The BELEMNITE therefore consists of—

1st. The spathose osselet, or *guard*, as it is termed, which is formed of calcareous spar of a radiated structure, having at the larger end a conical cavity, called the *alveolus*, as in *Lign.* 101, fig. 1, and *Lign.* 102, fig. 5.

2dly. A conical chambered, pearly shell, termed the *phragmocone*, which is situated in the alveolus, as in *Lign.* 101, fig. 2.

3dly. The horny prolongation of the *phragmocone*, for the reception of the ink-bag, called the *receptacle*, as in *Lign.* 103, *a*, *a* (*Bd.* pl. 44, figs. 10—13.).

4thly. The *ink-bag*, and its inspissated fluid, *sepia*; *Lign.* 103, *d* (*Bd.* pl. 44, figs. 7, 9.).

The invariable radiated crystalline structure of the Belemnite has evidently resulted from the peculiar organization of the original osselet.

From the obvious analogy of the structure above demonstrated, with that of the recent dibranchiate Cephalopoda, several eminent naturalists inferred that the animal of the Belemnite was closely related to the existing types; and the late Mr. Miller, in a communication to the Geological Society of London, gave a restored figure of the original, which, as modified by M. D'Orbigny, is represented *Lign.* 102, figs. 1 and 6. The indefatigable and successful researches of the Rev. Dr. Buckland have confirmed the general correctness of this restoration. In the Lias of Devonshire several specimens of the Belem-