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PART II.

(WESTERN SECTION.)

CHAPTER I.

PHYSICAL GEOGRAPHY.

NOTE.—The facts for the following sketch of the physical geography and geology of the western portion of the Dominion of Canada, are largely derived from the Reports of the Geological Survey. In compiling these notes, I have, however, quoted at length from summaries previously published by me, of which the most important are in *Geology and Resources 49th parallel*. (Boundary Commission Report) and *Geology of British Columbia*, *Geol. mag.*, vol. viii.

The northern part of the North American continent is geologically, and to a great extent also physically divisible into two great portions. In the first, extending from the Atlantic coasts to the south-eastern edge of the Laurentian axis,—which is marked by a chain of great lakes stretching from the Lake of the Woods to the Arctic Ocean,—the Archæan plateau is the dominant feature, the succeeding formations arranging themselves about its edges or overlapping it to a greater or less extent in the form of bays or inlets, but,—with the single exception of limited tracts of Triassic rocks,—no mesozoic or tertiary strata are represented in it. In the second, stretching westward to the shores of the Pacific, the Archæan rocks play a very subordinate part, and Mesozoic and Tertiary rocks are abundantly represented and alone characterize the whole area of the great plains. Correlated with the difference of age in the formations represented, is the fact that at a date when the flexure and disturbance of the eastern region had practically ceased, and it was set and firm, the western Cordillera belt continued to be the theatre of uplift and folding on a gigantic scale.

Where the great region of plain and prairie which occupies the whole central part of Mexico and of the United States passes the forty-ninth parallel of latitude, which constitutes the political boundary between the last named country and the Dominion of Canada, it is included in longitude between the 96th and the 114th meridians. It narrows pretty rapidly northwards, by the encroachment on it of its eastern border, but continues as a great physical feature even to the shore of the Arctic Ocean, where it appears to have a breadth of between 300 and