off Greenland, and also occurring along the coasts of Norway, where two other species, *Boreomysis tridens*, G. O. Sars, and *Boreomysis megalops*, G. O. Sars, have been also observed. Moreover, on the Norwegian North Atlantic Expedition two large species were taken, *Boreomysis nobilis*, G. O. Sars, and *Boreomysis scyphops*, G. O. Sars, the latter of which is also represented in the Challenger collection. Finally, there are two additional species from the Challenger Expedition, to be described further on. The total number of species thus amounts to seven. All are true deep-sea forms, the animals descending to very considerable depths, and having never been met with in shallow water.

The following is a synopsis of the three Challenger species :—

Eyes	imperfectly developed, calyciform, without pigment or visual elements,	.	*B. scyphops*, G. O. Sars.
	of the usual structure, short and thick, almost circular, with cornea greatly expanded. Frontal margin obtusely rounded,	. . .	*B. obtusata*, G. O. Sars.
	of the usual structure, narrow, almost fusiform, with cornea very small. Frontal margin with a small pointed projection in the middle,	.	*B. microps*, G. O. Sars.

43. *Boreomysis scyphops*, G. O. Sars (Pl. XXXII. figs. 10–20).

Petalophthalmus inermis, Suhm MS.

Boreomysis scyphops, G. O. Sars, Crustacea et Pycnogonida nova in itinere 2do et 3tio Expeditionis Norvegicæ anno 1877–78 collecta, No. 3.

Boreomysis scyphops, G. O. Sars, The Norwegian North Atlantic Expedition, 1876–1878, Crustacea, i. p. 56, pl. vi.

Specific Characters.—Frontal part of carapace without any distinct rostrum, projecting but slightly in the middle; antero-lateral lobes obtuse at apex. Eyes without pigment or visual elements, constituting two pedunculated concave, or well-nigh calyciform lamellæ, placed vertically. Antennular peduncle comparatively smaller than in the other species, and of more normal form. Antennal scale rather elongate, about twice as long as antennular peduncle, slightly tapering, denticle of outer corner somewhat projecting. Propodal joint of legs subdivided into two articulations only; exopods remarkably elongate, with terminal part composed of numerous articulations. Telson almost equalling in length the two preceding segments taken together, outer part slightly tapering, and fringed with numerous small denticles, apical incision narrow, occupying nearly one-fourth of the length of telson. Inner plate of uropoda reaching tip of telson, outer plate much larger. Colour a uniform pale red. Length reaching 85 mm.

Remarks.—This gigantic Mysidan was first met with on the Challenger Expedition in the subantarctic region of the Southern Ocean, and has been briefly recorded by the late Dr. v. Willemoes-Suhm under the provisional name of *Petalophthalmus inermis*. Subsequently the same form was obtained on the Norwegian North Atlantic Expedition