

of a mineral substance into an originally porous texture ; but my own observations lead me to consider this question as *sub judice* ; for we have yet much to learn as to the nature of those transmutations, which organic bodies undergo in the mineral kingdom. This species is abundant in the *White Chalk*, particularly in certain localities in Norfolk and Devonshire. It is more frequent in the chalk of Kent than in that of Sussex ; and in the cretaceous strata around Brighton, than in those near Lewes. I have never been able to detect the least vestige of a phragmocone, or chambered shell, in the alveolus. This Belemnite is occasionally imbedded in flint nodules ; and such examples possess the calcareous crystalline structure of the chalk and limestone specimens. In the chalk of Ireland, the Belemnites which have been corroded, or perforated by the depredations of some marine borers, are often injected with flint ; and if the calcareous substance be removed by immersion in dilute hydrochloric acid, exquisite siliceous casts may be obtained. It is not unusual to find flints with a cavity, occasioned by the solution and removal of the calcareous guard, and having a siliceous conical cast of the alveolus, occupying the upper part of the interspace. The reader will recollect that the pulley-stones of the Derbyshire Encrinites were produced by a similar process (see p. 317.).

The American cretaceous sands abound in a species of Belemnitella, nearly related to *B. mucronata*.