

exterior of the shell do not materially differ from those on the interior, and, consequently, the cast, fig. 3, and the shell, fig. 1, resemble each other; but in many species there is a striking contrast between the outer and inner surfaces, the external aspect being strongly ornamented, while the internal is smooth; the cast, therefore, in such examples, so little resembles the shell, that an inexperienced collector may readily suppose it belongs to a different species. The bivalve called *Trigonia*, *Lign.* 91, figs. 1, 2, is an instance of this contrast.

The polished slab of the *Septarium*, *Lign.* 86, fig. 2, demonstrates another condition of fossil shells—that of a compact argillaceous limestone—and entire beds of marble are composed of an aggregation of this kind, formed of shells and other animal exuviae, consolidated by mineral infiltrations. In the older secondary strata this state prevails; and the beautiful markings of many valuable marbles, are caused by sections of the enclosed shells. But this process is not restricted to the deposits of ancient date; at the present moment the same operation is silently but constantly going on in our seas, and an examination of the specimen, *Lign.* 87, will afford an exemplification of the manner in which these shelly limestones are produced.

We have here a solid mass of stone, composed of several recent species of shells, corals, &c. It is a fragment of a large block, dredged up from the British Channel, off Brighton. Similar masses have