May 2, 1873. Lat. 37° 25′ 0″ N., long. 71° 40′ 0″ W. Depth 1700 fathoms. Blue mud. Bottom temperature 36°·2 Fahr.; surface temperature 56°·5 Fahr.

Station 45. Off the coast of North America, east of Delaware and Maryland. May 3, 1873. Lat. 38° 34′ 0″ N., long. 72° 10′ 0″ W. Depth 1240 fathoms. Blue mud. Bottom temperature 37°·2 Fahr.; surface temperature 49°·5 Fahr.

Station 46. Off the coast of North America, east of New Jersey. May 6, 1873. Lat. 40° 17′ 0″ N., long. 66° 48′ 0″ W. Depth 1350 fathoms. Blue mud. Bottom temperature 37°·2 Fahr.; surface temperature 40°·0 Fahr.

Station 50. South of Halifax, Nova Scotia. May 21, 1873. Lat. 42° 8′ 0″ N., long. 63° 39′ 0″ W. Depth 1250 fathoms. Blue mud. Bottom temperature 38°·0 Fahr.; surface temperature 45°·0 Fahr.

Remarks.—The only form with which this species might be confused is *Pontaster mimicus*; the differences that separate them are discussed in detail under the head of that species. *Pontaster forcipatus* is readily distinguished from the other members of the genus by the narrow border of the supero-marginal plates, by the single large conical spine on the actinal surface of the adambulacral plates, and by the numerous characteristic pedicellariæ.

7a. *Pontaster forcipatus*, var. *echinata*, nov.

This variety, which is of large habit, is characterised by the great thickness of the spines on the marginal plates (which are rather more than 1 mm. thick at the base, and 4·5 mm. long), by the much larger size of the central spinelets on the paxillæ, and by the greater number of the paxillæ thus furnished. As compared with the type the disk appears to be slightly smaller. There is usually a robust and well-developed secondary spinelet below the lateral spine on the infero-marginal plates, at least on the inner half of the ray; but this is not always present, and the general spinulation of the infero-marginal plates is decidedly more echinulate. On the adambulacral plates there are seldom more than five spinelets on the actual furrow margin, but it is sometimes difficult to distinguish these from one or two minute thornlets at each end of the series, which stand at the adoral and aboral margins on the actinal surface of the plate. The actinal spine is very large and robust, and frequently slightly curved. The pedicellariæ are much less numerous, and are confined to the actinal interradial areas; they are not present on the infero-marginal plates (or only very rarely), and consequently do not extend along the ray.

Young Phase.—A small example, which measures $R = 17{\cdot}5$ mm. and $r = 3{\cdot}75$ mm., has fourteen supero-marginal plates. The lateral spinelets are longer and more delicate than in the type-form of the same size, and the disk appears relatively smaller. The character of the spinulation of the infero-marginal plates is more echinulate, and so also is that of the paxillæ. The slight imbrication of the supero-marginal plates is well seen; the adoral