

description, since we have to attend both to the upper beds and superior edge as well as the inferior edge of this important system: and were we first to trace the former, and then return to trace the latter, through the whole island, the eye and attention would be fatigued and perplexed by the necessity of recurring twice to geographical positions essentially connected with each other; but, by dividing the line into shorter intervals, and tracing the superior and inferior limits of this system through each of these in succession, we keep the attention fixed on the same district. As an additional argument in favour of this method, it may be stated that this long chain of hills, having suffered more or less from denudation, in different parts of its course, naturally subdivides itself into distinct groupes, generally corresponding with the divisions we shall assume. These will be, I. Yorkshire; II. from the Humber to the borders of Northamptonshire and Oxfordshire; III. Oxfordshire; IV. the Cotteswold or Gloucestershire District; V. Somerset and North Dorset; VI. South Dorset.

I. *Course through Yorkshire.* In pursuing this course we shall for the present pass slightly over Yorkshire, reserving to a separate article the considerations which influence our views as to the identification of the rocks of that district. We shall now therefore simply state that we are inclined to consider the oolitic series which stretches from Scarborough to the Howardian hills, forming an escarpment on the south of the sandy hills of the Eastern Moorlands, as rather belonging to that system which we are now considering, than to that of the coral rag; to which, on account of its corals, it has been referred both by Mr. Greenough and Mr. Smith. Bending round from the Howardian hills towards the south-east, it becomes overlaid and concealed by the chalk and green sand hills near Pocklington; but according to Mr. Smith's late map, reappears in the same line at North and South Cave, on the banks of the Humber; on the opposite side of which, in the direct continuation of this line, the great oolite does undoubtedly make its appearance: so that we have almost the evidence of a direct continuity of the strata in favor of the view here proposed.

II. *Course from the Humber to Oxfordshire.* From the Humber, the Stonebrash hills, which are here possessed of a very small elevation, stretch due south through Lincolnshire, the metropolis of which stands on their course. They at first divide the vallies of the Trent and of the Ancholme navigation, and afterwards have the valley of the upper part of the river Witham on the west, and that of the lower part of the same