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be deduced. Sedimentary rocks overlapped its western border during the Cretaceous, but with this local exception it was apparently a land area during the whole period. Probably it stood so close to base level for such a large part of the time that denudation proceeded with exceeding slowness. It has been suggested by J. W. Spencer that the plateau was elevated to a much higher point than at present immediately preceding the Glacial epoch, the evidence cited in support of this hypothesis being: (1) the existence of a river-like depression on the bottom of the gulf of St. Lawrence and (2) the occurrence of fiord-like inlets on the margin of the plateau such as those which characterize the outlets of Saguenay and Hamilton rivers.¹ It is probable, as pointed out in the section on denudation by the continental ice-sheets, that a large part of the detailed dissection so characteristic of the plateau at present was accomplished before the Glacial period and such an uplift might account for the wide extent and depth of this dissection.

Continental Ice-sheets.

The last important modifications in the bedrock physiography of the Laurentian plateau were those effected through the agency of the continental glaciers. These modifications may be regarded as falling into two classes: (1) those produced by denudation and (2) those resulting from deposition. The importance of the first in the physiographic development of the plateau has been generally recognized, but the last has been equally important in its topographic effects.

Denudation. That the continental glaciers were capable of considerable denudation is evident from the general roches moutonnées contours of the plateau surface, from the gently sloping curve of the surface of rock exposures on the north as compared with their more abrupt termination on the south, and from the glacial striæ and grooves which are commonly observed wherever a rock exposure has been protected from weathering agencies. Notwithstanding these evidences of the intensity of glacial denudation, however, there is other evidence indicating that the erosive action of the glacial ice sheets was largely of a superficial character and that the surface of the Pre-Cambrian bedrock which underlies the drift corresponds in its major features to the pre-Glacial topography of the plateau.

In numerous localities throughout the Laurentian plateau there are deep, linear, gorge-like valleys, now partially filled with drift, which cut across all varieties of rocks regardless of their structure or age and trend in practically every direction of the compass. We know that these valleys have not been formed since the glacial epoch, because they are

¹ Bull. Geol. Soc. Am., vol. 1, 1890, p. 68.