

are conducted of soils, fodder plants, grasses, roots, &c., of natural fertilizers, such as muds, mucks and marls from many parts of the Dominion. Waters for drinking purposes are also tested for purity, and many other useful lines of work undertaken bearing on agricultural pursuits.

503. The chief officers are a director, whose headquarters are at Ottawa, who supervises and directs the work on all the farms, and makes personal inspection of the branch farms at least once a year; an agriculturist, who conducts experiments with cattle and swine, also in dairying and with various agricultural crops. He also fills the important position of Dairy Commissioner for the Dominion. There is also a horticulturist, who has charge of the extensive orchards and fruit plantations at Ottawa, and who carries on experimental work with the growing of fruits and vegetables and with the best method of treatment for the various diseases to which they are subject. A botanist and entomologist, who, with the aid of an assistant, investigates the subjects of injurious insects, noxious weeds and plant diseases occurring throughout Canada. This officer also visits localities affected with special insect invasions or parasitic diseases and suggests measures for their destruction or mitigation. Experiments are also being conducted in bee-keeping. In addition, there is a poultry manager, who takes charge of the poultry department, and a farm foreman, who directs the labour on the farm and takes general charge of the field crops. The production of new varieties of cereals and other crops, the ornamentation of the grounds, and the forestry plantations are departments in charge of the director and his assistant, the foreman of forestry. During the past five years about 700 new varieties of cereals have been produced at the Experimental Farms by cross-fertilizing and hybridizing. All those of less promise are from time to time rejected. There are, however, still 404 varieties under test—227 of wheat, 79 of barley, 15 of oats and 83 of pease. Nearly 20 acres of land are occupied by forest belts, composed mainly of useful timber trees, to test their relative growth for timber purposes. About 600 varieties of trees and shrubs are being tested in the ornamental clumps and groups in different parts of the grounds. With the aid of a suitable office staff a large correspondence is carried on with farmers, who are everywhere encouraged to write to the officers of the farm for information and advice whenever required.

504. At the branch farms much of the work is so arranged as to cover those questions which are of the most immediate import-