

occasionally occur, but most frequently in the calcareous zones. The chief genera are *Cerithium*, *Turbo*, *Trochus*, *Pleurotomaria*, *Chemnitzia*, and *Turritella*. The cephalopods, however, are the most abundant and characteristic shells of the Lias; the family of the *Ammonites* numbers upward of 300 species in the British Lias. Many of these are the same as those that have been found in the Jurassic series of Germany, and they occupy on the whole the same relative horizons, so that over central and western Europe it has been possible to group the Lias into the various zones given in the table (p. 1482). Of the genus *Nautilus* about ten species have been found. The dibranchiate cephalopods are represented by more than 60 species of the genus *Belemnites*.

From the English Lias numerous species of fishes have been obtained. Some of these are known only by their teeth (*Acrodus*), others by both teeth and spines (*Hybodus*). The ganoids are frequently found entire; *Dapedius*, *Pholidophorus*, *Æchmodus*, *Pachycormus*, *Eugnathus*, and *Lepidolepis* are the most frequent genera. But undoubtedly the most remarkable palæontological feature in this group of strata is the number and variety of its reptilian remains. The genera *Ichthyosaurus*, *Plesiosaurus*, *Dimorphodon*, *Scelidosaurus*, *Teleosaurus*, and *Steneosaurus* have been recovered, in some cases the entire skeleton having been found with almost every bone still in place. The two genera first mentioned are especially frequent, and more or less perfect skeletons of them are to be seen in most public museums.

The Lias extends continuously across England from the mouth of the Tees to the coast of Dorsetshire. It likewise crosses into South Wales. Interesting patches occur in Shropshire and at Carlisle, far removed from the main mass of the formation. A considerable development of the Lias stretches across the island of Skye, and skirts adjoining tracts of the west of Scotland, where the shoreline of the period is partly traceable; while small portions of the lower division of the formation are exposed on the foreshore of the east of Sutherland, near Dunrobin. In the north of Ireland, also, the characteristic shales appear in several places from under the Chalk escarpment.

The LOWER OOLITES lie conformably upon the top of the Lias, with which they are connected by a general similarity of organic remains, and by about 45 species which pass up into them from the Lias. In the southwest and