

### Thirteenth Annual Meeting of the Ontario Agricultural and Experimental Union.

The above organization, composed of the students, ex-students and professors of the Ontario Agricultural College, met at the O. A. C., Guelph, January 28th and 29th. After the usual routine of business, it was decided to keep a register by the College Review. This will contain the name and address of every ex-student of the college, and as an address is changed and notice is given the address will be changed in the register. The record always being kept at the O. A. C., there will be no difficulty in future in one ex-student getting the address of another, unless he fails to give notice of change. Elmer Lick, Oshawa, President of the union, gave an address. Amongst many other important points brought out, the suggestion that individual experiments should be reported more than they had been was a good one. A test carefully reported or a result noticed may often prove of great value if given to the public. Co-operative experiments are valuable, but individual experiments are not to be despised.

S. T. Brown, Whitby, next gave a paper on dairying from a financial standpoint. Mr. Brown appeared to think that it would pay to give dairying greater attention. If properly conducted, very good profits would result from attention to this branch of the farm.

Joseph Yuill, Carleton Place, followed with a paper on "Profits of Winter Dairying." Mr. Yuill had found butter-making far more profitable in winter than in summer; it could be produced in greater perfection at that season of the year. By feeding ensilage, cows coming in during fall or early winter would give a good flow, and as they went to grass the flow would be maintained for a longer time than by any other method. By Mr. Yuill's management he had, after providing butter for a large household, been able to sell \$56 worth of butter from each cow per annum. In the discussion which followed, joined in by Prof. Dean and others, the only objection which appeared to be made to dairying was the amount of Sunday work it involves. The question was asked if a milking machine was a success. President Mills stated he had been told that there was a machine now used in Scotland which, after a long and careful test, had proved an entire success. They had written about it. The cost of the machine would be about £1 per cow. The entire herd could be milked in about five minutes.

A discussion followed upon the power of a cow to increase the richness of her milk as well as the quantity. Some good authorities appeared to differ in opinion, and it was suggested that it might be advisable for experimental stations to test this matter. The majority thought there was a limit beyond which, no matter what the cow was fed, the quality of milk would not better; if that point was not reached, the quality would improve.

John McMillen, M. P., followed upon "Fattening Steers." Gentleness in handling was strongly emphasized. If, when first purchased, they were inclined to be cross they should be curried and brushed. By such kind treatment they would soon become gentle. The same attendant should be with them right through. He advised direct exportation. Better care could be taken of the animals by going over with them and seeing they received every possible attention. The food that would make a grade gain 3 lbs. would only increase the weight of the average scrub 2 lbs. Animals should not be more than two years old to get the best results.

R. F. Holtermann gave the results of apicultural experiments. Fourteen had tested comb foundation in sections, varying in thickness 6 ft. to 10 ft. to 12 ft. to 14 ft. The foundation had been imported, not because Canadian was inferior, but the weight per pound was often not as even as that imported. The conditions had therefore been the best obtainable. The results had gone to show that the base of the foundation was not drawn out much, and by the use of anything but the lightest an undue amount of wax was left in the comb, making it unpleasant to the consumer. In every instance the heaviest comb foundation gave the heaviest comb, and with the 10 ft. and 12 ft., in every instance but

two, the 12 ft. per lb was the lightest. In the two exceptions there was no perceptible difference. Jas. Mills, M. A., Pres. O. A. C., followed with an address upon "Farming as an Occupation." Mr. Mills showed how farming was the most independent of occupations; he was about the only man who could express his opinion about political, social, religious and other questions, without it influencing his business. Such did not influence the growth or sale of his crops. Farmers did not make money very quickly—to do that, risk had to be run—but in farming, the risk was less and the average success greater. They were the wealthiest class. The reason why it did not appear so was because the wealth was more evenly distributed. He thought farmers could, without injury to themselves, display a little more pride; the only reason why they were not compelled to do so in personal appearance was on account of their independence. In cities there were social distinctions, and every circle was hedged in by certain distinctions. The occupation of farming did not debar a man from access to the very highest social position in the land. He advised the beautifying, if only by trees, of the home surroundings. He advised farmers who could not get to high schools or colleges to get about to educate themselves. No farmer had a right to either treat or use tobacco until he had spent at least \$10 in agricultural papers, literature and books for the home.

H. B. Jeffs, Bond Head, followed upon "Stock Breeding." Purity of blood to transmit traits was emphasized. All work should be thorough; care observed in mating and feeding of stock. The subject was very well received.

Elmer Lick followed with the report of Horticultural Committee. The experiment had been in the direction of testing different varieties of potatoes. Thirteen had conducted the experiment. Rural No. II. had been a partial failure, owing to poor seed. Owing to dry weather, two had failed to experiment with success—one had failed through rot. The order as to quantity per acre was as follows:—Empire State, Crown Jewel, Puritan, Thorburn, etc.

J. A. B. Sleightholm, Humber, in an able paper upon "Hog Raising," took that animal through its various stages—from birth to the slaughter house. He considered water given separately from the food essential. Pork could be produced for five cents per pound. By producing a good article and putting it on the market at the right time 7½ cents could be secured. What to select in breeding received considerable attention without a unanimous decision being arrived at. Mr. Sleightholm suggested a very high grade of Berkshire, crossed by a pure Yorkshire.

A. G. Gilbert, Dominion Experimental Farm, Ottawa, certainly surprised many by showing, to take statistics, the poultry business stood second only to barley in the amount of money it brought into the country. The address was an able one and was received with the strictest attention. In reply to a question, Mr. Gilbert said:—"Farmers should try and have hens lay when eggs were expensive—not when they were cheapest."

C. A. Zavitz, B. S. A., followed by giving the results of experiments in agriculture. He had a great many carefully prepared tables, showing results. The following plots were under experimentation:—

With fertilizers.....	70 plots;
Lucerne and corn.....	196 "
Roots.....	350 "
Spring grain.....	1026 "
Winter grain.....	1000 "
	2642 "

Prof. Burnett, of the Michigan State Agricultural College, after a brief address, read a paper by Prof. Wheeler, "Some Notes on the Origin and Improvement of a Few Cultivated Plants." In a very able address, he pointed out the great advantages which might result from hybridization, and created a desire amongst the members of the Union to go in for this kind of work. He thought this kind of work and the selection of seeds would do more than so much attention to the breeding of animals. Pres. Mills and Prof. Pantom moved, in fitting terms, a resolution thanking the professor for the very able method of dealing with the subject. Hon. John Dryden said very much could be done by the selection of

seed. He noticed the farmers who were ahead in best kinds of seed were those who went about the fields before reaping, cutting out the best heads of grain and taking extra care of them. Instead of taking the best out of the crop after threshing they did it before reaping. The best out of this latter was taken for seed.

The Minister of Agriculture followed with an address upon "The Future of Sheep Industry in Canada." He stated no matter what the fashion was, food and clothing would always be necessary. The producer should, when a certain line was dull, not go out of it, but endeavor to produce a better article; there was always room on top. The demand for an inferior article was becoming less and less, and it was becoming more of a necessity to produce what was good. The increase in the number of sheep in Canada had not been as great as that of other animals. The climate of Canada was particularly well adapted for sheep husbandry. In the United States Canadian mutton had a very high reputation, and experiments had gone to show that a market was open in Britain for Canadian lambs. The danger from dogs was preventing many farmers from keeping sheep.

A resolution was passed condemning sheep-killing dogs.

The discussion upon sheep husbandry showed a keen interest in this branch of the farm.

A communication was read from John J. MacKenzie, who is testing the vitality of the foul blood germ for the Ontario Agricultural and Experimental Union. He has kindly consented to investigate this question, and upon the completion of the test will report to the Union. This is a very important question, and the results will be of world-wide interest.

### Peas and Pea Growing.

Mr. Louis J. Coryell, whose article on pea growing appears in this issue, is one of the pioneers of the pea industry in the province of Ontario. He commenced growing fancy peas for the Canadian and American seedsmen about 20 years ago. At first he grew them on his own farm, but, as his trade increased, he engaged farmers to grow them for him. He eventually built a large elevator on the main line of the G. T. R. at Oshawa, that he might better conduct his business. Here he now receives all the peas grown for him. A large number of women are engaged throughout the season hand-picking the various sorts. He inspects all the fields while they are growing. He not only has his own experience as a guide, but being an observing man he learns much from the experience of others. The following is a list of sorts he has had sown during the last two years, showing the average yield per acre for the years 1890-91, also giving average length of the straw:—

VARIETY.	Av. Length of Straw.	Yield per acre
First and best.....	18 inches	1800 1801
American Wonder.....	12 "	1346 1514
Premium Gems.....	18 "	224 10
Advancers.....	18 "	104 16
Champion of England.....	14 "	12 19
Blue Peters.....	18 "	174 21
Little Gems.....	18 "	9 18
Hosford Market Garden.....	20 "	84 11
Coryell's Protection.....	20 "	94 16
Pride of the Market.....	12 "	54 134
Stratagems.....	15 "	44 20
Yorkshire Hero.....	25 "	9 22
Black-eye Marrowfat.....	25 "	8 12
Telephones.....	20 "	74 134
Mummies.....	20 "	74 16
Invicta.....	12 "	104 15
Tom Thumb.....	12 "	8
Prince Albert.....	20 "	12
White Marrowfats.....	20 "	114 204

The above yields do not show what each sort is capable of producing, but rather what they do produce when grown under adverse circumstances. The entire acreage, which covered a large area, was grown under contract, the seed being supplied to the growers, each grower being bound to return all the crop to Mr. Coryell. Under this system the worst, rather than the best, yields are obtained. A comparative idea of the productiveness of the various kinds is shown, however. On suitable land, well-cultivated, a grower should produce from any of the above sorts double as much as the average shown in the table.