external appearance and the structural details, is very striking. But, as the frontal plate exhibits in both a totally different form, and the eyes, moreover, in the present form have a very light pigment, whereas it is dark in the Mediterranean form, I prefer nevertheless to regard both as distinct, though very closely allied species.

Description.—The length of the body of the adult female is about 9 mm., that of the male somewhat less.

The form of the body (see Pl. XXXIV. figs. 4-6) is remarkably short and thickset, with the anterior division rather dilated, the posterior much more slender and cylindrical in form.

The carapace is comparatively very large, covering, besides the whole of the trunk, also the anterior part of the first caudal segment. Its posterior margin, contrary to what generally occurs in the Mysidæ, is quite straight, without exhibiting the slightest trace of the usual emargination in the middle; and the lateral parts or wings are very deep posteriorly, with their edges forming a strong curve. Anteriorly the carapace tapers somewhat, and exhibits here the usual cervical sulcus, which is, however, not particularly deep. The frontal margin juts forth in the middle as a rather broad, horizontally extending plate, abruptly truncate at the tip (fig. 7), not, as in the Mediterranean species, acutely pointed. The antero-lateral corners of the carapace are but slightly produced and almost right angled.

The first caudal segment exhibits in the female (see figs. 4, 5), on either side, a narrow plate, arching over the corresponding limbs, and apparently representing a kind of epimera. These plates are, however, wanting in the male (fig. 6). The other segments are simple cylindrical, and the last of them somewhat longer than the rest.

The eyes are comparatively short and thick, claviform, with the cornea slightly expanded, and occupying about the outer half of the eye. The ocular pigment in all the Challenger specimens, as also in those examined by Kröyer, is very light yellowish, whereas in the Mediterranean form it is of the usual dark hue.

The antennular peduncle (fig. 8) is rather thick and somewhat dilated toward the end, with the second joint exhibiting a rather peculiar, as it were, cup-shaped form, being apparently hollowed out anteriorly to receive the base of the terminal joint. The latter is about as long as the basal, and exhibits in the male on the lower face a very short knob-shaped lobe, clothed with a dense bunch of delicate hairs. Of the flagella, the outer, as usual, is the longer, and exhibits at the base a short lamellar expansion bearing a dense row of curved sensory bristles.

The basal part of the antennæ (see fig. 9) is rather thick and massive, and armed interiorly, at the base of the flagellum, with a strong denticulate spine. The scale, on the other hand, is exceedingly small, so as scarcely to be visible when the animal is viewed from above (fig. 5). It exhibits a somewhat rhomboidal form, the apex being obliquely truncate, with the inner corner slightly projecting and rounded off, the outer