

The following is a synopsis of the genera represented in the collection :—

Number of incubatory lamellæ, composing marsupial pouch in female,	seven pairs. Male	{	greatly differing from female, having mandibular palp and gnathopoda remarkably modified, . . . . .		<i>Petalophthalmus</i> , Suhm.	
			differing from female in the usual manner, chiefly as regards the structure of the caudal limbs, . . . . .		<i>Boreomysis</i> , G. O. Sars.	
	two pairs only, with a rudiment of a third pair. Eyes	{	imperfectly developed, lamelliform. Legs	rather strong, with a distinct terminal claw, . . . . .		<i>Amblyops</i> , G. O. Sars.
				remarkably slender, filiform, without any terminal claw, . . . . .		<i>Pseudomma</i> , G. O. Sars.
	of the usual structure. Caudal limbs in male	{	natatory. Propodal joint of legs	non-subdivided or only bi-articulate, terminal claw very strong, . . . . .		<i>Siriella</i> , Dana.
subdivided into three or more articulations. Antennal scale				remarkably small, . . . . .		<i>Anchialus</i> , Kröyer.
				lanceolate, setose on both edges, . . . . .		<i>Mysidopsis</i> , G. O. Sars.
			obliquely truncate at apex, outer edge smooth, . . . . .		<i>Euchaetomera</i> , G. O. Sars.	
			rudimentary as in female, . . . . .		<i>Heteromysis</i> , Smith.	

Genus 1. *Petalophthalmus*, Willemoes-Suhm, 1879.

*Petalophthalmus*, Suhm, Trans. Linn. Soc. Lond., ser. 2, vol. i.

*Generic Characters.*—Female exhibiting the usual Mysidan appearance; male very dissimilar, with mandibular palps prodigiously developed, and some of the limbs of the trunk also remarkably modified. Eyes in both sexes leaf-like, without any visual elements or pigment. Antennular peduncle greatly elongate in male, and without the usual hirsute lobe. Antennal scale lanceolate and setose on both edges. Gnathopoda in male very strong, subcheliform. Marsupial pouch in female composed of seven pairs of incubatory lamellæ. Caudal limbs of male scarcely natatory, inner branch simple, naked, styliform, outer non-articulate, slightly dilated in the middle, and having an oblique series of delicate bristles. Telson with apex entire, not incised in the middle. Outer plates of uropoda distinctly jointed at apex.

*Remarks.*—The remarkable form on which the above characterised genus has been based, exhibits, in the female, some affinity to the genus *Boreomysis*, G. O. Sars, the marsupial pouch being, as in that genus, composed of seven pairs of incubatory lamellæ, and the structure of the legs somewhat similar. Nevertheless, the very striking appear-