

prevail. They are placed in carefully arranged groups with the object of producing good effects, and, to make this part of the work more instructive to the visiting public, the specimens are plainly labelled with their common and botanical names. In this connection there are also large collections of flowering plants, such as roses, paeonies, irises, lilies, phloxes, gladiolus and beds of other attractive perennial and annual plants mixed. A new feature in this division of the work was begun during the past year, by the preparation of a number of large beds for the grouping of the most attractive wild flowers of the Dominion, one each for those of the Maritime provinces, Quebec, Ontario, Manitoba, the North-west Territories and British Columbia.

About twenty acres of land are now occupied by forest belts which extend the whole length of the north and west boundaries of the farm and contain about 20,000 trees, including all the more valuable economic woods which can be grown in this country either for timber or for fuel. Annual measurements are taken of the growth of the many varieties under trial, and useful data is thus being accumulated. The other objects in view in undertaking this branch of work were to determine by experiment with a number of different species the comparative growth and development to be had by planting at different distances apart, also to ascertain the relative growth which these trees would attain when planted in blocks of single species as compared with others planted in mixed clumps where a number of different species are associated together. The value of these tree belts for shelter is also being investigated, as well as the usefulness of hedge planting for the same purpose. To ascertain the most suitable trees and shrubs for hedges 66 trial hedges have been planted in 50 feet lengths, and these now form a very attractive feature in connection with this work of tree planting.

The other branches of the work at the Central Farm in charge of the Director are the permanent test plots for determining the action of fertilizers on important crops, the seed testing houses and conservatory, and the distribution of seed grain. Experiments were begun in 1888 with the object of gaining information as to the effects of certain fertilizers and combinations of fertilizers on the more important crops. During that year the experiments were confined to plots of wheat and Indian corn, but in 1889 the work was enlarged so as to include oats, barley and roots, and the experiments have been repeated every year since. The area devoted to these tests includes 105 one-tenth acre plots, and the results obtained are given each year in the Annual Report of the Experimental Farms. Special arrangements are made each year to test, for farmers in all parts of Canada, samples of grain of all sorts held for seed, the vitality of which may be doubtful. During the past year 1776 samples were thus tested and their germinating power reported on, and thus valuable information was given which in many cases prevented the use of grain for seed with weak or inferior germinating power.

Those varieties of grain grown on the several farms which prove to be the best and most productive are annually distributed by mail free, in small bags containing 3 pounds each, to farmers in all parts of the Dominion who ask for them. These sample bags of grain, when sown and properly cared for, usually produce from one to three bushels, and at the end of the second year the crop will generally furnish the farmer with a sufficient quantity of seed to sow a considerable acreage. This distribution is carried