There were six specimens of a beautiful little sea-urchin, with a small purple body and long white serrated spines, somewhat like those of the "piper" of the Shetland fishermen (Cidaris hystrix). There is, however, an anatomical character in this little urchin which removes it very widely from Cidaris, and gives it to some of us a tremendous fancy value. The character is a very small one. Instead of having at the top of the shell a rosette of ten plates, five of them perforated to lodge the eyes, and five for the passage of the tubes of the ovaries, this little urchin has eleven plates in the rosette—an additional one, large, crescent-shaped, and without a perforation (Fig. 31). This is entirely contrary to the usage of all the "regular" ur-

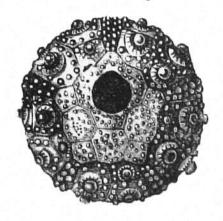


Fig. 32. — Salenia varispina, A. Ao. Showing the structure of the apical disk.

chins of modern times; but when we go back to the time of the chalk, we find a very compact and characteristic little family, the Saleniadæ, with the additional plate in the same position; and I agree with Professor A. Agassiz, who has referred a specimen of a species either the same as the one we dredged off the coast of Spain, or closely allied to it, dredged by Count Pour-

tales, in the Strait of Florida, to the chalk genus Salenia, under the name of Salenia varispina.

The same haul gave a large, handsome urchin, radiant with mauve and white bands springing from the centre of the disk. This was a fine new species of the genus *Phormosoma*, which I have described elsewhere, and shown to represent the genus *Echinothuria* of the chalk, and to belong to a family which were supposed to have become extinct with the close of Mesozoic times.

The present form, which I will call *Phormosoma uranus* (Fig. 33), corresponds with *Phormosoma placenta*, a species taken in the *Porcupine*, in 450 fathoms, off the Butt of the