

when more than usually indurated, wear an aspect very like the loose shillot afforded by decomposing greywacke. It contains regular courses of concretions, and sometimes continuous beds of an indurated calcareo-siliceous gritstone of similar character and constitution. This grit contains casts of many shells, but the shelly matter itself is rarely preserved; nor are the terebratulæ, which characterise the lower beds of No. 1, to be met with here. The characteristic shells will be mentioned under the proper head. Much of this gritstone readily decomposes on exposure to the atmosphere, but some of the beds, or rather some portions of those beds, possess a very high degree of induration: they are occasionally quarried and squared for flag-stones or excavated for troughs. Some of the most extensive quarries on these beds will be found at Fenny Compton hill, a little west of the tunnel of the Oxford canal, on the borders of Oxford and Warwick shires.

The hill above these quarries is crowned with ferruginous sandstone, beneath which is a thick bed of blue clay: then succeed some thin alternations of marly rocks and clay, and lastly comes the great mass of the green coloured calcareous grit, which is quarried to the depth of 30 or 40 feet.

Thus we have seen the lowest beds of this series to consist of a green sandy marle, containing concretions and rock masses of similar character, both in Oxfordshire and Dorsetshire. In the intermediate district the same concretions may be traced, as particularly near Stinchcombe in Gloucestershire, and Hinton St. George in Somersetshire: they are there called sand-burs or clay-burs, and are, we believe, the beds designated by Mr. Smith as marle-stone. These beds form a gradual transition into the lias marles.

If we are correct in assigning the sandy beds of the eastern moorlands of Yorkshire to this formation, we must add to the above account thin seams of imperfect coal, as occurring among its members: this subject will be however considered hereafter.

(b) *Mineral contents.* The beds included in this section present little deserving notice under this head. The fullers' earth contains fibrous calcareous spar; and the inferior oolite at Dundry, occasionally, though very rarely, affords quartz crystals. Common calcareous spar of course occurs abundantly in most of the beds.

(c) *Organic remains.* Those of vertebral animals are very rare in all these beds: a series of vertebræ were however discovered a few years back in the marly sandstone of Warkworth, Northamptonshire. They probably belonged to some large marine lacerta, but were dispersed soon after their dis-