

smooth and in places polish the underlying rocks. After the culmination of this period of cold, which was probably to some extent due to elevation of the continent, there succeeded an era of milder climate, with partial submergence, followed again by a period of re-elevation and increased cold, with a partial recurrence of the former glacial conditions, after which gradually the ice retreated northward and the present condition of surface began to be assumed. Traces of the ice age yet exist in the elevated areas of the highest mountain ranges even in comparatively low latitudes, and glaciers of considerable size are found in the Rocky Mountains of British Columbia at the present day.

The presence of the ice sheet is recognized by its markings upon the exposed rock surface. Instances of this are common on the ledges about Ottawa and even in the heart of the city itself, the grooving and striation of the surface due to the planing of the ice being well seen in the quarry at the corner of Sussex and Rideau streets. In many cases also the action of ice is recognized by the presence of smoothly-rounded hill slopes. The direction in which the ice passed if the exposed striated surfaces are well seen, can generally be told from the shape or contour of the elevations. Thus the rock surfaces away from the direction of ice-flow, called the "lee side," are usually rough and weather-worn, while those which face the direction of the flow are all ice worn; hence the term *stoss seite*, or struck side, is applied to the latter.

In opposition to the theory of a great universal ice cap of immense thickness just stated is the view now entertained by many that the most of the glacial phenomena were caused rather by a number of small or local glaciers which had their source about the summits presumably of every mountain range, and in their course followed the prevailing configuration of the surface. This view is well supported by the direction of the rock striations in the provinces of Quebec, New Brunswick and Nova Scotia, where the evidences in favor of a great south-easterly moving ice sheet are very few, and where the indications evidently point in the other direction or in favor of local glaciers.

Among the supposed indications of the presence of a great ice sheet, besides the striation of the rock, is the presence of scattered