

Hudson interpreted the larger of these plates as an interradiar marginal from another specimen of this species, but the writer is unable to accept this interpretation for two reasons. The first is, that although the shape is much the same as that of one of the interradiar marginals, still there is an important difference. This plate is pointed at the wider end, and evidently had a plate resting against each of the two plane faces at that end. The interradiar marginals, on the other hand, are not pointed, but have a plate resting directly against the end on a line with the long axis. Secondly, the large plate has another fairly large plate still in position, resting against one of the faces on the larger end, and this plate is larger and of different shape from any of the plates which abut against the inner faces of the interradiar marginals. Moreover, if these were plates foreign to this specimen, they would not maintain their natural position in relation to each other, but would be separated. It seems probable that they are plates of the abactinal system of this same specimen, and that they are not far from their original position. A specimen of *Palæaster matutina*, Hall, in the Museum of Comparative Zoology, shows interradiar marginal plates of this same form on the abactinal side.

It thus seems probable, both from analogy with the specimen of *Urasterella pulchella* here figured, and from the structure of the specimen itself, that the "covering plates" of *Protopalæaster narrawayi*, are really ambulacral ossicles exposed from the upper side.

EXPLANATION OF PLATE VI.

1. *Urasterella pulchella*, (Billings). A specimen exposed from the abactinal side, with nearly all the plates of the abactinal skeleton weathered away, exposing the ambulacral plates. Near the ends of two of the arms some of the ambulacrals are lost, revealing the pits in the adambulacrals. On the arm running to the left, a small patch of plates of the abactinal covering are still to be seen in position, covering the ambulacrals. The spinose marginals show but faintly in this photograph. The figure is three times natural size, and the specimen, which is from the upper part of the Trenton at Trenton Falls, New York, is in the Museum of Comparative Zoology.

2. *Protopalæaster narrawayi*, Hudson. A photograph of the holotype, showing the "covering plates," and the large displaced plate which is now believed to be an interradiar marginal belonging to the abactinal size of this specimen. Note the pointed inner end of this large plate and the smaller plate still in position against one of its faces. This figure is 2.66 times natural size, and was made by Professor G. H. Hudson.