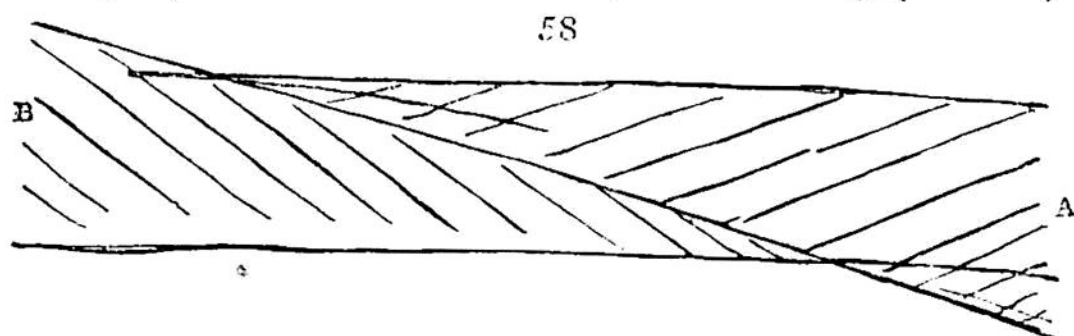
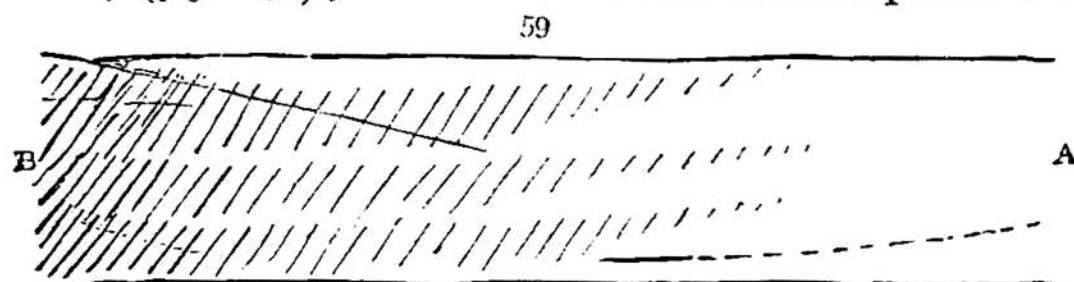


and  $b, b', b''$ , would be correctly described as the deposits of a certain *period*.

But if the deposits from A and B were continuously and contemporaneously spreading, the lines 1 and 2, 3 and 4, would completely coalesce towards A,—and the lines  $r$  and 1, 2, and 3, and 4 and 5 toward B. The sandstones would vanish indefinitely towards A, and the limestones towards B: a certain portion of sand would be diffused through the calcareous bed toward A, and some portion of calcareous matter through the sand towards B: the lines of contemporaneity would intersect obliquely the surface of the beds, as in the Diag. (No. 58.)



If the rate of deposition were *uniform* from each point, there would be only one calcareous and one arenaceous mass, (*fig. 59.*); but if from either of these points the



depositions were subject to periodical changes of intensity, this would occasion alternations of calcareous and arenaceous beds more or less distinct, according to the variations of intensity.

From this it may be concluded that the alternations of beds of different nature, proves either cessations or varying intensities of deposition, in one of the deposits; that, consequently, such a system as the oolites must have taken *a long time* for its accumulation and could not possibly have been generated with that rapidity