

Wotton-under-Edge, in Gloucestershire, the Upper Lias clay is very poorly developed, and between it and the ordinary limestone of the Inferior Oolite, there are thick beds of soft brown sand, with intermittent hard, sandy, calcareous bands, containing Ammonites, Belemnites, Pentacrinites, and bivalve shells. Above these there are bands of impure sandy limestone, called in 1856, by Dr. Wright of Cheltenham, the Cephalopoda bed, because of the prevalence in it of Ammonites, Belemnites, and Nautili, some of which, with other forms, are also common in the Upper Lias clay. This fact induced him to consider these sands and impure limestone to be so intimately related to the Upper Lias, that he named them in his Memoir 'the Upper Lias Sands'¹ instead of 'the Mitford Sands (of the Inferior Oolite,)' a name long before given to them by William Smith.

According to existing lists, 17 species of Conchifera pass from the sands into the overlying Oolite strata, and, indeed, about 39 or 40 species of all kinds are common to the Upper Lias and the overlying Oolitic formations,² thus linking the Lias to the Oolites in a continuous chain of specific life.

Throughout the southern half of England, from the English Channel to the borders of Northamptonshire, the various members of the Oolitic series maintain a tolerably uniform character.

THE INFERIOR OOLITE LIMESTONE forms the lowest member of this series. It first appears between the west end of the Chesil Bank and Bridport Harbour in Dorsetshire, from whence, underlaid by the before-mentioned sands, broken and interrupted by many faults, it ranges

¹ 'Journal of the Geol. Soc.' 1856, p. 292.

² As catalogued by Mr. Etheridge.