Habitat.—Station 184, August 29, 1874; lat. 12° 8' S., long. 145° 10' E.; depth, 1400 fathoms; bottom, Globigerina ooze; bottom temperature, 36°. One specimen, male. Trawled.

This species differs from *Hymenodora mollis* in having the dorsal crest and rostrum more compressed laterally, and anteriorly elevated to a horizontal line with the dorsum. The denticles are very minute, fewer in number, and more distantly separated from each other, and in our specimen have the appearance of being worn. The orbit exists as a well-defined notch without any tooth at the outer canthus, the tooth beyond, which is the first antennal tooth, is apparently worn and exists as a rudiment only, whereas the second antennal tooth is short and more clearly defined, and projects anteriorly outwards from the frontal margin; posteriorly the lateral margin overlies the first somite of the pleon, and is reduced to an extreme degree of tenuity.

The first two somites of the pleon are dorsally rounded and smooth, and are divided into an anterior and a posterior section; the lateral plates are of extreme tenuity and are broadly developed, that of the second overlapping the first. The third somite is dorsally slightly carinated, and posteriorly produced to a sharp tooth; the fourth, fifth, and sixth are feebly carinated and terminate abruptly, or in the most minute tooth-like projections.

The ophthalmopoda are shorter than the rostral projection, pyriform, and but little if at all compressed; the tubercle on the inner surface is reduced to a minimum, and situated close to the ophthalmus.

The first pair of antennæ has the peduncle short, but longer than the rostrum; the first joint is rather deeply excavate to permit the ophthalmopod to rest in the hollow; the second and third joints are very short and cylindrical, and support two unequal flagella of the ordinary character in the species of this genus. The stylocerite is nearly as long as the first joint and sharp-pointed.

The second pair of antennæ has the scaphocerite slightly tapering, of great tenuity, and furnished with a small denticle on the outer distal extremity, the two joints of the peduncle that succeeds the articulation of the scaphocerite are unequal in length, the distal being the longer and more robust. The flagellum is wanting.

The mandible and oral appendages have not been examined in this species, but I assume they are generic in condition.

The first pair of gnathopoda resembles the same organ in *Hymenodora duplex*, but the basecphysis is wanting, which I attribute to injury, inasmuch as the muscles that move it are present; the coxa supports a mastigobranchia of extreme tenuity, and attached to it is a small podobranchial plume.

The second pair of gnathopoda is broken off at the distal extremity of the ischium.

The first two pairs of pereiopoda are chelate. The first and a portion of the fifth are the only parts preserved in the solitary specimen.