

Section iii. Miocene

§ 1. General Characters

The European Miocene deposits reveal great changes in the geography of the Continent as compared with its condition in earlier Tertiary time. So far as yet known, Britain and northern Europe generally, save an area over the site of Schleswig-Holstein and Friesland, were land during the Miocene period; but a shallow sea extended toward the southeast and south, covering the lowlands of Belgium and the basin of the Loire. The Gulf of Gascony then swept

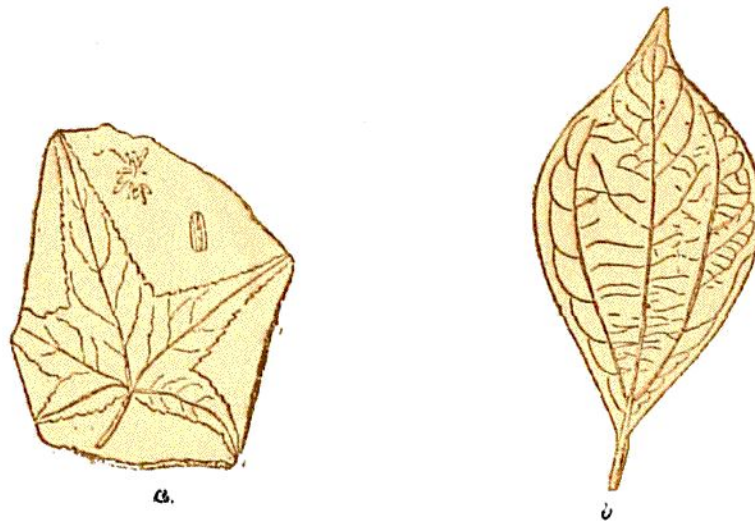


Fig. 436.—Miocene Plants.

a, *Liquidambar europæum*, Braun. (3); *b*, *Cinnamomum Buchi*, Heer (3).

inland over the wide plains of the Garonne, perhaps even connecting the Atlantic with the Mediterranean by a strait running along the northern flank of the Pyrenees. The sea washed the northern base of the now uplifted Alps, sending, as in Oligocene time, a long arm into the valley of the Rhine as far as the site of Mainz, which then probably stood at the upper end, the valley draining southward instead of northward. The gradual conversion of salt into brackish and