

be more particularly described hereafter. Near Froome, however, the great oolite approaches very near to, if it does not quite touch, the mountain limestone, and the line of bearing of these beds being thus thrown out of their regular course, it becomes doubly difficult to trace them: a bed of clay in the valley a mile west of Froome appears, however, to be that associated with the fullers' earth, and hence the inferior junction of the great oolite probably ranges by Cloford to Bruton; whence it seems to proceed along the edge of the hills on the west of Charlton, Horethorn, Milford, Port, and Sherborne, a few miles south of which the crop of this oolite is, like that of the other oolitic systems, overspread by the great western extension of the chalk and green sand through Dorsetshire.

VI. *Course in the South of Dorsetshire.* On the south of this overlying extension of the chalk and green sand, the beds of the present oolitic system re-emerge from beneath it near Bridport.\* The rock here assumes the fissile character of forest marble, and it has been sometimes exclusively referred to that subdivision; but since it is in immediate contact with the fullers' earth clay and inferior oolite, and the thickness of the series seems also inconsistent with this supposition, we are rather inclined to believe that the whole oolitic series of the present formation here puts on this form.

This rock ranges to Bothenhampton, on the east of Bridport valley, having however an insulated portion capping the cliff on the west of Bridport harbour; but, on the east of the harbour, the cliffs exhibit only inferior oolite for more than two miles, where the second cliff in that direction (Burton cliff) subsides, and is succeeded by a low bank of the fullers' earth marle, characterized by its fibrous calcareous spar. Above this marle are quarries of the fissile oolite, which proceeds hither from Bothenhampton. The cliffs here terminate, a shingle bed (the commencement of the great Chesil bank) being interposed between the hills and the sea. The oolite is plainly to be traced through the base of these hills from Swyre to Abbotsbury, forming their general platform, which supports insulated summits of the overlying green sand at Swyre beacon and Abbotsbury camp.

Thus far the structure of the district is sufficiently regular, and the strata horizontal or nearly so; but beyond Abbotsbury

\* All this district, and indeed the whole south of Dorsetshire, is erroneously represented in Mr. Smith's Map. Mr. Greenough's is correct in the neighbourhood of Bridport, but requires, between Abbotsbury and Weymouth, the alterations mentioned in the article on the course of the coral rag.