Colour in alcohol, white, tinged with yellow, where the membrane is thickened in the interbrachial arcs. The tube-feet are yellow.

Locality.—Station 300. Off the coast of South America, between the Island of Juan Fernandez and Valparaiso. December 17, 1875. Lat. 33° 42′ 0″ S., long. 78° 18′ 0″ W. Depth 1375 fathoms. Globigerina ooze. Bottom temperature 35° 5 Fahr.; surface temperature 62° 5 Fahr.

Remarks.—Hymenaster vicarius has a somewhat parchment-like supradorsal membrane, the delicate spinelets of the paxillæ elevating it into small pointed peaks, the spinelets being often very prominent; this appearance is emphasised by the delicacy of the membrane, which allows a considerable portion of the spine to be visible. This pseudo-spinous character and the broad lanceolate rays serve to distinguish the species from its congeners.

## 9. Hymenaster pellucidus, Wyville Thomson (Pl. LXXX. figs. 1-5).

Hymenaster pellucidus, Wyville Thomson, 1873, The Depths of the Sea, p. 120, fig. 16.

Locality.—" Porcupine " Expedition :

Station 59, 1869. In the Faeroe Channel. Lat. 60° 21' N., long. 5° 41' W. Depth 580 fathoms. Bottom temperature -1° 3° C.; surface temperature 11° 5° C.

Remarks.—This species has been so fully and carefully described by Drs. Danielssen and Koren that it would be superfluous to redescribe the single example which is at my disposal. As, however, this is the type specimen—and of some importance historically—I have given drawings of it, which will probably not be without interest.

Hymenaster pellucidus was dredged during the Norwegian North Atlantic Expedition at a number of stations off the Coast of Norway, off the Island of Jan Mayen, off Spitzbergen, and in the intermediate seas, the most northerly station being in lat. 80° 3′ N., the depths ranging from 70 to 1539 fathoms.

## 10. Hymenaster infernalis, Sladen (Pl. LXXXVII. figs. 4-7).

Hymenaster infernalis, Sladen, 1882, Journ. Linn. Soc. Loud. (Zool.), vol. xvi. p. 224.

Marginal contour substellate; interbrachial arcs well indented and somewhat angular, the minor radius being in the proportion of 43 per cent. R=28 mm.; r=12 mm., approximately. Rays broad at the base, but greatly attenuated outwardly. General form depressed.

The supradorsal membrane is very thin. The paxillæ have long pedicles surmounted by eight to ten elongate delicate spinelets. The muscular fibres, which are extremely fine and thread-like, are rather numerous, and radiate from the tips of the spinelets, which

<sup>&</sup>lt;sup>1</sup> Den Norske Nordhavs-Expedition, 1876-1878, Zoologi, xi. Asteroidea, 1884, p. 72, pl. xiii. figs. 1-17, pl. xv. figs. 7 and 8.