

seems to be common to several forms of the genus in question. The specimens dredged at Stations 295 and 298 are totally devoid of deposits, the calcareous substance having probably been dissolved.

The integument is thin, often transparent. The calcareous ring resembles that in *Cucumaria abyssorum*, but appears narrower. The Polian vesicle and madreporic canal are single. The muscular stomach is not very well developed. The reproductive organs as well as the respiratory-trees are more highly developed than in the species itself.

*Cucumaria abyssorum*, var. *hyalina*, nov. (Pl. IV. fig. 7).

Body subcylindrical or fusiform, slightly curved, more tapered posteriorly. Tentacles ten, of almost equal size. Anus surrounded by some small papillæ and more strongly developed, tooth-like deposits. Pedicels arranged in a double row along each ambulacrum, slightly more numerous on the ventral than on the dorsal surfaces. Integument thin, glassy, and very rough from scattered, rather large four-armed deposits, resembling those in *Cucumaria abyssorum*, but provided with a long, spinous, outwardly directed process. Pedicels strengthened by terminal plates and transverse supporting rods almost like those in the species just named. Colour, white, transparent. Length up to 30 mm.

*Habitat*.—Station 147, December 30, 1873; lat. 46° 16' S., long. 48° 27' E.; depth, 1600 fathoms; bottom temperature, 34°·2; Diatom ooze; three specimens. Station 300, December 17, 1875; lat. 33° 42' S., long. 78° 18' W.; depth, 1375 fathoms; bottom temperature, 35°·5; Globigerina ooze; two specimens.

Though this variety bears the closest resemblance to *Cucumaria abyssorum*, it is easily distinguished by several obvious characters. The posterior extremity of the body is not so evidently tail-like. The pedicels are more numerous and the integument is transparent glassy, and much rougher with the outwardly directed processes of the deposits visible to the naked eye. The characteristic four-armed deposits (Pl. IV. fig. 7) are scattered and distinct from those in the above named species by the presence of a rather large and spinous, outwardly directed process, running out from the base of one of the arms or from the central part of the deposits itself. Often that arm, which carries the spinous process, is shorter than the rest. The ends of the arms are commonly pierced by one to four holes, seldom by more. In less developed deposits the ends of the arms are completely devoid of holes, simple or provided with some minute branches. The diameter of the deposits measures as much as 0·4 mm. It may, however, be remarked that even in *Cucumaria abyssorum* the deposits show a tendency to develop such outwardly directed spines. The pedicels are supported by terminal plates and transverse supporting rods almost like those in the above cited species. From scanty materials I cannot give any detailed description of the papillæ and