

development easy. The two common species are *CIDARIS CRETOSA* (*Org. Rem.* Pl. I. fig. 21.), with elongated spines, and *C. CLAVIGERA*, with short, club-shaped spines.

*CIDARIS DIADEMA* (*Lign.* 77, fig. 4.).—A small depressed species is also frequent in the Chalk; it was formerly known as *C. diadema*; but now forms the type of M. Agassiz's genus *Diadema*. A flint cast of the interior of a shell of this kind is figured *Lign.* 77, fig. 5. These casts, together with those of the larger Cidarites, are often met with on the ploughed lands, in beds of gravel, and among the shingle of the sea-shore of chalk districts; appearing as flattened round bodies, with a circular protuberance at each pole, and vertical rows of rounded projections. The imprints of the external surface of the shells are also frequent in chalk flints, and present exquisite casts, in intaglio, of the mammillated tubercles, and ambulacral grooves. A fragment of a flint, bearing the imprint of a portion of a Cidarite, is represented *Lign.* 82, fig. 2. The holes around the impression indicate tubular cavities in the flint, formed by the spines; proving that these processes were attached to the shell when enveloped by the fluid silex; both having since perished, and left only their imprints. The shells of the genus *Echinus* resemble those of *Cidaris*, but the tubercles are imperforate; more than twenty-five species of fossil *Echinus* are described.