

tion of the strata, both of the Inferior Oolite and of the formations which immediately succeed it."*

The Inferior Oolite here alluded to is a thin bed of calcareous freestone, resting on, and sometimes replaced by yellow sand, which constitutes the passage-beds from the Liassic series. The Fullers' Earth clay lies between the limestones of the Inferior and Great Oolite, at the base of which last lies the Stonesfield slate—a slightly oolitic, shelly limestone, or flaggy and fissile sandstone, some six feet thick, rich in organic remains, and ranging through Oxfordshire towards the north-east, into Northamptonshire and Yorkshire. At Colley Weston, in Northamptonshire, fossils of *Pecopteris polypodioides* are found. In the Great Oolite formation, near Bath, are many corals, among which the *Eunomia radiata* is very conspicuous. The fossil is not unlike the existing brain-coral of the tropical seas (Fig. 118). The work of this coral seems to have been suddenly stopped by "an invasion," says Lyell, "of argillaceous matter, which probably put a sudden stop to the growth of Bradford Encrinites, and led to their preservation in marine strata."† The Cornbrash is, in general, a cream-coloured limestone, about forty feet thick, in the south-west of England, and occupying a considerable area in Dorsetshire and North Wilts, as at Cricklade, Malmesbury, and Chippenham, in the latter county. *Terebratula obovata* is its characteristic shell, and *Nucleolites clunicularis*, *Lima gibbosa*, and *Avicula echinata* occur constantly in great numbers. Wherever it occurs the Cornbrash affords a rich and fertile soil, well adapted for the growth of wheat, while the Forest Marble, as a soil, is generally poor. The Cornbrash passes downwards into the Forest Marble, and sometimes, as at Bradford, near Bath, is replaced by clay. This clay, called the Bradford clay, is almost wholly confined to the county of Wilts. *Terebratula decussata* is one of the most characteristic fossils, but the most common is the Apiocrinites or pear-shaped encrinite, whose remains in this clay are so perfectly preserved that the most minute articulations are often found in their natural positions. PLATE XIX., p. 261 (Fig. 1), represents an adult attached by a solid base to the rocky bottom on which it grew, whilst the smaller individuals show the Encrinite in its young state—one with arms expanded, the other with them closed. Ripple-marked slabs of fissile Forest Marble are used as a roofing-slate, and may be traced over a broad band of country in Wiltshire and Gloucestershire, separated from each other by thin seams of clay, in

* President's Address, by Professor A. C. Ramsay. *Quart. Jour. Geol. Soc.*, 1864, vol. xx., p. 4.

† "Elements of Geology," p. 400.