

WITH A FARMERS' EXCURSION TO THE ONTARIO AGRICULTURAL COLLEGE.

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On June 28th last, just as the bell on the tower on the old city hall was ringing the hour of noon, we steamed into the Royal city of Guelph. The city looked familiar after an absence of several years. The most noticeable change is the electric car system which is now extended to the college, a distance of a mile and a half from town. This must be a great accommodation to the public and also to the boys; but at the same time must be quite an effectual means of extracting the nickels from their pockets, especially when they take their lady friends up to see the college sights.

After a while we managed to get a place where we could hang on to the outside of one of the cars which was vainly trying to handle the enormous crowds. We noticed many fine buildings which have been built of late years. Evidently the college has been an aid to the increase of land values in the vicinity. On nearing the city we had noticed the prevalence of blue weed, one field especially was completely covered with it. A few years ago, when there was only an occasional plant to be seen, we remember how the late Prof. Pantou, who was an enthusiast in the destruction of weeds, used to warn us as well as the neighboring farmers against this pest; but his advice has evidently not been taken in this vicinity as is shown by appearances.

On arrival at the grounds our first stop was made at the gymnasium, where a lunch was served. This is an improvement on the old days, when we had to obtain our physical education in the fields, and the excursionists had to be content with the blue dome of heaven as a protection from the sun and wind. Dr. Mills was there to welcome the strangers to the college with all his old-time vigor. Indeed, time seems to have dealt kindly with him, and he still greets the student with the same warm grasp of the hand, and is as interested in his welfare as of yore. Afterwards we were taken in charge by Mr. Zavitz, one of the old boys of the college and head of the experimental work of the college, and also of the Experimental Union, an organization of ex students and leading farmers who carry on a system of co-operative experiments all over Canada with the varieties which have proved of most value on the experimental plots at the college. By this means new varieties are distributed, and reliable data obtained of the value on the varying soils and conditions of the different varieties. This department alone has been of incalculable value to the country, as many of the standard varieties of farm crops now generally grown were imported and distributed in this way.

We were first shown the potato plots. The experiments here show that medium whole potatoes give the best results; also that the best method of cultivation is to plant them on the flat five inches deep. Last year, being a very wet season, those planted at a depth of two inches gave the best results, while the year before that being exceedingly dry, those planted at a depth of seven inches gave the best results. The plots of barley next

claimed our attention. Here, among a large number of varieties, it was easy to see the superiority of a variety lately imported from Russia—the Mandshu-chucri. This variety has given a much larger yield than any other, both in the farm experiments and also through the Union experiments all over the country. We were informed that a twenty acre field of barley which we had noticed on the way up, and which was ahead of anything that we had seen this year, had been sown with this variety. In oats another Russian variety, the Siberian, has for a number of years given much better results than any of the other varieties. In spring wheat the Herisons, bearded, a variety recently imported from France, has not only come out ahead, but has a stiff straw, free from rust, and is a remarkably heavy wheat, being two or three pounds over the standard weight. It was selected by a committee of millers as one of the best milling wheats grown in Ontario.

Fifty-three varieties of fall wheat were formerly grown, but by reeding out the poorer varieties they have been reduced to seventeen. Of these, one alone had been able to withstand the recent severe storms of wind and rain; for, while all were more or less lodged, the Dawson's Golden Chaff stood up stiff and straight. In addition to this advantage, Dawson's Golden Chaff has headed the list by several bushels to the acre both at the college and in the Union experiments all over Ontario. The early Genesee Giant is a variety which has given very satisfactory results, especially on poor land, but on rich land it is apt to produce straw of a very coarse nature, and is not so likely to fill as well as if the straw had not grown so abundantly in the plots; on College plot this variety was badly lodged.

After a hurried look over the other plots we followed Mr. Rennie, the Farm Superintendent, into the barn to view the six or seven different breeds of cattle which are kept on the farm for educational purposes, and to listen to his lecture on the "cropping" of the farm, which is that of a four course rotation. Two years' grass, plowed shallow in the fall for roots, corn and peas, followed by fall wheat on the peaground and barley or oats on the root or corn ground, the mixture used for seeding.

Seeding down consists of seven pounds red clover, three of alsike and four of timothy. Mr. Rennie is a firm believer in shallow plowing, thorough cultivation afterwards, so as to keep the plant food near the surface. In his experiments in fattening steers he has found that where they have been dehorned and allowed to run loose in box stalls they have made an average gain of over seventy pounds per head for the winter season over those that were tied up in the ordinary way. The most satisfactory application for the horn fly he has found to be a mixture of one gallon of seal oil and an ounce of crude carbolic acid, applied once a week. Mr. Rennie has made a number of improvements on the farm. Among others he has taken down the cross fences and divided the farm into four sections of ninety acres each. The farm proper, after making allowance for all expenses due to educational purposes, is managed on a paying basis, as an ordinary farm should

be. This is something that I do not think has been attempted by any other government experiment station. The experimental department cannot, of course, be expected to give a cash return, as it has an educational purpose to serve; but I consider that all experimental stations should have a farm attached, upon the working of which a dividend can be shown on the right side of the balance sheet. This would give the farmers confidence in the institution, and also act as a good object lesson. For, if with the best men that can be obtained, and with the many advantages which the ordinary farmer must do without, a profit cannot be shown, of what use are all the experiment stations? This was Mr. Rennie's contention before going to the farm, and I am glad to see that he is carrying it to a successful finish.

We next went across the street to where the dairy buildings are located. We first visited the building devoted to the creamery department of the dairy school. Here can be seen all the different cream separators, together with other improved machinery for the practical illustration of creamery management. In the cheese room one of the things which caught our attention were two cheeses made from 300 pounds of milk, of three per cent. and four and two-tenths per cent. milk respectively. The one from the richer milk was nearly one-third larger; thus practically showing the value of rich milk for cheese making, and also the justice of paying for milk for cheese making by the butter-fat test. In the curing room a strong stream of cold air was coming in through the sub ar duct, and although it was a very hot day the temperature of the room was down considerably below sixty. In the other part of the building is conducted what is called the home dairy. In this room are seen a number of the different hand separators, together with the other apparatus suitable for farm buttermaking. Here the faculty have made a pleasing innovation by the employment of a lady instructor in dairying. The fruits of this venture were seen in the increased number of ladies; there being no less than twenty in attendance at last year's dairy class. Miss Rose, the instructor, was busily engaged in giving a lecture to a crowd of delighted excursionists and at the same time giving a practical demonstration of the same by churning, working the butter, and putting it up ready for market. In the stables connected with the dairy we saw the Thistle milking machine in operation. This machine seems to do its work thoroughly and to be agreeable to the cow, as we noticed several chewing their cud while the operation was being proceeded with; but we would consider it too cumbersome and expensive for practical use, except perhaps in very large dairies.

We then discovered to our surprise that the afternoon was nearly gone, and that if we would reach home that night we would merely have time for a hurried glance through the other departments and the several new buildings which have been recently erected. On the way home many and varied were the comments which we heard made regarding the college and farm, but we were agreeably surprised to find that with very few exceptions they were of the most favorable kind, very differ-

ent from what you would have heard a few years ago. In this respect the excursions are doing much good by advertising the college, and by bringing the farmers to the college for a day's sight-seeing it becomes more favorably known throughout the country.

FEEDING AND HANDLING HOGS.

A few weeks ago we summarized an interview with Mr. J. W. Flavelle, manager of the Wm. Davies Packing Company, in which he stated that there were too many corn and clover-fed hogs coming to market, and that the export bacon trade was likely to be seriously injured by the soft and inferior quality of meat which this line of feeding produced. The following letter to *The Globe* of July 22nd bears directly upon this question and contains information of special value to every farmer:

To the Editor of *The Globe*.—We have had endless trouble this spring with soft fed and bruised hogs. The former is accounted for by the feeding of corn and grass, the latter on account of rough handling and poking the hogs with sticks, whips, etc.

Now these complaints are more serious than farmers think, and will revert back to their detriment in the long run, and we wish to appeal to their better judgment and have them see the matter in the right light.

It is quality that is wanted, and Canada's reputation sustained on the bacon markets of the world. This cannot be done otherwise than by the most approved methods. We can assure the farmers that it is to their benefit in every way, as the better quality they turn out the better price they will get. This quality can only be obtained by much care in every detail as to feeding, breeding, and handling.

Now, in the first place, as to feeding. We would advise farmers to use peas, etc., but to avoid corn and grass; secondly, as to breeding. The Yorkshire and Tamworth breeds are acknowledged the exact thing by all experts, as they do not carry too much fat and are long and lean, even at 200 pounds' weight. In the third place, we mention the matter of handling. The hogs, when coming to market, should not be poked, whipped, or abused in any way. They should be handled with every care. We consider a broom the best thing to drive hogs with. Bear in mind that every time you hit a hog you bruise him, and, upon being killed, it shows up, so that the hog's value is reduced, at least, one cent per pound, no matter how slight the bruise is.

This is a fact, and can be easily avoided, and not cost the farmer a cent, but, indirectly, bring him more money for his year's output, because packers now figure on buying hogs with a proportion of bruises, and, if there were no bruises, hogs generally would bring more money, whereas to-day a lower price must be paid to cover the loss on these bruised hogs. "The least punch bruises a hog, and it is not necessary."

We would also advocate spaying young sows, as it is another vital step towards gaining a high standard of quality and should not be forgotten.

Farmers and drovers should see that railway companies have suitable yards at each station, so hogs will not fight or get bruised, and we believe that instead of the large yards now in use that a great improvement would be made by having a number of small yards, large enough to hold each farmer's hogs separately before loading into the cars, as this would avoid strange hogs getting together and fighting.

Again, we must request farmers, for their benefit, the country's benefit and all concerned, to avoid corn and grass and follow out these ideas, and in a year or two they will see enormously good results.

We might here say that Ireland gets ten shillings per 112 pounds, or about two-and-a-half cents per pound more for bacon than Canada. Why? Simply because they follow out the principles we mention above. Canada can get there if she tries, and each farmer individually should make a strong effort. If hogs were right in this country they would be worth one cent per pound more, as they are in Ireland.

Take the Irish principle and watch results.