

a diminution in the motion and transporting power of the water, perhaps to a sinking of the tract, so that only fine mud was intermittently brought into it. The advent of limestone above the shale serves to show that the water cleared, owing to a deflection of the sediment-carrying currents, or to continued and perhaps more rapid subsidence, and that foraminifera, corals, crinoids, mollusks, or other lime-secreting organisms, established themselves upon the spot. Shale overlying the limestone would tell of fresh inroads of mud, which destroyed the animal life that had been flourishing on the bottom; while a return of sandstone

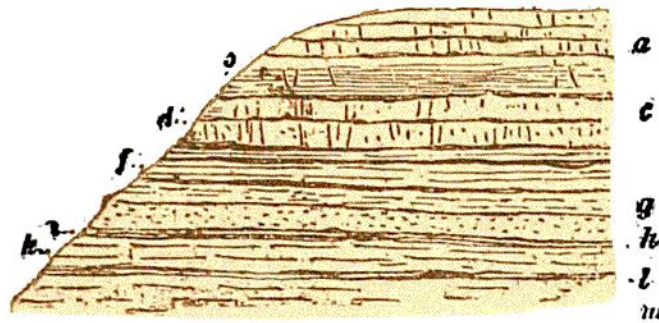


Fig. 216.—Section of Strata from the base of the Lias down to the top of the Trias, Shepton Mallet (B).

*a*, Gray Lias limestone and marls; *b*, earthy whitish limestone and marls; *c*, earthy white limestone; *d*, arenaceous limestone; *e*, gray marls; *f*, gray marls; *g*, red marls; *h*, sandstone with calcareous cement; *i*, blue marl; *j*, red marl; *k*, blue marl; *l*, blue marl; *m*, red marls.

beds would mark how, in the course of time, the original conditions of troubled currents and shifting sandbanks returned. Such alternating groups of sandy, calcareous, and argillaceous strata are well illustrated among the Jurassic formations of England (Fig. 216).

Certain kinds of strata commonly occur together, because the conditions under which they were formed were apt to arise in succession. One of the most familiar examples is the association of coal and fire-clay. In Britain a seam of coal is generally found to lie on a bed of fire-clay, or on some argillaceous stratum. The reason of this union