X.—*Some Observations Tending to show the Occurrence of Secular Climatic Changes in British Columbia.*

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In a report by the writer on a portion of the Rocky Mountains, proper, comprised between latitudes 49° and 51° 30′, the following remarks occur,[1] referring particularly to the years 1883 and 1884 :—

"Evidence of a remarkable character has been found, which seems to show that a somewhat rapid increase in the total annual precipitation, has taken place during late years, and deserves to be recorded here. The evidence referred to is that afforded by the abnormal height of small lakes, without outlets, occurring in regions characterized by moraine hills. These serve as natural gauges, but instead of measuring the actual rainfall, give a result dependent on this and the counteracting effect of evaporation. The abnormal character of the rise of water in these lakes is shown by the fact that it has killed a belt of trees, some of large size and at least fifty years in age, along parts of the margins of some of these lakelets. Both the Douglas fir (*Pseudotsuga Douglasii*) and the yellow pine (*Pinus ponderosa*)—the latter never naturally growing even in damp soil—have been found in numbers thus killed. The condition of the trees shows that they have been killed within a few years, and their size indicates that the waters of the lakes in question have not been for any considerable time during a period of fifty years or more, at the present high level. These observations were made both in 1883 and 1884. The lakelets observed to be so affected were numerous, and scattered over a belt of country along the western part of the range for a length of about 140 miles ; three of the principal districts in which such facts were noted being the Tobacco Plains, the Kootanie Valley between the Lussier River and head of Columbia Lake, and the upper valley of the Kootanie, near the mouth of the Vermilion."

It was further recorded, that most of the small streams flowing westward from the Rocky Mountains in the same region, showed signs of excessively heavy flood-water in the early part of the year 1884. "This evidence was of such a character in relation to trees of great age which had been undermined, and belts of wood through which the water had rushed with devastating force, that I was led to believe no such flood could have occurred for fifty or a hundred years previously."

[1] Annual Report, Geol. Surv. Can., 1885, p. 32 B.