Fig. 363.

Belemnites Puzosianus, D'Orb.
Oxford Clay, Christian Malford.

a, *a*. Projecting processes of the shell or phragmocone.

b, *c*. Broken exterior of a conical shell called the phragmocone, which is chambered within, or composed of a series of shallow concave shells pierced by a siphuncle.

a, *d*. The guard or osselet, which is commonly called the belemnite.

Similar elongated processes have been also observed to extend from the shells of some belemnites discovered by Dr. Mantell in the same clay (see fig. 363), who, by the aid of this and other specimens, has been able to throw much light on the structure of this singular extinct form of cuttle-fish.*

Lower Oolite.

Cornbrash and Forest Marble.—The upper division of this series, which is more extensive than the preceding or Middle Oolite, is called in England the Cornbrash. It consists of clays and calcareous sandstones, which pass downwards into the Forest Marble, an argillaceous limestone, abounding in marine fossils. In some places, as at Bradford, this limestone is replaced by a mass of clay. The sandstones of the Forest Marble of Wiltshire are often ripple-marked and filled with fragments of broken shells and pieces of drift-wood, having evidently been formed on a coast. Rippled slabs of fissile oolite are used for roofing, and have been traced over a broad band of country from Bradford, in Wilts, to Tetbury, in Gloucestershire. These calcareous tile-stones are separated from each other by thin seams of clay, which have been deposited upon them, and have taken their form, preserving the undulating ridges and furrows of the sand in such complete integrity, that the impressions of small footsteps, apparently of crabs, which walked over the soft wet sands, are still visible. In the same stone the claws of crabs, fragments of echini, and other signs of a neighboring beach are observed.†

Great Oolite.—Although the name of coral-rag has been appropriated, as we have seen, to a member of the Upper Oolite before described, some portions of the Lower Oolite are equally entitled in many places to be called coralline limestones. Thus the Great Oolite near Bath contains various corals, among which the *Eunomia radiata* (fig. 364 is very conspicuous, single individuals forming masses several feet in diam-

* See Phil. Trans. 1850, p. 393.

† P. Scrope, Geol. Proceed. March, 1831.