THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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Everyone interested in dairying should not only read, but study that instructive little book, "Dairy ing for Profit or the Poor Man's Cow," which may be obtained from the author, Mrs. E. M Jones, Brockville, Ont. Price, 30 cents. Over 62,000 copies have been sold, and in order to further stimulate its circulation, we will give two copies to every old subscriber sending in his own name (renewal) and that of one new yearly subscriber accompanied by two dollars.

Ottawa Experimental Farm.

While in Ottawa recently, one of our staff visited the Central Experimental Farm. Here we were fortunate in finding Prof. Robertson at liberty, and he showed us through the commodious barns stables and dairy. Nearly all the cattle were in the fields, but in the piggery we were shown the animals with which the different experiments are being carried on, with a view to test the readiness with which crosses of the different breeds will lay on flesh under the same conditions. It is too early yet to give an opinion in regard to the merits of the different lines of breeding. A full report will be given later in the year.

At the time of our visit the corn and sunflowers showed the effects of the severe storms.

This year the beans were sown both in the rows with the corn and also in drills by themselves. Up to within a few weeks of the close of the season those planted with the corn seemed to do the best; later those planted alone pushed ahead of them. We noticed a number of test plots of beans, of which the variety named the Teck appeared to be the most growthy

Eight acres of sunflowers have been grown, and careful records will be kept to show the difference in feeding value between corn ensilage alone and that containing a proportion of sunflowers and

One of the most important departments of the work undertaken by this station has been the experiments on hybridizing of grains, which for a number of years were under the direct charge of the Director, Prof. Saunders, but lately, owing to the many demands upon his time, this part of the work has been given over to Mr. W. F. McCoun.

The object of these experiments has been to produce a wheat with the earliness of the Ladoga, combined with the vigor, quality and productiveness of the Red Fife. These qualities they think they have obtained in a new hybrid which they have namedafter our ex-Governor-General, The Stanley this hybrid, which is a cross between the Ladoga and the Red Fife, is a very promising variety. It is hoped that it will have the milling qualities of the Red Fife. It matures about a week earlier than the Red Fife, which it closely resembles in appearance. It has lost the beards of the Ladoga, but still retains the red chaff of that variety. has had a tendency to go back to the bearded form, which goes to prove that wheat was originally bearded, but this year it appears to be fixed in its characteristics as a beardless wheat.

Some other promising varieties have also been obtained, which are: The Alpha, a cross between the White Fife and Ladoga: Preston—this is a bearded sprout from the Stanley, the bearded heads having been saved and sown by themselves.

Abundance is another which has given a large yield, but has not the vigor of the Fifes.

A large number of English wheats have been tested, but as a rule they have not been found satisfactory, their principal fault being their lateness in coming to maturity.

In crosses between the very early Indian wheats and the Fife there was nothing of value obtained, with the single exception of that between the Spiti Valley of the Himalayan mountains and the Fife, and this one was not above the average.

Altogether there are being tested 600 different hybrids, the majority of which were originated by Prof. Saunders, some by his son in the Northwest and others by Mr. McCoun.

An interesting experiment, but one which Mr. McCoun says is more curious than useful, is a cross between fall wheat and rye, but unlike the experiment recorded by the Rural New Yorker the plant was unfertile. The variety operated upon was the Johnston wheat, and the result was a plant similar in appearance to rye, with the exception of the receptacles, which resembled those of wheat, but not a single kernel was to be found in any of the heads. Crosses were also tried between two and six-rowed barleys, with the object of obtaining a barley which would have the length of head and strength of straw of the two-rowed, with the earliness and other desirable qualities possessed by the six-rowed sort. In this trial many curious combinations were obtained; the varieties used were the Baxter's six rowed and the Chevalier two-rowed, and resulted in heads of all lengths with a tendency to revert to the two-rowed type. A few very promising crosses have been selected, which are chiefly of the six rowed types.

The work of testing the trees in the forest belt has been greatly enlarged during the past year. Four thousand trees, comprising over thirty varie ties, have been placed in the belt this year. The object of this work is to accumulate a fund of reliable information as to the growth of valuable trees, which will be available later on when treegrowing becomes more general for economic pur-

Experiments have also been conducted in seeding plots, at intervals of one week, which go to confirm previous assertions as to the great import ance of early sowing and the proper preparation of the soil the previous fall.

The distribution of seed has gone on stronger than ever. Last year 21,000 bags of seed were sent through the mails. Some idea of the magnitude of the work can be had when we consider that this represents the enormous amount of over four tons of mail matter.

Prof. Fletcher reports that more interest than ever has been taken in his work by the farmers generally, and that they are beginning to make more inquiries for remedies for insects and fungus diseases, and, as he says, the main thing is to get them aroused to do something, if ever so little, to stay the ravages of our insect foes. In conjunction with Prof. Shutt, he has also been carrying on a series of exhaustive experiments on grasses, which are embodied in a bulletin of 36 pages, which has just been issued by the department. About 250 different varieties of our native grasses have been tested, some of which are equal to, if not superior to, the imported species. The bulletin in question contains notes concerning the agricultural value, as well as tabulated statement of the composition of many species of imported and native grasses. advise every farmer to obtain a copy of this valuable bulletin.

We greatly regret the fact that the heavy downpour of rain prevented us from inspecting the work that he is doing in testing different plants and shrubs for hedge purposes. The time was passed, both pleasantly and profitably, in the green-house, where, under the able direction of Prof. Saunders, we were shown the modes of propagating the more delicate plants, and the large collection of rare and tropical plants, which included a great number of cacti in peculiar shapes, orchids in all manner of fantastic forms, and also the more useful plants, as coffee, tea, pomegranates, oranges, lemons, arrow100t, and others the natives of sunnier climes than this.

In the horticultural department a good work has been done with currants, raspberries and strawberries; new varieties have been sent out to the experimental stations, and the most promising varieties will be distributed among the farmers for further test.

Mr. John Craig, the horticulturist, has done much work in testing the different varieties of fruit and vegetables, with the object of determining those which will give the best results.

In grapes 144 varieties have been tried this season, and, at the date of the Ottawa exhibition, out of this number fifty were in good, edible condition. A week of good weather should have doubled the number. The most promising varieties were:—In white grapes, Lady Rogers 31 seemed the most desirable. Red-The Lindley, Morgan, Verginnes and Salem; the two last named are exceedingly good keepers. Black - Moor's Early. This is the earliest and best paying grape of all; has small bunch, fair sized berry, and of better quality than Champion, and a little earlier. Rogers 17 is a large black grape. Worden is also another very desirable grape. His advice would be to plant the vines on a warm, southern slope, summer prune closely, feed with potash fertilizers, and spray with copper compounds for fungus diseases. An illustration of the benefit of spraying could be seen in the vineyard. On vines left unsprayed not a pound of grapes was to be found, while those which were sprayed bare from 10 to 25 pounds per vine.

Mr. Craig has also been experimenting with the different varieties of tobacco, and has found that a number of the finer varieties will do well in the Ottawa Valley. These will be tested shortly with regard to their burning qualities.

We found the general manager of the poultry department, Mr. Gilbert, busily engaged in taking care of his pets. Great improvements have been made here of late. About two acres have been enclosed by a high woven wire fence, to give yard room for the fowls, besides a large addition to the poultry house which has lately been crected. We found Mr. Gilbert testing the merits of a bone crusher, which had just been purchased. opinion is that the bones and scraps which are wasted on most farms would provide food for a sufficient number of hens to keep the table supplied with fresh eggs.

The Banks' Red Gravenstein.

We have received a sample of this new apple from Mr. A. S. Panks, Waterville, N. S; We find that it is a very handsome apple, being, as its name implies, much higher colored than the ordinary Gravenstein. That received was a very smooth specimen, of good size, in color a beautiful red, with lighter streaks of shading, and had the peculiar flavor which instantly proclaimed it a genuine Gravenstein.

The Annapolis Valley has long been famed for its Gravensteins, but one of the chief objections to them has been that a large percentage of them fail to color-well.

The Banks' Red Gravenstein originated as a sprout from a common Gravenstein on a branch which is said to have borne red apples for thirteen years. Scions from this branch were used, and the originator now claims that it is thoroughly established as a distinct variety; that it is superior to the common Gravenstein as a cropper, and also in its keeping qualities; that the deep color will add twenty per cent, to its value; and also that it can be picked for export much earlier than the ordinary Gravenstein, and yet will have more color than the others at their best.

Mr. Banks is prepared to fill orders either for scions or young trees.