

it is astonishing how much the proportion of moisture in a soil can be influenced by cultivation. Soil when allowed to remain for a time undisturbed, gradually settles into what is known as a capillary condition, through which water in the soil below is brought readily to the surface, where it evaporates. If soil is allowed to remain long in this condition, it will bring water thus from considerable depths. The ploughing of a soil breaks up this capillary structure, and subsequent cultivation pulverises it and reduces it to a good condition of tilth. After this the mere scratching of the soil to the depth of an inch or two leaves the surface in a porous condition which acts like a mulch and prevents much of the moisture below from escaping. Thus, by judicious cultivation, the proportion of moisture in a soil can be regulated and loss controlled. In this way crops can often be produced on semi-arid land, too dry to give favourable results with ordinary treatment.

A few moments must now be given to the latter part of my subject, referring to the great progress made in agriculture in Canada during the past few years.

Twenty-three years ago farming in Canada was in a very depressed condition and in 1884 the House of Commons appointed a Select Committee to enquire into this subject and to suggest the best means of developing and encouraging the agricultural interests of this country. Careful investigation led to the conclusion that the general lack of success was not due to any fault of the soil or climate, nor to want of industry among the farmers, but to defective farming from want of skill and knowledge in all branches of this work, and up to this time, no provision had been made by the Government to remedy this. There is probably no industry engaging the attention of mankind that requires more skill and general information to conduct successfully than farming. Competition in food products is keen throughout the civilized world, and the farmer must turn to practical account every advantage within his reach to improve the quality of his products and to lessen the cost of their production if he is to improve his position.

The Committee recommended that the Government should establish experimental farms, where experiments might be carried on in all branches of agriculture and horticulture and that the results of this work should be published from time to time and distributed freely among the farmers of the Dominion.

The recommendations of the Committee were favourably received and early in 1886 an act was passed authorizing the Government to establish a central experimental farm and four branch farms. The central farm was to be located near Ottawa and the branch farms in different parts of the Dominion, one in the Maritime Provinces, one