true aim should be to train the mind of the farmer so that it will be of the most use to himself throughout life. The first question to be asked was how much time should be given to this training? This, he believed, would depend upon the length of the course which was to be taken up. As the course lengthens, so must the amount of education imparted be increased, and the imparting of exact information should be the chief object.

In the second year's course there was an opportunity to go down to the base of things. Such a course might begin about November 1st, and continue to April. In such a course one of the first things to be taken up was the proper management of the farm, and this should be done by the students themselves. Everything that is practical about farm work should be gone into. By this he did not mean training to plow, harness horses, etc., but systems of feeding and managing live stock, ventilation of buildings, etc.

With the practical training should come the theoretical. The student should be taught to observe results. Every farm, he declared, has conditions peculiar to itself. The farmer may know how to manage one particular soil, but one that is entirely different may require considerable experience on his part before he is able to manage it. A stockman may know that one animal will feed well, but of another he may not be certain as to its ability to transform feed into flesh. A student should be taught to apply those deductions drawn from his observations. This, Mr. Griddale declared, was where many institutions fell short. Another important feature was the development of business ability. Too many farmers were lacking in this respect, and considerable practice was necessary before many young men were able to acquire a reasonable amount under ordinary conditions. Another requisite of agricultural colleges was the ability to develop energy among the students. He knew very well that it is not always possible to develop energy in men, but it was at least worth trying amongst students. The live-stock department in agricultural colleges should be strongly equipped. He believed live stock would be the salvation of this country in future, as it has been of other countries. A good institute should develop moral training. By this he meant the development of the best that is in us; the love of truth, etc.

Students should also have independence highly developed. Another faculty was thoroughness, and every college should strive to develop the individuality of its men, as only through this channel would the farming classes become the responsible factor in this country's welfare that they should. In conclusion, Mr. Griddale declared that farmers should be led to lean upon their own resources; to be able to select from their numbers men that would be able to represent them with credit in the legislative halls of the country.

HON. DR. ELLIOTT.

The Hon. Dr. Elliott, Commissioner of Agriculture for the Northwest Territories, was the next speaker, and in making his first bow to a Manitoba audience he expressed the very great pleasure that it gave him. Something had been said regarding the severe climate of the Territories, but he wished to remind those present that in some districts of the Northwest cattle which had been running on the open range and were not ready for market in the fall, had during the winter improved in flesh and were now being offered for sale. In regard to the management of the local shows, which was his subject for the evening, he had noticed that in other countries where the agricultural society and its work had been abandoned years ago, no improvement had been made, while on the other hand where an honest effort had been made to do good work the results had been very satisfactory.

The object of holding the local show should be to educate the people, and the Government of any country was entitled to support the local show by a suitable appropriation, but no Government in Canada had money that they could afford to distribute without receiving good value therefor. He believed that farmers should take more leisure and devote more time to the study of their work, for in no part of Canada would intelligent farming bring better results than in Manitoba and the Territories, but there were, unfortunately, as elsewhere, men who could not be taught. In the Territories they had established judging institutes, for the purpose of affording the people an opportunity of acquiring a knowledge of animal form,

but, unfortunately, only the best farmers attended, and old men came and left the boys at home. This, the Honorable Commissioner did not believe was the proper course; not but what he thought the old men should come, but the boys also should be afforded an opportunity.

To make the show a success there were several important items that should be carefully considered. The first essential was a good secretary-treasurer, and he should be remunerated for his work, but this official should not have all the work to do himself; the directors should consider themselves responsible, and should not cease to do their part. As a rule he had found that secretaries did good work, but that directors generally did not. Secondly, it was the duty of the Government to employ competent judges. To do this it was necessary to have a meeting of representatives of the agricultural societies along each railway line called at some central point, and the fairs arranged in circuits, so that time and expenses might be saved in bringing competent men to do the work. "A judge should be a judge," he declared, "he should understand animal form and characteristics, and his politics should not make any difference. He should also be a man of good appearance and good physique. When beginning his work he should give a short lecture on what was required in the animal he is about to judge, and then he should award the prize according to merits, and be able to give satisfactory reasons. Another very necessary qualification was to be able to give satisfaction to those who did not get a prize. In speaking of the best methods of drawing a crowd, he declared that a

the present methods of handling and growing this staple commodity, it bids fair to deteriorate, a tendency that it will pay all Western agriculturists to endeavor to arrest.

Varieties with undesirable qualities have been allowed to mix with the standard wheat of Manitoba and the Northwest, and, as a consequence, samples of clean, pure Red Fife are hard to obtain. Red Fife is the standard variety in the big spring wheat belt, is very hard, stands the early spring frosts better than other varieties, is unexcelled in milling qualities, due mainly to its hardness and richness in a gluten of the best kind. Goose wheat is rich in gluten, but that gluten is inferior to the gluten obtained from Red Fife.

Preston wheat is a bearded variety that has grown in favor among farmers in districts where Red Fife has frequently been injured by early fall frost. It is from two to five days earlier than the Red Fife. If the weather be unfavorable at the time when ripening takes place, it may ripen even ten days earlier than the latter variety. Some Canadian millers claim to have made careful milling tests of Preston wheat, and condemn it as much inferior to the Red Fife. Results of tests carried on under the direction of Dr. Saunders, who originated the variety, indicate that it is only slightly inferior to the Red Fife.

PURE SEED PAYS.

One of the results of mixing other wheats with Red Fife is that many mature early and shell heavily before the variety furnishing the bulk of the crop is ready to cut, thus constituting considerable loss to the farmer, in addition to furnishing material for a volunteer crop.

There is a bright future for the farmer raising pure seed, and still a brighter one for the man growing pedigreed seed of the best varieties. This is particularly a field for private enterprise, to which, however, the Dominion Dept. of Agriculture is willing to lend aid in the way of advice from its experts. The establishment of Government seed-farms is not considered advisable, and rightly so—a spoon and pap fed agriculture would soon become a sterile agriculture, barren in ideas and results.

SEED-GROWERS' ASSOCIATION.

The Department of Agriculture advises, however, the formation of Seed-growers' Associations, with a view to the production and use of seed of the best quality. The rules, as already drafted, require each member to guarantee the purity, vitality and freedom from noxious weed seeds of all lots of seeds sold by that member. The association will issue a certificate showing the numbers of years the variety has been grown and selected by hand.

Members are required to keep their seed pure by operating a hand-selected plot of not less than one-quarter of an acre. This "stock-seed" plot must be sown each year with seed taken from large heads of grain that are gathered by hand from unthreshed grain, preferably from the standing crop. By following this continued system of hand selection, on a small plot, the variety is not only kept pure, but the productive capacity of the seed is much improved. The heads of grain are selected each year from the special seed plot.

To assist in the sale and distribution of seed produced by members, the association proposes to issue a catalogue each year, giving the names and address of the members, the kinds and varieties of seed produced by them, the amount for sale and the price per bushel.

The holding of seed fairs will aid in effectively bringing this important work to the public notice. The railway companies are ready to assist the work by granting special rates to each association on registered seed. The market for high-class seed is never glutted, and will undoubtedly pay to cater to by those willing to give the time and trouble necessary.

A. P. KETCHEN.

Mr. A. P. Ketchen, B.S.A., gave an outline of the live-stock association work as a factor in the scheme of agricultural education. He showed that Canada had just completed the greatest year in her history, and that agriculture was the main item in our commercial prosperity, and of this the largest sum was the animal products. Hog-raising, he showed, was one of the main items. The Province of Ontario had made good progress in this respect. Mr. Ketchen believed that it would not be possible to feed cattle with profit were it not for the adoption of improved methods; the old system would be entirely too costly.

He paid a splendid tribute to the educational work of the Guelph Winter Fair. At no institution of the kind was a greater interest manifested, and there was not a solitary attraction except the lectures. He thought the stock-judging classes had a high educational value. A good stock judge should have plenty of decision. This characteristic was, unfortunately, lacking in many public men.

S. A. BEDFORD.

Mr. S. A. Bedford, Supt. of the Brandon Experimental Farm, followed, with what he con-



W. W. Fraser, Emerson.

President Manitoba Horse-breeders' Association.

horse-race was a grand thing, but it was not the best thing for an agricultural show. At the horse-race the people sit in the grand-stand from morning to night, and this is not educating the people. He did not wish to be placed on record as unreservedly opposed to horse-races, but he did think it should not be one of the leading features of an agricultural show. He would prefer to have athletic sports, including ball games by local teams. "What is the advantage of having a large crowd," he said, "if the people are not receiving any agricultural education at the show?" He believed that directors should arrange the prize-lists better. For example, in districts where beef cattle predominate, the same amount of money should not be given in the dairy classes. He was very much in favor of giving prizes to those showing the most ability in live-stock judging, and he hoped to see the day when that would be one of the features of every country show.

A FORWARD MOVE FOR THE IMPROVEMENT OF SEED.

With a view to the improvement of the quality of the seed used by farmers in Western Canada, organization has been decided upon by the Dominion Department of Agriculture as the means by which to accomplish this end.

Chief of the Seed Division Clark has the following to say on this important question:

Wheat from the Western Canada prairie lands has an enviable reputation in Europe and the U. S. on account of the quality of its gluten. Under