

antennular peduncle, as also by the structure of the two hindmost pairs of legs, both of which are rather dissimilar, as compared with those in other Euphausiidae. Moreover, the structure of the gills is somewhat different. Finally, the genus is highly distinguished by the presence in the female of a double ovisac. Besides the new species described below, the northern form, *Thysanopoda norvegica*, M. Sars, which, perhaps, is identical with *Thysanopoda couchii* of Bell, belongs to this genus. The generic name proposed here is a translation into Greek of the appellation "*Noctiluca*," adapted by W. Thompson for a form of this family, but preoccupied in zoology for a Protozoon.

30. *Nyctiphanes australis*, G. O. Sars (Pl. XX.; Pl. XXI. figs. 1-7).

*Nyctiphanes australis*, G. O. Sars, Preliminary Notices on the Challenger Schizopoda, No. 28.

*Specific Characters.*—Form of body rather slender. Carapace without any lateral denticles, anterior part distinctly keeled above; rostral projection very short; frontal margin forming on either side, above the eyes, an obtuse angle. The two anterior caudal segments having the posterior margin slightly produced in the middle; epimera of moderate size, subtriangular, pointing obliquely backward. Last segment not longer than preceding; preanal spine obsolete. Eyes large and protruding, pyriform. Antennular peduncle very elongate, outer corner of basal joint drawn out to a sharp spine, dorsal leaflet comparatively small, with inner corner acute, outer edge entire. Antennal scale not nearly reaching the tip of second joint of antennular peduncle, narrow, sublinear, outer corner produced as a well-marked tooth. Mandibular palp remarkably elongate. Legs very slender, antepenultimate and penultimate pairs in female wanting exopod. Last joint of penultimate pair half as long as preceding joint. Penultimate pair of gills without secondary branch. Telson with obtusely lanceolate apex; subapical spines slender and smooth. Inner plate of uropoda a trifle longer than outer, and reaching tip of telson. Ovisacs conoid, affixed in part to antepenultimate pair of legs. Length reaching 17 mm.

*Remarks.*—From the northern form, *Nyctiphanes norvegica* (M. Sars), this species is easily distinguished by its more slender form, the absence of lateral denticles on the carapace, the much more elongate antennular peduncle, the form of the dorsal leaflet thereon, and, finally, by a somewhat different relation in size between the two joints of the endopod of the penultimate pair of legs. Moreover, the structure of the gills and the form and arrangement of the ovisacs would seem to be somewhat different in the two species.

*Description.*—The length of the adult male is about 17 mm., that of the female somewhat less.

The form of the body in both sexes (see Pl. XX. fig. 1; Pl. XXI. fig. 1) is rather slender, but somewhat different as regards the relation in size between the anterior and posterior divisions, the latter being more fully developed in the male (see Pl. XXI. fig. 1), and