

EVIDENCE OF R. F. STUPART, DIRECTOR OF THE DOMINION METEOROLOGICAL SERVICE OF CANADA, GIVEN BEFORE THE SELECT COMMITTEE, APRIL 5, 1907; TOGETHER WITH A SHORT REPORT REGARDING THE CLIMATE OF NORTHERN CANADA, AND SOME TABLES OF TEMPERATURE AND PRECIPITATION, PREPARED SUBSEQUENTLY BY HIM FOR THE COMMITTEE, AND LAID BEFORE THAT BODY BY THE CHAIRMAN.

Mr. Stupart, in his evidence before the committee, explained that the service under his charge has records from a large number of stations in Saskatchewan and Alberta, and from a few stations scattered over the Mackenzie river basin, and along the shores of Hudson bay. For instance, along the shores of Hudson bay there are observations taken at Moose Factory, Fort Churchill and York Factory; and moving inland, at Fort Hope on the Martin river. From a number of stations in Alberta and Saskatchewan reports are received twice a day, namely, from Edmonton, Calgary, Medicine Hat and other places. North of the telegraph, the reports are altogether dependent upon the mails, and arrive from two months to six months or a year after the observations are taken. The observations are taken regularly by paid observers—men who are paid either \$50 or \$100 a year for doing the observation work. Many of them are missionaries; others are employees of the Hudson Bay Company. They are supplied with government instruments by the department. Observations are taken in the far north at Herschell island, Port Simpson, Pale river—that is Fort McPherson—Fort Good Hope further up, and further south from Fort Chipewyan and Fort Dunvegan and Fort Vermilion. This year instruments have been supplied to Lesser Slave lake, Peace River Landing and Fort Vermilion. These are three new stations opened up in the Peace river district.

Mr. Stupart explained that he had been in charge of the service since 1894. The bureau was organized in 1870. The observations in very few instances go back to 1870. In the provinces of Ontario and Quebec and the maritime provinces, they go back to 1870, or in some few instances at the Grammar Schools to 1868. The witness did not think any of the observations in the northern countries go back beyond 1883, except at Churchill and York, where observations were taken by the Hudson bay factors, and the department has possession of their reports. There are only a few years' observations in Ungava. There is a record for three or four years at Fort Chimo, and then for 1884-5-6, and again for a portion of 1897 there are reports along the shores of Hudson strait. Those are observations taken six times a day. It is a very perfect report. The information contained in Andrew Gordon's report was the work of the Meteorological Service. There is no automatically registered sunshine. The Meteorological Service take the rainfall, the snowfall, the height of the barometer, the temperature of the wet and dry bulb barometers, the clouds, the directions in which they are moving, the fogs, and the direction and force of the wind, the rainfall and snowfall. These are all set forth in the tabulated statements.

LACK OF DATA ON PEACE RIVER CLIMATE.

Mr. Stupart explained that, taking the records as a guide, he was rather at a disadvantage in reporting as to the climate of Peace river, inasmuch as up to last year the department had only one station in the Peace river country, and that was at Dunvegan. The station there is down in the valley, and from reports that he had since received from a surveyor who had been working there for the last two or three years, it