

*General account of Range and Extent, Height of Hills and Inclination of Strata of the Purbeck Beds, Portland Beds, and Kimmeridge Clay.**

(d) *Range and extent of the three formations above described.* None of these formations have as yet been observed to the north of Buckinghamshire, where the Portland beds first make their appearance underlying the iron sand, (whose course through that county has been traced in a preceding article,) and forming a constituent part of the same chain of hills. It may thus be traced from a mile north of Stukeley, a village about five miles on the west of Leighton Buzzard, Bedfordshire, to the hills between Wiuslow and Aylesbury, and dipping thence to the south, it underlies a great part of the vale of Aylesbury. Further west, on the borders of Oxon and Bucks, it rises from Thame, and culminates on the insulated group of Brill hills, where it has only a very thin covering of iron sand. The section here displayed corresponds very precisely with that of Chicks Grove as given in the note to page 173. The quantity of green earth in the lowest sandy strata is here very remarkable. Pursuing the same direction through Oxfordshire, to the south-west, it may be traced through the parishes of Milton and Hazely on the south-east of the Thame; and rising thence to the north-west, culminates in Shotover, circling round the more elevated ridge of that hill, immediately beneath the iron sand and ochre which form its summit: it is here however quarried in the village of Garsington only. It exhibits, round the slope of this ridge, inferior sandy beds, some of which are very full of particles of green earth; while the lowest contain those large nodules of calcareo-siliceous grit, which from their size and grotesque appearance will attract the notice of every one who ascends Shotover in following the old London road.

At the foot of the high ridge of Shotover, the Kimmeridge clay makes (as far as has been traced) its first appearance in the village of Headington, where it is seen in many of the quarries overlying the oolites of the next division. In its previous course through Bucks, the Portland beds seem to rest immediately on the Oxford clay (both the Kimmeridge clay and the coral rag being wanting.)

On the Berkshire side of the valley of Oxford, the Kimmeridge clay may be traced on the hills answering to Shotover, in the pit sunk by Sir George Bowyer in a fruitless search for coal near the northern edge of Bagley wood; but the strata

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