

Chalk (Turonian); it contains few fossils, among which are *Belemnitella plena*, *Hippurites* (*Radiolites*) *Mortoni*, *Ptychodus*.

In Cambridgeshire the Chalk Marl is covered by a band of harder stone (Totternhoe Stone), passing up into sandy and then nearly pure white chalk, and these strata, equivalents of the Chalk Marl and Gray Chalk, are probably separated by a palæontological and stratigraphical break from the next overlying (Turonian) member of the series.¹⁴² According to the original classification of M. Hébert, this zone of *Belemnitella plena* is placed at the base of the Turonian group; by Dr. Barrois it is made the summit of the Cenomanian. The latter view receives support from traces of a break and denudation above this zone in England.

Middle Chalk, Turonian.¹⁴³—This division comprises the "Lower White Chalk without flints," and is marked off at the base by a band of hard yellow and white nodular chalk, locally known in Cambridgeshire as "rag," and termed by geologists the Melbourne Rock. It is about 8 or 10 feet thick, and forms a convenient band in mapping out the subdivisions of the Chalk. It contains *Rhynchonella Cuvieri*, *Terebratulina striata*, *Inoceramus Cuvieri*, *Spondylus striatus*, *Ammonites peramplus*, etc.¹⁴⁴

The White Chalk of England and northwest France forms one of the most conspicuous members of the great Mesozoic suite of deposits. It can be traced from Flamborough Head in Yorkshire across the southeastern counties to the coast of Dorset. Throughout this long course, its western edge usually rises somewhat abruptly from the plains as a long winding escarpment, which from a distance often reminds one of an old coast-line. The upper half of the deposit is generally distinguished by the presence of many nodular layers of flint. With the exception of these inclosures, however, the whole formation is a remarkably pure white pulverulent dull limestone, meagre to the touch, and soiling the fingers. Composed mainly of crumbled foraminifera, urchins, mollusks, etc., it must have been accumulated in a sea tolerably free from sediment, like some of

¹⁴² A. J. Jukes-Browne, *Geol. Mag.* 1880, p. 250. See also the same author in "Geology of the Neighborhood of Cambridge" (*Mem. Geol. Surv.*), and *Quart. Journ. Geol. Soc.* 1886, p. 216; 1887, p. 544.

¹⁴³ From Touraine, where the marly chalk is well developed.

¹⁴⁴ W. Hill and A. J. Jukes-Browne, *Quart. Journ. Geol. Soc.* 1886, p. 216; *op. cit.* 1887, p. 580.