

"quarter-acre circular plot" method, the nature of the soil and timber. We proceeded north to the Canadian Pacific railway, where the party was broken up on account of Mr. Newnan having to return to resume his studies at the Faculty of Forestry, University of Toronto. With the assistance of Mr. W. Wardrope, the country was finished in a similar manner as far north as the Winnipeg river and then about ten days were spent in the Laurentian country near Cross lake on the Canadian Pacific railway.

After finishing the field work, I spent about a week in Minnesota near Duluth and International Falls inspecting some of the drainage operations being carried on there, leaving there for Ottawa, where I arrived on November 7.

### DESCRIPTION OF SURVEY AND SOURCE OF DATA.

Since there was such a large territory to cover (over 3,500 square miles), and a limited time in which to do the work, and as the party, which comprised only two members, had to work under the unfavourable conditions caused by the well-nigh impassable muskegs, it was necessary to work on a large scale. Therefore, this is merely a preliminary study of conditions here, and does not by any means pretend to take the place of a working-plan report.

The map accompanying this report was compiled from the data procured on the survey over the country which was covered. In the muskeg country to the east of this the data were procured from the reports of the township surveys by Surveyors Mulloy, Pearce, Johnston and Fitzgerald, modified by the notes taken on the parts of that country which were covered.

*Plant Region.*—Southeastern Manitoba has not the outstanding features peculiar to any of the plant regions as they are classified. It is on the boundary of three regions, viz., "The Southern Forest," "The Northern Forest" and "The Mixed Prairie and Woodland" and shows conditions, in this district, found in each of these regions.

*Tree Species.*—Arranged in order of importance in this district these are:—

- Black spruce—*Picea mariana*.
- Tamarack—*Larix laricina*.
- Jack pine—*Pinus Banksiana*.
- Poplar—*Populus tremuloides*.
- Paper birch—*Betula alba* var. *papyrifera*.
- White cedar—*Thuja occidentalis*.
- White spruce—*Picea canadensis*.
- Black ash—*Fraxinus nigra*.
- Balsam poplar—*Populus balsamifera*.
- Balsam fir—*Abies balsamea*.
- American elm—*Ulmus americana*.
- Scrub oak—*Quercus macrocarpa*.
- Manitoba maple—*Acer Negundo*.
- Red pine—*Pinus resinosa*.
- White pine—*Pinus strobus*.

*Climate.*—The climate is practically the same as that of the rest of southern Manitoba, except that it is less subject to winds than the more level prairie portions to the west. Although typically a continental climate, with an abundance of sunshine throughout the year and extremes of heat in summer and cold in winter, with