which are imbricated like the slates on the roof of a house, the shell being perfectly flexible. One marked character, however, of the northern species was that the lower (oral) surface of the test was quite different in character from the apical surface, the pore areæ and the water-feet on the lower surface being reduced to insignificance, and the test uniformly studded with tubercles for primary spines surrounded by enormous areolæ, giving attachment to masses of muscle quite out of proportion to the size of the spines. In the only specimen which we procured, the spines on the oral surface were broken and incomplete, but I remarked on this curious disproportion when briefly noticing the species.* After going over the siftings from the *Porcupine* dredgings, Dr. Carpenter sent me, with a number of other things *incertæ sedis*, one or two peculiar conical calcareous bodies jointed on short stalks. These I recognized as a part of some unknown echinoderm, what part I was at a loss to conceive. Curiously enough, a couple of days ago (June 13th, 1874) we dredged in 400 fathoms 100 miles to the eastward of Sydney, a splendid specimen, a foot in diameter, of another species of *Phormosoma* (Fig. 35), all the primary spines

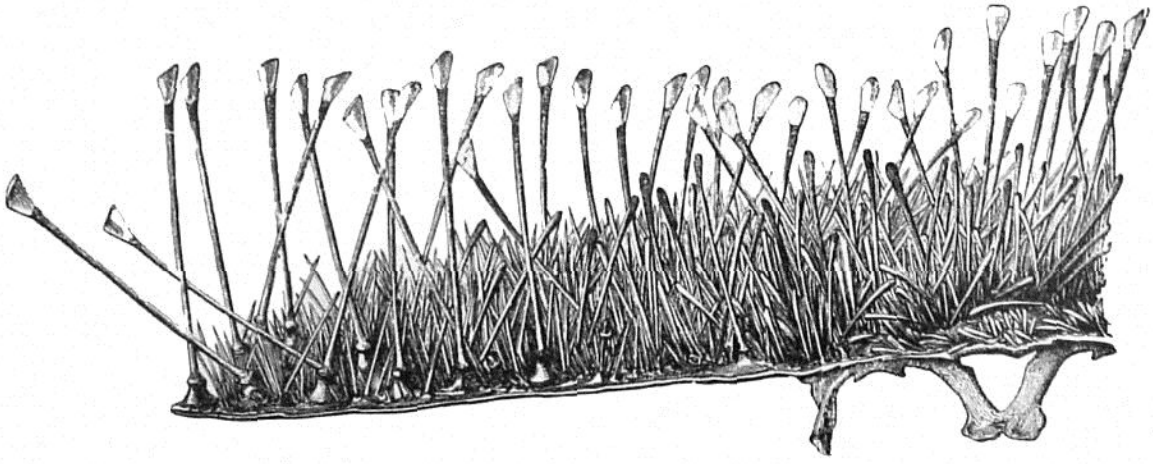

FIG. 35.—*Phormosoma hoplacantha*, WYVILLE THOMSON. Southern Sea, between Australia and New Zealand. Portion of the ventral surface of the test. Reduced one-third.

of the oral surface tipped with calcareous cones, identical in structure with those found on the Scottish coast, but consider-

* "The Depths of the Sea," page 161. London, Macmillan & Co., 1873.