The Farming World

And Canadian Farm and Home

VOL. XXV. TORONTO, 1 SEPTEMBER, 1906. No. 17.

Some New Developments in Modern Agriculture

AGRICULTURE has made rapid strides in recent years. The methods employed in farm practice to-day are far in advance of those in use fifty years ago. So much so is this the case, that one is inclined to wonder if there is anything more to be learned in regard to it that is really new. And yet every day brings before the busy farmer some new problem to be solved or some new feature tending towards the improvement of his crop and the increasing of the productive power of his farm. It is indeed a progressive age, agriculturally as well as in other respects. The farmer must, therefore, give some thought to some of the new movements of to-day that will in future have an important bearing upon his calling.

* * *

One of the most important lines of investigation opening up to the experimenter or the farmer is to be found in the application of the principle of the survival of the fittest in the propagation of ordinary farm crops, or in other words the propagation of crops with disease resisting qualities. No field of investigation pertaining to farm crops is more important than this. Insect pests and diseases of plants seem to increase in number as the years go by. Their ravages must be counteracted in some way, and one of the most feasible and practical ways of doing it is to select and propagate plants in which the greatest disease resisting powers predominate. The movement for better seed and the method of crop improvement by seed selection is accomplishing a great deal in this direction. Experiments conducted recently by the United States Department of Agriculture have demonstrated that it is possible to obtain a variety of most all of the standard vegetables and fruits which can to a greater or less extent ward off the attacks of insects or blight. While it is true that many plant pests can be controlled by various poisons and culture methods, yet for such pests as wheat rust, clover seed midge, etc., satisfactory remedies have not yet been discovered. Here is the investigator's opportunity to select and propagate varieties of crops immune or less subject to attack by disease, and which will succeed where others fail.

* * *

Numerous instances might be given of the disease-resisting qualities of one plant as compared with another. For instance, European grapes planted in the United States, where the grape fruit louse is present, fail because this insect is able to destroy their roots. On the other hand, the roots of American grapes are so hard and wiry that this insect cannot destroy them. The resisting power of the Keiffer pear to blight has made it possible to grow this variety successfully in the south, where other varieties fail. American gooseberries are but little subject to mildew, which seriously affects English varieties grown on this side of the Atlantic. In recent years experiments have been conducted in Maine, Vermont and Minnesota to obtain a disease-resisting type of potato. While these experiments have not yet produced a tuber wholly proof against late blight or rot, sufficient evidence has been obtained to justify the hope that efforts in this direction may soon result in the development of varieties combining general excellence with a high degree of disease resistance. A melon grower of Colorado has discovered a rust-resistant melon which promises to be of immense value to the cantaloupe industry of that state. And the same thing is possible with other crops, if only the farmer is active in observing the growing crop. If there is rust in the wheat, select some individual plants for seed that have withstood its ravages or have been least affected by it. If a hill of potatoes is not affected by blight, keep that hill for seed. In this way the strongest and best seed can be secured, and the way opened up for eventually securing disease-resisting types.

A new feature of interest to the fruit grower is the introduction of parasites to prey upon and destroy orchard insect pests. A few years ago a parasite was introduced into California from a foreign country to prey upon the codling moth. The results have been very satisfactory, and now the Ontario Department of Agriculture has decided to take up this line of work, and in a few years, perhaps, wormy apples will be a thing of the past. This plan of destroying pests by other insects has been utilized also with success in cotton culture in the south and in connection with other agricultural industries. If it prove effective the orchardist has a simple way of controlling the ravages of insect pests. However, one is inclined to ask what will these parasites prey upon when the particular insect which they have been brought in to destroy is destroyed? Will they die off, having fulfilled their mission, or prey upon something else, becoming a pest themselves? In the meantime, however, we need not worry. Sufficient for the day is the evil thereof.

* * *

Specially new features in the realm of live stock are not numerous just now, excepting it be the more prominent place given to the dual-purpose cow. Progress in every branch of it is being made. Generally speaking the purebred animal holds a higher place among our farmers than ever before. Slowly but surely, there is a growing tendency to use purebred males, though the "scrub" male is made use of for breeding purposes even yet in too many localities. However, progress in this direction is very gratifying and marks a distinct advance in the live stock industry of the Dominion. A feature of this work is the advent of cow testing associations and the desire to know what the dairy animal will return in milk. This work will have a wholesome effect in stimulating dairymen to keep only cows that will return a good profit over their keep. Horsemen are waiting with interest for the announcement of the local government in regard to the horse industry.

* * *

The feature of interest in dairying just now is the milking machine. Upon the final success of this machine depends in a very large measure the future of the dairy industry of this country. If the forces now at work can succeed in perfecting a machine that will do the work of milking successfully in every respect, and which can be sold at a reasonable figure, dairying is bound to extend its operations, and become a far more impor-

This Issue.

This is the ninth annual Exhibition number of THE FARMING WORLD. Its special features are the illustrations and the number of articles written specially for this journal. The illustrated article on "Clydesdales in Scotland," by Arch. McNeilage, is of special interest to horsemen. Beginning with this issue and extending during the next few months, we begin a series of articles on "Agriculture in Ireland," by the Hon. John Dryden, which will be read with interest by every Canadian. Many other articles deserve special mention but space will not permit.

Read this number through carefully. Speak a good word for it to your friends. If you are not already a subscriber send in your name and address at once. We will send THE FARMING WORLD to your address from date to Jan. 1, 1908, for **Sixty Cents**, or until Jan. 1, 1909, for **One Dollar**.