

that, in consequence of a subterranean movement *somewhere*, the oceanic basins were filled by sediments from other lands, or other lines of wasting coasts, the *change* from coloured sandstones to oolitic deposits in the same basin would be intelligible, though we might never know the local position of such tracts of land or lines of coast.

Most frequently, the arenaceous deposits associated with the oolitic system are easily and obviously distinguishable from those of earlier date: they are not micaceous, and seldom felspathic, as many of the carboniferous grits are; they are never of the same red, and seldom so white as those of the saliferous period. A yellow tint prevails among them, which sometimes deepens into ferruginous stains; the grain is generally fine; quartz pebbles seldom occur; their substance is mixed with carbonate of lime. But from this description, which applies to the south of England, great variations occur in particular districts, as in Yorkshire, Sutherland, and Westphalia, in the wealden districts of Kent and Sussex. The first three tracts may be sufficiently illustrated by the Yorkshire type, which is eminently distinguished from the rest of England, by having, in the lower parts of the group, enormous masses of sandstone and shale, greatly analogous to the sedimentary rocks of the carboniferous system, interpolated among the reduced and deteriorated strata of oolitic limestone. What renders the resemblance of these to the older grits and shales the more striking, is the circumstance that thin beds of coal, with fossil plants, occur among them, and that some beds of ironstone, and abundance of diffused oxide of iron, augment the analogy. There can be no doubt that these great and numerous points of similitude between the oolitic and carboniferous systems, in the north of England, point to a similarity of causes, extensively acting in the earlier, but reduced to limited effects in the later periods.

In the wealden tracts of Sussex and Kent, an almost similar series of sandstones (quartzose, coarse or fine-grained) and clays, with impure, but not oolitic lime-