

only are found, but little certainty can be obtained as to the family to which they belonged ; the leaves of many well-known genera offer more certain characters ; the flowers are rarely in a state of preservation to afford any valuable data ; but the fruits, or seed-vessels, which are frequently well preserved, may enable the botanist to arrive at precise determinations as to generic, if not specific, relations.

The lignite, or brown coal, as we have before stated, is almost entirely composed of dicotyledonous trees, of genera, and of many species, which are still inhabitants of Europe ; namely, poplar, willow, elm, chestnut, walnut, sycamore, maple, linden, buckthorn, &c. (See *Bd.* Vol. I. pp. 508—514.).

The tertiary marls of Aix, in Provence, which abound in lacustrine shells, crustacea, and insects, also contain leaves of the cinnamon, and other dicotyledons. (*Wond.* p. 245.).

The deposits of brown coal, on the banks of the Rhine, are literally the carbonized remains of forests, which in some very remote period, were drifted from the interior of the continent into a vast lake or gulf. The trees bear evident marks of transport, and are destitute of roots and branches. The entire mass resembles those rafts of forest-trees, which are daily seen floating down the Mississippi into the Atlantic, where they become engulfed in its profound depths, and probably will be converted into coal or lignite. In future ages, they may