

of the United States, and of the so-called Miocene of McKenzie River and Greenland, and that the whole are Paleocene; and this conclusion has now been confirmed by the researches of Gardner in England, and by the discovery of true Lower Miocene beds in the Canadian northwest, overlying the Laramie or lignite series.

In a bulletin of the United States Geological Survey (1886), Dr. White has established in the West the continuous stratigraphical succession of the Laramie and the Wahsatch Eocene, thus placing the Laramie conformably below the Lower Eocene of that region. Cope has also described as the Puerta group a series of beds holding vertebrate fossils, and forming a transition from the Laramie to the Wahsatch. White also testifies that a number of fresh-water mollusks are common to the Wahsatch and the Laramie. This finally settles the position of the Laramie so far as the United States geologists are concerned, and shows that the flora is to be regarded as Eocene if not Upper Cretaceous, in harmony with what has been all along maintained in Canada. An important *résumé* of the flora has just been issued by Ward in the bulletins of the United States Geological Survey (1887).

Before leaving this part of the subject, I would deprecate the remark, which I see occasionally made, that fossil plants are of little value in determining geological horizons in the Cretaceous and Tertiary. I admit that in these periods some allowance must be made for local differences of station, and also that there is a generic sameness in the flora of the northern hemisphere, from the Cenomanian to the modern, yet these local differences and general similarity are not of a nature to invalidate inferences as to age. No doubt, so long as palæobotanists seemed obliged, in deference to authority, and to the results of investigations limited to a few European localities, to group together, without distinction, all the floras of the later Cretaceous and earlier Tertiary,