stones, occur, with ironstone beds and diffused oxide of iron, traces of coal and fossil plants. Were the beds of this local deposit placed by the side of others of the old carboniferous era, it would be difficult to distinguish them by any mineral characters capable of being expressed in language; we may therefore admit for this district, and some small tracts related to it, a renewal for a short period of the actions by which the carboniferous rocks were formed; and this is easily intelligible upon the principle of changes in the direction and depositions of oceanic currents, occasioned by subterranean movements.

The clays of the oolitic system are mostly of a decided blue colour (near the surface changing to yellow), often laminated, especially in the lias formation, but more frequently appearing like a nearly uniform mass of argillaceous sediment obscurely divided by a few laminæ of shelly limestone, or lines of septaria: pyrites and jet lie in many of them. The gradation from these clays to the limestones and sandstones is usually very gentle.

The limestones of this system are various: those associated with a great abundance of blue clays (as the lias limestones) are mostly of a compact texture, and of white, yellow, grey, blue, or blackish colour. Frequently, nodular masses collected by molecular attraction round organic bodies constitute the whole mass of the lias limestones. Those which appear in considerable thickness, as the Bath oolite, Portland oolite, Oxford colite, are generally of the oolitic texture in the middle, though below and above this may be exchanged for compact or shelly beds. Thin detached limestones, like the forest marble, are sometimes very coarsely oolitic: calcareous layers in sand are usually charged with siliceous matter and often cleaveable to slate or flags (Stonesfield). The grains of oolite vary much in size; the smallest are perfectly spherical, the largest irregular; they generally cohere; the interstices are sometimes filled by calcareous spar: the centres of the large grains of oolite are commonly occupied by small shells or portions of shells, corals, grains of sand, &c., which served as the points