

p. 316) to imbibe more water, and retain it for a longer time than the Westmoreland slate; but it does not imbibe half so much, nor retain it one-fourth the time that a common tile does. (G. Notes.) In this part of the country also, the escarpment on the right bank of the Nen, between Higham Ferrers and Peterborough, exhibits beds resembling forest marble at Raunds and Stanwick.

The whole mass of this oolitic system in Dorsetshire (excepting the inferior oolite and its sand) presents the fissile character of the forest marble; but it seems more probable that the great oolite here passes into this structure (as it undoubtedly does occasionally in other places), than that the forest marble, generally a subordinate bed only, should here swell to such a disproportionate thickness, and the great oolite itself be wanting.

No. 7. *Clay over the upper oolite, or Bradford clay*, consists of a common blue marly clay, which, at the point of its contact with the great oolite, is replete with the peculiar organic remains hereafter to be described. It is sometimes wanting, and it then becomes impossible to distinguish the upper beds of the great oolite from those of the forest marble.

No. 8. *Great Oolite.** This is, both in thickness and utility, by far the most important of the British oolites: it consists of a stratified calcareous mass, varying in thickness from 130 to more than 200 feet; softer and harder beds, (the former characterized by those distinct oviform concretions which give name to this series of rocks, the latter exhibiting them more rarely and obscurely) alternate in this mass of strata. The former afford the freestone which renders this rock so valuable; but these strata vary much, both in thickness and quality, even in quarries in the same neighbourhood. The Kettering freestone of Northamptonshire is rendered extremely beautiful by the distinctness of its oolitic structure: that of Bath has generally a finer grain: this has been employed in the late repairs of Henry the Seventh's chapel at Westminster. St. Paul's was built principally from the quarries about a mile north of Burford in Oxfordshire. Fragments of comminuted shells may be observed in all the varieties mingled with the ova, but so completely broken down that it is generally impossible to ascertain their species; hence arises the rarity of such specimens from this rock, and our consequently imperfect knowledge of its fossils. The colour of the freestone beds is generally white with a light cast of yellow. Of the other beds, some are grey, some almost blue in the middle: sometimes

* We have principally copied this description from Mr. Smith.