

principality of Wales, the transition limestones of Ayrshire are also gradually forming, in no small part, — so abundant has life now become in the waters, — of massive corals, and of the stony exuviæ of encrinites and molluscs. But to the period of this calcareous deposit, — so vastly prolonged, that the massive corals of its later ages grow upon rock formed of the remains of their early predecessors, — there comes a last day; a sandy deposit begins to be cast down over it, and, in the altered circumstances, many of the corals die, to re-appear no more. But life in other forms is not less abundant than in the previous time. The sedentary brachipods, — pentamerus, with its strange internal partitions, — terebratula, with its perforated umbone, — orthis, spirifer, and atrypa, with their long tendril-shaped arms, — lie so thickly upon the arenaceous bottom, that their remains, as they yield to the inexorable law of death, form no inconsiderable proportion of the ever-rising platform on which their successors spend also their determined day, and yield, in turn, to the destroyer. And thus, during the earlier and middle ages of the Caradoc Sandstones, stratum after stratum is laid down, each, in succession, a home for the living and a burying-ground for the dead. And then yet another change takes place. The arenaceous deposit is succeeded by a deposit of gray argillaceous mud: the fauna, too, alters in at least its aspect, in the proportions borne in it by families and genera. Though in one certain bed, and for a comparatively short period, a small species of terebratula abounds, the brachipods generally greatly decrease, — a consequence, mayhap, of the altered nature of the bottom, now considerably softer than before; but, on the other hand, the cephalopoda, represented chiefly by the orthoceratites, very much increase, and the trilobites attain to their numerical maximum. Scales of fishes, somewhat resembling the bony plates on the sides of the sturgeon, have been found by Mr. M'Coy in the Silurians of Ire-