and carries the stylamblys in a modified form, so that the appendage is suggestive of the petasma as it exists in *Penæus*.

The telson is long, narrow and tapering, and subequal with the lateral plates of the rhipidura.

Observations.—Mr. Sidney Smith suggests a close affinity of this species with Acanthephyra, which is true so far as the resemblance of the oral appendages, and the approximation between the genera is most apparent in Hymenodora rostrata, where the rostrum is longer and more distinctly dentated than usual. But with these parts the resemblance seems to cease. In Acanthephyra the rostrum is long and dentate above and below; the eyes are furnished with an ocellus and a rudimentary tubercle on the inner side; the scaphocerite is rigid, sharply pointed, and capable of being locked in a definite position and used as a weapon of offence; the propodos in the three posterior pairs of pereiopoda are not remarkably long as compared with the carpos, and the meros is not transversely compressed.

Geographical Distribution.—The species of this genus, like most of the family, are from deep water; only two specimens of one species being taken at a less depth than two miles.

They are mostly found in mid ocean, on a bottom of mud or ooze: in the Atlantic beneath the equator and as far south as the Island of Tristan da Cunha, and in the Indian Ocean as far south as Kerguelen Island. Buchholz's specimen 'Hymenodora (Pasiphaë) glacialis was taken at the surface near the pack-ice in lat. 78° N., and Hymenodora (Meningodora) mollis, Sidney Smith, was taken off the eastern coast of the United States, whereas our specimen of the same species was taken off the eastern coast of South America, near Pernambuco. Hymenodora duplex was taken in the South Indian Ocean, and Hymenodora rostrata at the east entrance of Torres Strait, associated with Tropiocaris tenuipes.

In these localities the specimens which were taken are not numerous, and the depth was very considerable and varied from one and a half to two and a half miles. In the most typical forms the eyes have almost entirely lost their pigment; in some species it is reduced to a brown colour and in a few it is black, as if the degree of pigmentation was dependent upon variation in depth and degree of light.

Hymenodora mollis, Sidney Smith (Pl. CXXXVI. fig. 5).

Meningodora mollis, Sidney Smith, Bull. Mus. Comp. Zool., vol. x. p. 74, pl. xi. figs. 8-9; pl. xii. figs. 5-9.

Carapace slightly compressed anteriorly, and produced to a rostrum that is shorter than the first joint of the first antenna, and armed on the upper surface with eleven or twelve small teeth.

<sup>&</sup>lt;sup>1</sup> Die zweite deutsche Nordpolarfahrt., Bd. ii., Crust., p. 279, 1874.