polliciform process, and armed above it with a long straight spine. The dactylos is less than half the length of the propodos, obtuse at the apex and carrying a long, slender, hair-like spine. The other pereiopoda resemble the preceding, except that I could not determine any evidence of a rudimentary chela, and that they appear to lose the spinous character as they proceed posteriorly. The pleopoda, with the exception of the first, which I have not been able to determine, are short and biramose. The posterior pair which helps to form the rhipidura is remarkable, and, I believe, unique; the basal joint is short and is furnished with a tooth on the anterior distal angle, and at the extremity with two branches, one of which is very long, large, broad, and foliaceous; it is narrow at each extremity and wide in the middle, the distal end terminating truncately, and armed at each angle with a small tooth or spine; smaller points or teeth fringe the margins from the apex to the base, and at the base the lateral margins are curled over towards the plate, thus giving strength to the basal portion of the appendage. The inner plate is small, flat, rudimentary, and tipped with a few small hairs.

Length, 25 mm. (1 in.).

Habitat.—Atlantic Ocean; surface (captured at night).

Benthesicymus,[1] Spence Bate.

Benthesicymus, Sp. B., Ann. and Mag. Nat. Hist., ser. 5, vol. viii. p. 190, 1881.

Body smooth. Tissue submembranous. Carapace anteriorly produced on the dorsal surface to a short rostrum, laterally compressed and elevated to a crest. Cervical fossa deeply marked; a strong calcified ridge separates the lateral cardiac from the branchial region.

Posterior somites of the pleon laterally compressed and shorter than the rami of the rhipidura. The telson is narrow, pointed, laterally compressed.

Ophthalmopoda transversely compressed in their whole length, single-jointed; furnished on the inner side with an ocular tubercle. Ophthalmus not broader than the peduncle.

First pair of antennæ has the first joint of the peduncle excavated to receive the ophthalmopod, armed on the outer margin with a stout stylocerite, but without a prosartema on the inner; the two succeeding joints are short, and the terminal one supports two long flagella articulating at the extremity, the upper and outer being more robust than the inner and lower.

The second pair of antennæ supports on the inner side of the first or coxal joint a well-developed phymacerite; the second joint carries a large, broad, and foliaceous scaphocerite, strengthened on the outer margin by a rigid rib that terminates in a small tooth or point; the third joint supports on the inner distal side a small, hook-like,

[1] Βενθεσίκυμος, an inhabitant of deep water.