

especially collections made by myself near Calgary in 1883, and by officers of the Geological Survey in 1884, have been described in the "Transactions of the Royal Society of Canada," vols. iii. and iv.

In studying these fossil plants, I have found that there is a close correspondence between those of the Lower and Upper Laramie in the two areas above referred to respectively, and that the flora of the Lower Laramie is somewhat distinct from that of the Upper, the former being especially rich in certain aquatic plants, and the latter much more copious on the whole, and much more rich in remains of forest-trees. This is, however, possibly an effect rather of local conditions than of any considerable change in the flora, since some Upper Laramie forms recur as low as the Belly River series of the Cretaceous, which is believed on stratigraphical grounds to be considerably older than the Lower Laramie.

With reference to the correlation of these beds with those of the United States, some difficulty has arisen from the tendency of palæobotanists to refer the plants of the Upper Laramie to the Miocene age, although in the reports of Mr. Clarence King, the late director of the United States Geological Survey, these beds are classed, on the evidence of stratigraphy and animal fossils, as Upper Cretaceous. More recently, however, and partly perhaps in consequence of the views maintained by the writer since 1875, some change of opinion has occurred, and Dr. Newberry and Mr. Lesquereux seem now inclined to admit that what in Canada we recognise as Upper Laramie is really Eocene, and the Lower Laramie either Cretaceous or a transition group between this and the Eocene. In a recent paper* Dr. Newberry gives a comparative table, in which he correlates the Lower

* Newberry, "Transactions of the New York Academy," February, 1886.