

gulf-weed; with many crustaceans, several of the nudibranchiate mollusca characteristic of the gulf-weed fauna, such as *Scilla pelagica* and *Glaucus Atlanticus*, and many planarians.

On the following morning the dredge was put over at 8 A.M., and line veered to 3000 fathoms; and at 10 o'clock we sounded in 2435 fathoms, sending down the slip water-bottle and a thermometer. The thermometer registered 1°·7 C., and the sample of the bottom in the "Hydra" tube was still redder and more unpromising than in the sounding of the day before.

The dredge came up at 4.15 P.M. with a small quantity of red mud, in which we detected only one single, but perfectly fresh, valve of a small lamellibranchiate mollusk (Fig. 45). In the

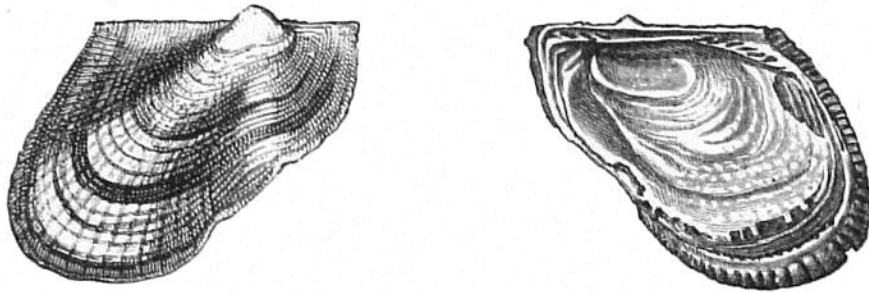


FIG. 45.—*Avicula* (sp.). Greatly enlarged. (No. 16.)

mud there were also some sharks' teeth of at least two genera, and a number of very peculiar black oval bodies about an inch long, with the surface irregularly reticulated, and within the reticulations closely and symmetrically granulated; the whole appearance singularly like that of the phosphatic concretions which are so abundant in the greensand and trias. My first impression was that both the teeth and the concretions were drifted fossils; but on handing over a portion of one of the latter to Mr. Buchanan for examination, he found that it consisted of almost pure peroxide of manganese.

The character both of the exterior and interior of the nodule strongly recalled the black base of the coral which we dredged in 1530 fathoms on the 18th of February; and on going into the matter, Mr. Buchanan found not only that the base of the coral retaining its external organic form had the composition