

Colour of the cells of the polyps and zooids light red, and of the stems of the tentacles of the polyps pale red, which colour is occasioned by red calcareous needles. Besides these, colourless needles occur in all uncoloured parts of the rachis, and in the stems of the tentacles at their ends.

Axis cylindrical, 0·37 mm.

Habitat.—One single specimen from Station 44, North Atlantic, south of New York, lat. 37° 25' N., long. 71° 40' W. Depth, 1700 fathoms. Bottom temperature, 1°·7 C. Grey ooze. May 2, 1873.

2. *Protoptilum*, sp.

A fragment of a *Protoptilum* differing from *Protoptilum aberrans*, (1) by the more intense colour of the cells, (2) by the longer row of undeveloped polyps, (3) by the occurrence of only dorsal and ventral zooids, (4) by the smaller size of the polypidom, (5) by the more intense colour of the needles of the stems of the polyps, (6) by the absence of a swelling at the lower part of the rachis.

The fragment in question consists of a stalk, which has an upper swelling, and a large end-bulb.

Habitat.—Station 45, North Atlantic, south of New York, lat. 38° 34' N., long. 72° 10' W. Depth, 1240 fathoms. Bottom temperature, 2°·4 C. Mud. May 3, 1873.

3. *Protoptilum*, sp.

A second fragment comes nearer to *Protoptilum aberrans*, and differs from it only in the want of colour of the needles in the tentacles of the polyps, and in the absence of generative organs in the swelling of the rachis.

Habitat.—Station 46, North Atlantic, east of New York, lat. 40° 17' N., long. 66° 48' W. Depth, 1350 fathoms. Bottom temperature, 2°·3 C. Mud. May 6, 1873.

Trichoptilum, n. gen.

Sea-pens of the family of the Protoptilidæ. Polyps with cells, sessile, disposed alternately in one single row on each side of the rachis. Cells cylindrical, with eight strong spines. Zooids dorsal, one to three between the polyps, small, without spines. Axis quadrangular. Calcareous bodies numerous in the cells and tentacles of the polyps, very scarce in the sarcosoma of the rachis, abundant in that of the stalk.

1. *Trichoptilum brunneum*, n. sp. (Pl. VIII. fig. 31).

Long and slender. Rachis more than five times the length of the stalk. Length of rachis, 29 mm. of stalk, 5·3 mm. Stalk, with an upper enlargement of 1·6 mm. and an end-bulb of 2·6 mm. diameter, with short calcareous needles of 42 to 68 μ , which are very numerous in the upper parts, and diminish in number towards the end-bulb.