

We dined at Lemon's Hotel, Richmond Hill. Several Canadian stockmen and farmers were there; also Mr. Wolley, from Kentucky. This gentleman was purchasing stock; he offered Mr. Lemon, in our presence, \$75 gold for one ewe lamb. We tried to persuade Mr. Lemon to accept it, but he refused the offer. Some of the stockmen were criticising the remarks we made in the last ADVOCATE concerning the cow that gained the gold medal at the Centennial, which honor should, if the Exhibition was what many look on it to have been—the greatest Exhibition in the world—make her the best cow. But there are many ready to dispute her right to such honor, and nearly every breeder of note considers that he has a more valuable animal, and within half a mile of this village a rival cow was to be found. Of course we must see this wonderful cow; her name is Katinka, the property of J. McCorkney. We must admit that Katinka has a finer horn and perhaps a squarer body; even her color might be preferred by many. The great crowning points of this cow are her immense chest, brisket or dewlap, and the fullness of her front quarter. We hope this cow and Isabella may be at the Provincial Exhibition; they are well worth looking at; they both have some points that we do not believe can be surpassed by any cattle that we have seen in Canada.

We called at the

GOVERNMENT FARM AT GUELPH

on the 21st. On entering the gate we observed that a finer lot of flowers graced the borders and plots than we had ever seen there before. They appeared in a healthy, thriving condition; the ground had been well worked. The vegetable garden, also, was in good order; the carrots and cabbages were quite as good as we have seen them at any place this season. The grass plot in front of the College looked very poor when compared with the many nice green lawns we had seen. A large addition to the main building is in course of erection.

Our object in visiting this institution at the present time was to see the different varieties of cereals, &c., as they were growing. The Professor of Agriculture, Mr. Brown, kindly showed us over the experimental plots. The Scott, Soules and Arnold's Gold Medal wheats were cut and standing in the shock. The Scott wheat might have been cut a little earlier, as grains of it were to be seen shelled out on the ground. The Gold Medal wheat and the Soules wheat appear to be both the same variety. We could not see the difference on this farm when standing together. We have for years tried to find the difference, but are now further from discerning it than ever. Both wheats are alike in straw and grain, both ripen at the same time, and both have heads that are thicker set than others.

The Clawson wheat was dead ripe and should be cut; it was a fine looking crop. The Silver Chaff was ripe on one part of the land and quite ready for cutting; on the other part of the land it was quite green on the same ridge, and sown at the same time. There are some other varieties of winter wheat, but the stock is not complete in this class. The spring grain varieties are much more numerous, sixty kinds having been sown, including the samples procured from the Centennial Exhibition. One-half of the ground devoted to spring grains is now bare, except where weeds or fall wheat had been sown in the spring.

The greater portion of this land had been devoted to foreign seeds. Considerable space was given to the English Mainstay spring wheat: it has stood out well, but shows no signs of heading. Many other varieties are in a similar condition. There have been many varieties sown procured from other countries; many did not vegetate

and others produced a few heads. The Professor, Mr. Brown, very appropriately remarked that he presumed these samples had been shown at the Exhibition of 1851 and at every Exhibition since where they could gain a prize or merit. We did not see any foreign variety of spring wheat that was equal to our Canadian varieties; a great many were much later, and many resembled our Canadian wheats in the form of the heads. The Canadian and American varieties were more promising. There were a great many names given to the same varieties, as they had been sent in from different parts of the country and by different persons. No difference could be noticed in the Rio Grande and Red River; the Red Fern and Emporium were the same. The Minnesota and Manitoba wheats are mixed varieties, being composed of Fife, Club, &c. Most of the varieties were mixed. The Red Fern appeared as good as any wheat there. The oats showed much better in appearance than the wheat, as nearly all had grown. Some kinds were very late. There were two varieties that were earlier than our common oats; they were called the Black Sea and the White Blade oats. The latter were quite ripe, while most of our Canadian varieties were quite green. The oats sent under the names of the Australian, New Zealand and Sidney, are all the same, and looked quite as well as any oats there. The statistical report, no doubt, will be published after the threshing.

There was a variety of barley sent by Hon. D. Christie, which had remarkably long heads. There were some strange looking peas to be seen there. The advantages of these new varieties, if any, can only be ascertained by continued cultivation. Various grasses are being tried. We were quite astonished to see such a difference in some of the varieties on the same plots of ground and under the same treatment. Some parts would be looking luxuriant and healthy, while other parts would appear very inferior; these variations could be distinctly traced to a few inches. This convinced us that this land is totally unfit for fair tests. One piece may look well, and another adjoining will look part good, part bad. We also noticed this in a marked degree when viewing a piece of barley on the Government land, in a field in front of the College, on the west side of the road. The field appeared more spotted than any field we had previously seen; on some spots the barley was quite ripe, while on other spots and streaks it would be quite green. On enquiry, we heard that the substrata of clay, quicksand and gravel are so very uneven that it is most difficult to drain the land, as each of the above named obstructions are to be found in lumps and streaks by themselves below the surface. This is most unfortunate, as no proper or accurate test can ever be made without having an eye-subsoil. To place such a foundation in a single field would cost ten times more than has been expended in the purchase and improvement of this farm.

It is the intention of the Government to have an auction sale of stock and products some time in September.

Injurious Insects.

REVIEW OF AN ADDRESS TO THE CONFERENCE ON THE EXTIRPATION OF INJURIOUS INSECTS.

We are in the receipt, through the kindness of Mr. J. Ferguson, of the address by Mr. A. Murray, "arisen out of a letter addressed by the President of the Privy Council to the Agricultural Societies throughout the Kingdom," urging their taking prompt and energetic measures "for the extirpation of insects injurious to agriculture." The action of the Privy Council in this matter is well worthy the paternal government of the country, while forcibly illustrating the importance attached to everything pertaining to agriculture.

Mr. Murray is quite sanguine in his opinion that the evil caused by injurious insects, though very difficult to deal with, may be greatly lessened. In this we entirely agree with him. The contest now carried on with insects, trivial as they may seem, will doubtless be the means of provoking greater energy and more intimate knowledge of every branch of natural history, so that the losses borne will not be without some gain. He says:—"Besides the occasional great injury done by insects, by which whole districts are ravaged, a continual drain is constantly kept on us by them, which constitutes a perceptible percentage of deduction from the cultivator's profits. Much of this is preventable, and I assume that where it can be prevented at less cost than the loss it occasions it should be prevented.

Of the remedies proposed by Mr. M., the first is a rotation of crops, not merely by an individual, but by united action. If we wish to rid a district or a country of any injurious insect, and if, as is generally the case, we have the power of doing so by attacking it at a particular time and in a particular manner, it is obvious that to be effective the attack must be simultaneous and combined; for to what purpose would it be if one cleared his farm while his neighbor did not clear his, he by his inaction preserving a reservoir of pests to replenish the cleared fields.

We doubt not that, if properly carried out, a district rotation of cropping would be a most efficient method of stamping out the pest. The great majority of vegetable-feeding insects do not feed on all kinds of plants indiscriminately; most of them are restricted to one kind of plant, so that if we should cease to grow that plant the number of the insects would correspondingly diminish. Thus, for instance, if a district is almost entirely in pasture, there will be very few wheat-feeding insects in it, but if it is turned into a wheat country, there will be myriads. If these numbers reach such a pitch as to deteriorate the crops, change the rotation and grow some other crop instead of wheat. But the great difficulty in this method is in the obtaining united and simultaneous action. Our experience of the operation of the Act for the extirpation of the Canada thistle shows how ineffectual are laws merely placed in the statute book; and an Act compelling the necessary rotation, were such an Act passed by the Legislature, would be as liable to be disregarded as the thistle Act.

The next method considered is, the attacking the enemy in their winter quarters. It takes as an example a small fly belonging to a family some of which attack wheat, others barley, &c. "The fly remains about the ear for many weeks after it is threshed, and may be found in great numbers in winter in a semi-torpid state among the chaff. The owner of the chaff should be compelled to burn it." In like manner should people be compelled to burn accumulated heaps of weeds, stalks, vines, &c., instead of storing them in a rot-heap for manure. Such heaps are the safe haunts and breeding-places of wire-worms and other pests. The truth of this we have proved by experience, and we are careful that such heaps are now converted into a most valuable manure—ashes.

Next is considered the remedy in the shape of some application that is fatal to the insect. With this remedy we are all familiar; as where paris green is used for the destruction of the potato bug, hellebore for the currant fly, and sulphur for the red spider and the hop-dly. He says:—"As a remedy, however, such applications seem better adapted for individual protection than combined stamping out; although it would be foolish to forego the advantages of using them where they