Occasionally, however, especially in Northamptonshire and Oxfordshire, the causes (whatever they may have been) which have evidently produced great degradation and wearing away of parts of this chain, have denuded the cap of the great oolite near the escarpment of the main chain of hills, and thus exposed a very considerable breadth of the subjacent sandy beds, causing the oolite to terminate in a low terrace (yet sensibly elevated above the denuded tract), and considerably within what appear to have been its ancient limits. This fact is clearly indicated by the occurrence of numerous, scattered. and insulated masses of this rock dispersed throughout the denuded space. These masses, which often occupy more than a square mile in extent (sometimes several miles) occur not only as regular outliers (i. e. forming the caps of insulated hills in the regular plane of the strata), but also in the lower grounds and vallies surrounded by hills of the subjacent sands, being in this case always disposed in considerably inclined planes, as if they had been precipitated into their present situation from the summits of the adjacent hills over which they appear to have once extended. We may conjecture with much probability that the denuding cause which has manifestly excavated the valleys of this tract, (and which may possibly have been the currents of the retiring waters beneath which all the secondary beds of our present continents have obviously been formed) undermined, in the course of its action, these masses, by removing the loose materials of the subjacent sand; while the more solid beds of the incumbent solite partially resisted its destructive agency, and left behind these relics of its former extent.

These particulars may indeed seem more closely connected with some of the following heads of description, than with the range and extent of these strata; but they will be found, as we proceed, so essential to the full elucidation of the present subject, that they could not have been omitted in this place without manifest inconvenience: and, having thus obtained a clear view of the general circumstances connected with the position of these rocks, we shall be enabled to trace more readily and rapidly the particulars of their local distribution.

Although these beds form (with very partial interruptions arising from the overlying of the chalk and green sand formations near the two extremities of the line in Yorkshire and Dorsetshire) a continuous zone extending across the island from north-east to south-west, and have their track marked by a line of hills which, considered in a general light, must be regarded as a single chain; yet it seems necessary to break this extended line into shorter intervals for the convenience of