## 3. The Laramide Mountain System, including the Wasatch Range.

The Laramide system of mountain ranges extends along the summit of the Rocky Mountains far northward into British America, and southward into Mexico. In British America, just north of Montana, the upturned belt lies east of the Archæan protaxis. In the United States it occupies the summit region of the mountains, between the line of the Wasatch Archæan and the Front Range or protaxis. Dr. G. M. Dawson states that, in British America, the belt of upturned rocks along the summit of the Rocky Mountains extends from Montana northwestward, with a small interruption, to the Arctic Ocean, which it reaches west of the Mackenzie delta.

The rocks involved were those of all Paleozoic and Mesozoic time, Cambrian beds making the bottom, and the Laramie, or the uppermost formation of the Cretaceous, the top. The whole thickness of the series in British America, between $50^{\circ}$ and $54^{\circ}$ N., is 34,000 feet (R. G. V. McConnell, 1887), and in the region of the Wasatch, about 31,000 feet (C. King, 1878); as nearly as has been learned this was the final depth of the geosyncline in which the deposits were accumulated.

The facts from British America, as reported by McConnell (1887) and Dawson (1886), are much like those of the Appalachian region.

The following figures, by McConnell, from a point in the range not far from the line of the Canadian Pacific Railway, show the Cretaceous rocks

( $\mathrm{Cr}, \mathrm{Cr}$ ) overlaid by the Cambrian (C), or the bottom beds of the Paleozoic, almost horizontally for a width of two miles; and the describer states that the whole width of the overthrust of the Cambrian at this place is, by his estimate, seven miles. These Cambrian beds are overlaid on the west by Devonian beds (D), and by the Carboniferons ( $\mathrm{Cb}^{\prime}, \mathrm{Cb}^{\prime}$ ), which have a fault (F) between them. The thrust is away from the ocean, as in the Appa-

