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to us. The value of the data so obtained will be apparent, not only for the present but for the future successful farming of these lands. Joil analysis is a tedious affair, but we have during the course of years put on record the data of many types of soils found in the Dominion. Two years ago we were able to issue an important bulletin on the Western prairie soils, which has received wide recognition. This work continues, and our labours in this connection have been extended in recent years to typical soils from Nova Scotia and New Brunswick in the East and British Columbia in the West. We have found the knowledge so gained of much assistance in advising our farmers respecting the economic up-keep of these lands and in the use of manures and fertilisers.

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Conservation of Soil Moisture.

In districts of sparse rainfall, as in certain parts of North-Western Canada, in which, unless there be provision for irrigation, the so-called "dry-farming" methods must be practised, the question of the absorption and retention of moisture by the soil is all-important. The principles of moisture conservation are fairly well and widely understood, but there yet remain many features in the economical working of the soil to be satisfactorily settled. The value of sub-soiling, the depth and time of ploughing, the frequency, nature and depth of surface cultivation, the value and kind of sub-surface packing are all points requiring investigation on both heavy and light soils. In the autumn of 1910, therefore, an exhaustive series of experiments in soil culture was planned by the Agriculturist and Chemist, to be carried out at a number of the Western Experimental Farms, to learn the effect of various cultural treatments on crop yields and with the hope that these yields might be correlated with the moisture content of the soils. To this end determinations of the moisture in samples taken to several depths from the experimental plots at regular intervals throughout the season have been made. The results indicate the influence of the several cultural methods under examination on the moisture content of the soil to a depth of 5 feet. Several hundreds of such samples have been examined monthly during the past two seasons. We find that the moisture content of the soil may be profoundly modified by the nature and time of treatment em ployed, and several facts of considerable practical importance in the working of the land, looking to a greater conservation of moisture, have been brought out.

The Fertilising Value of Rain and Snow.

The nitrogen compounds present in the rain and snow as falling at Ottawa have been determined since 1906. This investigation is being