

these lakes and Lake Winnipeg consists of marsh land or muskeg, while the region to the west, between the lakes and the Tertiary, is relatively drier, and is practically the beginning at that point of the prairie region.

3. The Interior Continental Plateau extends northwards in a roughly triangular form whose base, so far as Canada is concerned, is Lat. N. 49°, and whose apex is Lat. N. 62°, the triangle leaning westwards. The length of the base is about 800 miles, while at Lat. 56° the width is about 400 miles.\*

This plateau may be described also as an inclined plane (or series of three inclined planes or steppes), whose lower edge rests upon the Laurentian "rim" to the eastwards, and whose upper edge, about 2,000 feet higher than the lower, rests upon the Palæozoic rocks of the Rocky Mountains to the west. The average descent from west to east, is over five feet per mile. This descent, extended as it is over about 800 miles, sufficiently accounts for the rapidity of the rivers,\* and for the great depth of some of their channels.

Although denudation has occurred, the waste has taken place approximately equally over the whole surface, and this, apart from local instances of erosion, accounts for the comparative uniformity of the prairie levels. The prairie region may, however, also be considered as consisting of three slopes or steppes, separated by more or less abrupt escarpments †

(a.) The lowest level occupying the extreme east of the region, partly on the Palæozoic and partly on the Tertiary, contains an area of about 55,000 square miles. The northern and greater portion is almost covered by the Winnipeg Lake system, while the southern portion of about 7,000 square miles contains the bed of the glacial "Lake Agassiz," whose deposits form the fertile prairie lands of Manitoba.

The western boundary of this slope is formed by a disconnected range of hills—Pembina Mountain, Riding and Duck Mountains, and Porcupine and Pasqua Hills. Beyond these hills to the west lies the second slope or steppe.

(b.) The second slope or plain, known as the Missouri Côteau, contains about 105,000 square miles, more than 50,000 square miles being open prairie. The surface undulates especially in the more northerly part, and the river valleys are deep and wide.\* The mean elevation is about 1,600 feet, or 600 feet higher than the first slope. The southern portion is scantily supplied with timber, but there are great quantities of black poplar with some spruce in the more northerly portion.

(c.) The highest slope, extending from the western edge of the second, to the Rocky Mountains has a mean altitude of 3,000 feet, and an area of 134,000 square miles. Uniform as the surface appears to a casual observer from the main line of the Canadian Pacific Railway, it is really more irregular than the surface of either of the two other slopes. The effects of denudation are here more obvious, deep ravines and coulées having been cut in the soft cretaceous and tertiary rocks.\* The southern portion of this slope is like that of the others, open and treeless prairie, while the northern portion towards the Saskatchewan valley is frequently well wooded. The Cypress Hills and Wood Mountain, which occur in the southern portion of the slope "must be regarded as outlying remnants of an older plain of the "Tertiary period."\* The whole of the great plain is thickly covered with glacial deposits.\* To the south of the Canadian plains lie the plains of the Dakotas and Montana, and to the north, the forests, broken by innumerable lakes and rivers, extend to the "Barren Lands."

## II.—The Continental Plateau.

### (i.) SUMMARY OF LAND SURFACE FEATURES.

The continental plateau upon which stretch the great plains of the North West, having been described in general terms, must now be considered as regards the features of the land surface. The open prairie extends from the

\* Dawson, Dr. G. M., "The Geology and Physical Geography of Canada (Handbook of Canada)."

† See Chart showing profiles opposite, and map at end of volume.