

fossils, with but few exceptions, are specifically distinct from those of the Devonian system; and not one of them have been found in the carboniferous strata.*

In the Cambrian, or slate system, we have a vast argillaceous formation, with numerous conglomerates; and from the structure of the entire series, it would appear that after the deposition of the strata by water, the whole had been exposed to the long-continued influence of heat, by which the original sedimentary character was either greatly modified, or entirely obliterated. About twenty or thirty species of shells and corals, consisting of cyathophylla, spiriferæ, productæ, &c. are the only organic remains: and as these occur in the upper part of the system, it may probably hereafter be found convenient to separate the Silurian from the Cambrian, at a lower level, and thus include the fossiliferous strata in the former grand division. In accordance with the slaty structure, is the prevalence of melted rocks throughout the Cambrian epoch; for not only do granite, porphyry, serpentine, and trap, occur in veins and dikes, but also intercalated with the strata, as if the melted matter had been poured over argillaceous sediments at the bottom of the sea, and had become covered by succeeding deposits.

* See Silurian System, p. 585. Mr. Murchison evidently anticipated that the old red system would be characterised by its peculiar organic remains.