the cephalothorax, very narrow, and equal in diameter throughout its entire length, fivejointed, the various joints nearly equal in length. Anterior antennæ (fig. 1) composed of thirteen joints, of which the second and third and the last four are very short and nearly equal, the fourth, fifth, and ninth being the longest; the proportionate lengths of
 about twelve very long and slender setæ. The maxilla (fig. 4) has a stoutly armed prehensile portion and a well-developed palp, to which is attached a trisetose branchial (?) plate. The first pair of swimming feet (fig. 7) has both branches three-jointed, the outer branch bearing a marginal series of small aculeated spines; the branches of the following three pairs are also three-jointed (fig. 8), but have no marginal spines. The terminal spines of all the feet are excessively long and slender, and are finely pectinated on the outer margin. The fifth foot (figs. 1, 9, 10) consists' of a small tubercle, to which are attached two long biarticulate setæ. Caudal segments slightly divergent, nearly as long as the preceding abdominal segment, each bearing six plumose setæ, four of which are about as long as the abdomen; one of these arises from near the base of the external margin ; two others-the innermost and outermost of the apical seriesare much shorter than the rest.

Dana has described three species of Oithona, Claus two, and Boeck two, but none of these seem quite to agree with the form which occurs in several of the Challenger gatherings. The animal, however, is so fragile, and so difficult of examination, that it is quite possible that errors of observation may have affected the descriptions both of myself and other authors. But, so far as I can make out, the antennæ of this species are certainly thirteen-jointed. Dana assigns only seven joints to those of all his species, and I cannot but think that he must have failed to observe them correctly. Claus's species have respectively ten and twelve joints. The present species approaches most closely to Oithona spinirostris, Claus, and perhaps to Oithona setiger, Dana, but the differences are too considerable to allow of our safely referring it to either of these. Though examples of Oithona were noticed in very many of the surface-gatherings of the Challenger, I have not been able to recognise differences requiring their reference to more than one species. The form doubtfully referred in the general list of species (p. 5) to Oithona spinirostris, Claus, I cannot on re-examination distinguish from the present species.

Specimens which I refer to this species were found in the produce of the surface-nct from the following localities :-Off the south of Papua; off Port Jackson, Australia; west of the Philippine Islands (Station 206) ; in Hilo Harbour, Sandwich Islands, abundantly; in lat. $42^{\circ} 32^{\prime}$ S., long. $56^{\circ} 27^{\prime} \mathrm{W}$. (Station 318); lat. $32^{\circ} 24^{\prime} \mathrm{S}$., long. $13^{\circ} 5^{\prime} \mathrm{W}$. (Station 335 ) ; lat. $12^{\circ} 16^{\prime} \mathrm{S} .$, long. $13^{\circ} 44^{\prime} \mathrm{W}$. (Station 341) ; lat. $9^{\circ} 43^{\prime} \mathrm{S}$., long. $13^{\circ} 51^{\prime} \mathrm{W}$. (Station 342) ; in all the Stations between lat. $3^{\circ} 10^{\prime} \mathrm{N}$. , long. $14^{\circ} 51^{\prime} \mathrm{W}$. ; and lat. $10^{\circ} 55^{\prime} \mathrm{N}$., long. $17^{\circ} 46^{\prime} \mathrm{W}$. (Stations 348-352); and in lat. $26^{\circ} 21^{\prime} \mathrm{N}$., long. $33^{\circ} 37^{\prime}$ W. (Station 353).

