

to ; this division will comprise the highest in the English series of regular strata,* and therefore occupy the first place in our arrangement.

Section II. *Strata above the Chalk.*†

(a) *Nature and extent.* These consist of various beds of sand, clay, marl, and imperfectly consolidated limestone. They occupy two extensive tracts, each circumscribed by the hills of the chalk formation, excepting where the line of sea coast traverses their areas and conceals their continuation.

Since the chalk formation, dipping on all sides though generally at a scarcely perceptible angle beneath these formations, forms, when viewed on the large scale, concave areas in which they have been deposited, those areas have been denominated basins ; but it must not be inferred from this term that the chalky edge of the basin can be traced completely round, since the interference of the line of coast prevents this. The most northerly of these basins has been denominated that of London, from its including the metropolis ; the southern that of the Isle of Wight, because the northern portion of that island falls within it.

* No superior or more recent regular formations are known to exist in any part of the earth yet examined, with the exception of some trap rocks probably of volcanic origin.

† The earliest published account which conveys any distinct information of these strata, is a series of papers by Mr. Middleton on the Mineral Strata of Great Britain, inserted in the Monthly Magazine for October 1812 and following months ; which, although not written in scientific language, and containing some inaccuracies, yet possesses very considerable merit. He rightly enumerates the beds above the chalk in the following order : 1. Vegetable mould ; 2 and 3. Brick earth and shells, sand, and gravel, (the upper marine formation of this volume) ; 4. London clay ; 5. Shells, pebbles, sand, and pipe clay containing wood coal occasionally, and resting on the white sand which covers the chalk (our plastic clay formation). The account given of each of those beds, though short, exhibits fairly all the most striking features and localities, and requires correction in very few instances.

Mr. Webster's interesting discovery however of the alternation of fresh-water formations with those of marine origin, thus establishing the perfect analogy of the French and English series, and the more scientific character of his memoir, have undoubtedly given to his name a just precedence amongst the observers of these formations ; and his materials were completed long before the publication of Mr. Middleton's paper. Each indeed appears to have been perfectly unacquainted with the researches of the other.

Subsequently, Mr. Buckland has completed the history of the lower members of these formations ; but we still remain without any particular memoir on the upper members as they appear in Suffolk, and round Bagshot ; Mr. Warburton however is understood to be engaged in supplying this deficiency.