

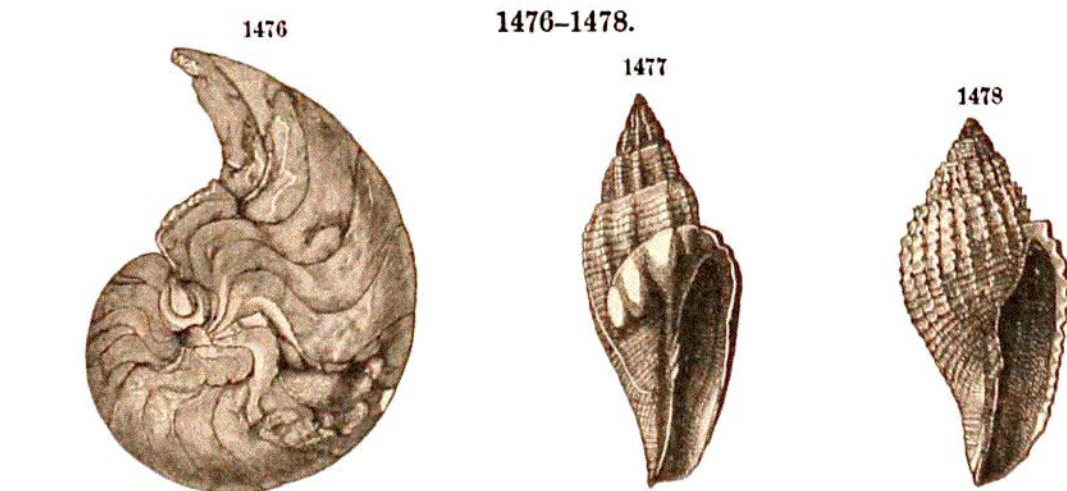
of the Eocene of Mississippi, Arkansas, and elsewhere, have afforded large numbers of leaves of plants; others have been obtained, together with a variety of nuts, from the bed of lignite at Brandon, Vt.

The plants of these beds, some of which are here represented, are closely related to those of the present era.

Fig. 1470 represents an oak leaf (*Quercus myrtifolia*) from Somerville, Tenn., the Lagrange group of Safford; Fig. 1471, leaf of a cinnamon (*Cinnamomum Mississippense*), from Mississippi, at Winston; Fig. 1472, a palm (*Calamopsis Danae* Lsqx.), from Mississippi, in Tippah, Lafayette, Calhoun; Fig. 1473, nut of a beach (*Fagus ferruginea* (?)), from the Lagrange group of Tennessee; Fig. 1474, fruit (*Carpolithes irregularis* Lsqx.), from the Brandon Lignite bed; Fig. 1475 (*Carpolithes Brandonensis* Lsqx.), the most abundant of the Brandon nuts, natural size. The kind of plant producing these two fruits is undetermined. Among the other Brandon fruits, Lesquereux recognized the genera *Carya*, *Fagus*, *Aristolochia*, *Sapindus*, *Cinnamomum*, *Illicium*, *Carpinus*, and *Nyssa*. (*Am. Jour. Sc.*, xxxii., 355, 1861.)

ANIMALS. — Invertebrates. — In the Eocene, among *Protozoans*, Rhizopods are very numerous in some of the beds. The coin-shaped fossils, *Orbitoides*, resembling Nummulites in form, abound in the Vicksburg beds, and the rock is often called the *Orbitoides limestone*; the common species, *O. Mantelli*, is represented in Fig. 1494.

Midway. — Characteristic species of the Midway group are represented in Figs. 1476–1478; of the Lignitic group, in Figs. 1479–1481; and Eocene of the Lower Claiborne, in Figs. 1482–1484, 1487, 1488; of the Upper Claiborne, in Figs. 1485, 1486, 1489; of the Vicksburg, in Figs. 1490–1496; of the Miocene, in Figs. 1497–1507; of the Pliocene, in Figs. 1508–1510.



EOCENE, MIDWAY GROUP. — Fig. 1476, *Enclimatoceras* Ulrichi; 1477, *Volutilithes rugatus*; 1478, *V. limopsis*.
Fig. 1476, C. A. White; 1477, 1478, Harris.