

at the south end of the Isle of Purbeck, in the Vale of Tisbury in Wiltshire, at Swindon, and in the Vale of Aylesbury. The beds are very inconstant in their outcrop, only showing at those places which were probably near the original western margin of the sea of the period. At Swindon both limestone and sand are of trifling thickness. Outliers of it occur in Bedfordshire, and the whole has evidently been exposed to denudation before the deposition of the Cretaceous rocks.

Such is a brief outline of the marine Oolitic strata in the south and centre of England, and also of the Upper and Middle Oolites in their range into Yorkshire.

It will be observed that in this description I have specially insisted on the unconformable overlapping of the Cretaceous strata across the Portland, Kimeridge, and other formations, at intervals, all the way from Dorsetshire to Yorkshire, for by-and-by it will appear that this fact has an important bearing on the physical theory of the deposition of the Purbeck and Wealden strata, which come next in succession.

In the meanwhile, I must return to the Northamptonshire area, where we left the Lower Oolites, and follow them into Yorkshire, when it will be seen, that they were formed under physical conditions in some respects very different from those which obtained in the South, while the marine clays and limestones of the Lower Oolites of that area were being deposited.

It will be remembered that in Gloucestershire, a few miles west of Stow-on-the-Wold, the Fuller's Earth thins out, and the Inferior Oolite and Stonesfield Slate come together, the latter being formed in part of the sandy flags that make the base of the Great Oolite, and constitute the Stonesfield Slate. Going easterly into