

studied both in the United States* and Canada; and, though their flora was originally referred by mistake to the Miocene, it is now known to be Eocene or Palæocene, or even in part a transition group between the latter and the Cretaceous. The following remarks, taken chiefly from recent papers by the author,† will serve to illustrate this :

On the geological map of Canada the Laramie series, formerly known as the lignitic or lignite Tertiary, occurs, with the exception of a few outliers, in two large areas west of the 100th meridian, and separated from each other by a tract of older Cretaceous rocks, over which the Laramie beds may have extended, before the later denudation of the region.

The most eastern of these areas, that of the Souris River and Wood Mountain, extends for some distance along the United States boundary, between the 102d and 109th meridians, and reaches northward to about thirty miles south of the "elbow" of the South Saskatchewan River, which is on the parallel of 51° north. In this area the lowest beds of the Laramie are seen to rest on those of the Fox Hill group of the Upper Cretaceous, and at one point on the west they are overlaid by beds of Miocene Tertiary age, observed by Mr. McConnell, of the Geological Survey, in the Cypress Hills, and referred by Cope, on the evidence of mammalian remains, to the White River division of the United States geologists, which is regarded by them as Lower Miocene.‡ The age of the Laramie beds is thus stratigraphically determined to be between the Fox Hill Cretaceous and the Lower

* See more especially the elaborate and valuable reports by Lesquereux and Newberry, and a recent memoir by Ward on "Types of the Laramie Flora," "Bulletins of the United States Geological Survey," 1887.

† "Transactions of the Royal Society of Canada," 1886-'87.

‡ "Report of the Geological Survey of Canada," 1885.