

A report by J. S. Newberry, on the plants of the Raritan group of the Atlantic border, nearly ready for publication at the time of his death in 1892, has not yet appeared (1894). A few Long Island species have been described and figured by A. Hollick (1892-93). They were from the clays on the north side of the island between Eaton's Neck and Glen Cove.

An account of the plants of the Dakota group is contained in Lesquereux's quarto reports — one volume published in connection with the reports of the Hayden Expedition, and another posthumous volume, edited by F. H. Knowlton, published as vol. xvii. of the Memoirs of the U. S. Geological Survey (1893). The flora, so far as now known, includes 429 Angiosperms, 8 Endogens, 15 Conifers, 12 Cycads, and 6 Ferns; in all 470 species. As Knowlton states, the proportion of Cycads is nearly the same as in the Atané group of Greenland described by Heer, while the Angiosperms make 91 per cent of the whole and in the Atané group 72 per cent; and a fourteenth of the whole are identical with Greenland species. The spirally marked fruit of a *Chara*, *C. Stantonii*, has been found by Knowlton in the Bear River beds.

The Laramie plants also were described by Lesquereux in one of the quarto volumes of the Hayden Expedition reports. But it is found that there is some uncertainty with regard to localities, and the subject is undergoing revision. They include no Cycads.

The following lists of characteristic species of the Laramie and Denver groups are from F. H. Knowlton: —

Fossil plants characteristic of the Lower Laramie: *Musophyllum complicatum*, *Flabellaria eocenica*, *Ficus lanceolata*, *Ficus latifolia*, *Quercus angustiloba*, *Sterculia modesta*, *Anona robusta*, *Dombeyopsis squarrosa*, *Nelumbium tenuifolium*, *Rhamnus salicifolius*, *Cornus suborbifera*.

Fossil plants characteristic of the Denver group: *Osmunda affinis*, *Asplenium erosum* (*Pteris erosa* Lx.), *Aspidium Lakesii*, *Woodwardia latiloba*, *Oreodoxites plicatus*, *Ficus occidentalis*, *F. spectabilis*, *Populus Nebrascensis* (varieties), *Fraxinus eocenica*, *Zizyphus fibrillosus*, *Rhamnus Goldianus*, *Platanus Reynoldsii*, *Viburnum Goldianum*.

Fossil plants common to both the Lower Laramie and Denver groups: *Ficus planicostata*, *Dombeyopsis obtusa*, *Paliurus zizyphoides*, *Artocarpus Lessigiana*.

The plants of the Livingston beds, referred by Weed and Knowlton to the Denver horizon, are the following (*U. S. G. S. Bulletin*, No. 105, 1893). They are stated to be, by Weed, from the lower 300' of the beds. Those species that occur also in the Lower Laramie beds are designated by Lar.; those in the Denver group of the Denver region, by the letter D; and those that are known from the Miocene Tertiary, by the letter M: —

<i>Abietites dubius</i> Lesquereux.....Lar.	<i>Platanus Guillelmæ</i> Göppert...Lar., D. M.
<i>Sequoia Reichenbachii</i> Geinitz.....Lar.	? " <i>aceroides</i> Göppert.....D., M.
<i>Taxodium distichum</i> Miocenum Heer.	<i>Ficus auriculata</i> Lx.....D.
<i>Ginkgo adiantoides</i> Ung.	? " <i>tiliaefolia</i> (Al. Br.) Heer...Lar., D.
<i>Phragmites Alaskanus</i> Heer.	" <i>planicostata</i> Lx.....Lar., D.
<i>Caulinites sparganioides</i> Lx.....Lar.	<i>Cinnamomum Scheuchzeri</i> ? Heer.
<i>Populus mutabilis ovalis</i> Heer.....Lar.	" <i>ellipticum</i> Knowlton.
" <i>laevigata</i> Lx.....D.	<i>Litsæa Weediana</i> Knowlton.
<i>Salix angusta</i> Al. Br.....Lar., M.	<i>Laurus socialis</i> Lx.....type from Lar.
<i>Quercus castanopsis</i> Newb.	<i>Fraxinus denticulata</i> Heer.....Lar.?
" <i>Godeti</i> ? Heer.	<i>Andromeda affinis</i> Lx.
" <i>Ellisiana</i> Lx.....Lar.	? <i>Nyssa lanceolata</i> Lx.....D.
<i>Juglans rugosa</i> Lx.....Lar., D., M.	<i>Rhamnus rectinervis</i> .....Lar., D.
" <i>denticulata</i> Lx.....D., M.	" <i>salicifolius</i> ? Lx.....Lar.
" <i>rhamnoides</i> Lx.....Lar., D.	<i>Celastrinites lævigatus</i> Lx.