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the sea, or nearly 1,000 feet above the Manitoba lake. The valleys are deeply incised, and one of them, now carrying a small stream, the Qu'Appelle river, at one time carried also the waters of the South Saskatchewan while its northern drainage was blocked by the Keewatin glacier. The drainage of the southern part is eastward into a confluent series of streams entering the Assiniboine valley and northeast into the Saskatchewan. At the edge of the plateau the major valleys are wide and thus divide the escarpment into several prominent hills overlooking the lake plain, known as Pembina, Riding, Duck, Porcupine, and Pasquin hills. Wooded areas occur in the northern part of the plateau and along its outer edge, while a few of the higher levels of the central surfaces are similarly covered.

## THIRD DIVISION.

This area, extending from the Coteau or the hilly country west of Moosejaw to the foot-hills of the Rockies, is divided by the depression through which the South Saskatchewan flows. To the north of this depression the drainage is mainly eastward to the Saskatchewan and northeastward to the Athabasca, while the region to the south includes a fringe of the drainage basin of the Missouri river. There is also, immediately west of the Coteau, a small basin without present outlet, whose waters evaporate in lakes Johnston and Chaplin.

The relief of this division is accentuated by the fact that much of it is bare of trees, so that such elevations as the flat-topped Cypress hills, standing 2,000 feet above the railway near Medicine Hat, and the Hand hills, 800 feet above the surrounding plain, become prominent topographic features.

## FOURTH DIVISION.

The topographic character of the foot-hills is much more diverse than that of the other divisions. The geological structure is closely related to the topography, and all the hills are formed of folded or faulted rock masses.

Since the folding in these hills is due to the same causes that produced the Rocky mountains, the strikes of the folds follow directions nearly parallel to the mountain chains. Although many of them are of considerable elevation, the summits of the foot-hills are not as serrated as the mountains are, since the rocks composing them are softer. Their flanks, also, are either grassed or clothed with timber. In general arrangement they form a belt of varying width and elevation, consisting of parallel ridges cut here and there by streams rising in the mountains behind. The transverse valleys occupied by these streams are strongly-marked features and are probably ancient drainage lines as, in the outer zone of the foot-hills where the rocks are less folded, the valleys are very broad and the former plateau is represented merely by fragments separating the valleys.

## THE ST. LAWRENCE LOWLANDS.

The southern interior of the continent consists of a plain of low relief, bordered on the east by the Appalachian mountains, on the west by the Cordilleran mountain systems, and on the north by the old surface of the Laurentian plateau. To the northeast this plain becomes reduced in width, and in the vicinity of Quebec is represented by a narrow plateau or shelf on each side of the St. Lawrence river. The triangular area beyond, in which is the island of Anticosti, is structurally related to the central lowlands. The underlying rock structures are comparatively undisturbed and represent great periods of deposition that were continued from the Cambrian to Devonian times.