

size, Nautilus, and Goniatite, swam above. Corals of strange shapes were abundant : there were several species of Tubilipora, which more resembled the organ-pipe coral than aught else that still exists ; with great numbers of a horn-shaped coral, Turbinolia, with its point turned downwards, like that of a Cornucopia, and with an animal somewhat akin to the sea-anemone, expanded, flower-like, from its upper end. With these, too, there were grouped delicately branched corals, mottled with circular cells ; and minutely elegant Fenestrella, that seemed reduced editions of the sea-fan. An antiquely-formed sea-urchin, whose spines were themselves roughened with minute spines, as the more delicate branches of a sweet brier are roughened with thorns, crept slowly among these zoophytes by its many cable-like tentacula ; while forests of Crinoidea waved in the tide, and sent abroad their many arms from the ledges over-head. These forests of Crinoidea or stone-lilies formed one of the leading characteristics of the sea-bottoms of the period. We may conceive of them as thickets of flexible-jointed stems rooted to the rocks, and with a variously-formed star-fish fixed on the top of each stem. Some of the stems were branched, some simple ; in some the petals or rays were richly palmated ; in others, plain and star-like ; in some, what might be deemed the calyx of the flower, but which was in reality the stomach of the animal, was round and polished ; in others, ornately carved into regular geometrical figures. But however various in their appearances, they were all sedentary star-fishes, that, poised on their tall, cane-like stems, sent abroad their arms into the waters of the old Carboniferous ocean, in quest of food. The minute joints of the stem, perforated in the middle by a circular passage, and fretted by thick-set rays radiating from the centre, seem to have attracted notice in an early age, and are known in legendary lore as the beads of St. Cuthbert. Dr. Mantell states that he has found quantities of these perforated ossi-