

ance of the male at once distinguishes this genus from all other known Mysidans, the sexual characters being quite anomalous and differing from what is usually met with in this family. Moreover, the structure of the antennal scale and of the telson, as also that of the outer plates of the uropoda, would seem to afford well-marked characters, distinguishing this genus from the genus *Boreomysis*. As regards the imperfect development of the eyes, which has suggested the generic name, that character is also found in one of the species belonging to the above mentioned genus, viz., in *Boreomysis scyphops*, G. O. Sars, to be described in the sequel.

42. *Petalophthalmus armiger*, Willemoes-Suhm (Pl. XXXII. figs. 1-9).

*Petalophthalmus armiger*, Suhm, Trans. Linn. Soc. Lond., ser. 2, vol. i. p. 40, pl. viii.

*Specific Characters.*—Male: Body rather slender, well-nigh cylindrical in form. Carapace remarkably small and not nearly covering whole of trunk, two segments of which are entirely exposed; cervical sulcus well marked; frontal margin forming, in the middle, only a very small projection; antero-lateral corners narrowly rounded. Eyes forming two very thin oval lamellæ, supported on short pedicles. Antennular peduncle exceedingly slender, with basal joint longer than the two others taken together, flagella shorter than peduncle, subequal. Antennal scale narrow, lanceolate, projecting but slightly beyond basal joint of antennulæ; flagellum imperfectly developed, shorter than scale, biarticulate. Mandibular palp projecting beyond antennular peduncle, last joint reflexed and armed with seven strong spines. Maxillipeds short and thick, without exopodite, meral joint expanded interiorly to a linguiform lobe, terminal joint unguiform. Gnathopoda of a structure similar to maxillipeds, but much larger. The three anterior pairs of legs with last joint densely hirsute; remaining pairs very slender, with terminal part not subdivided, and having a distinct but feeble claw. Telson oblongo-quadrangular, apex broadly truncate, jutting out in the middle as a short dentiform projection, and having on either side five strong spines; lateral edges finely denticulate in the outer half. Terminal joint of outer plates of uropoda very sharply defined, linguiform. Length, 40 mm.

*Remarks.*—Of this interesting form I have only had opportunity of examining a single male specimen, apparently that described by the late Dr. v. Willemoes-Suhm. That author has also described the female; but the specimen from which his description was drawn up has unfortunately been lost. To judge from the figures given, it would seem to have presented a far less deviating appearance, resembling rather the species of the genus *Boreomysis*.

*Description of the Male.*—The specimen examined by me, which apparently is full-grown, measures 40 mm. in length.

The form of the body (see Pl. XXXII. fig. 1) is very slender and well-nigh cylindrical, without exhibiting any sharp demarcation between the anterior and posterior divisions.