CTENOPHORA.

By N. ANNANDALE and STANLEY KEMP.

The only member of this group represented in our collection is a representative of the order Cydippidea and of the genus Pleurobrachia, Flemming, forming a race of P. globosa, Moser a species originally described from the Malay Archipelago. For this race we propose the name bengalensis, as it occurs on at least one side of the Bay of Bengal and differs from the form found in the Gulf of Manaar to which Browne has given the name ceylonensis.

Pleurobrachia globosa bengalensis must be classed as a periodic visitor to the Chilka Lake, over the whole of which it is found for a great part of the year. In the fresh-water season, however, it disappears, and does not re-appear until the water has regained a certain salinity. From observations made in the Ennur backwater, near Madras, in January, 1915 it would seem that it is able to live in a medium of sp. gr. 1·0045, but not in one of 1·0025.

In the outer channel of the lake, in the salt-water season of 1914, we captured in our tow-nets on several occasions a species of the order Lobata but the animal was so fragile that we failed to preserve specimens. In formalin it seemed literally to melt away and all attempts at narcotizing it had the same effect.

Pleurobrachia globosa, Moser.


The typical form of this species has not been found in the Indian Ocean. We have already alluded to the race endemic in the Gulf of Manaar.

Race bengalensis, nov.

(Plate ix, fig. 5.)

In all the more important structural features (viz. the relative position of the tentacle-sheaths, of the tentacle-openings, the canals and the stomodaeum and the proportions of the tentacle-sheaths) this race agrees with the typical form of the species, from which it differs in all the points noted by Browne in his description of his variety ceylonensis. From that form, however, it differs in that in the vast majority of individuals, the costae are still longer, being about twice as long as in the typical form and at least a quarter longer than in ceylonensis. The length of the meridional canals, which extend for the whole length of the costae, is also relatively longer than in the latter, but the opening into them of the adradial canals is also

1 Herdman's Ceylon Pearl Fisheries IV, p. 161 (1905).
median. In most individuals each costa consists of about 28 ciliated plates, which diminish gradually in size towards both extremities. Neither the number of plates nor the exact proportions of the costae are quite constant and individuals occur in which one or more of the costae are shorter than the others; in one individual examined the number of plates varies from 16 to 23. In all our specimens the tentacle-base is pressed more or less closely against the stomodaeum and is, perhaps for this reason, concave, but in the living animal its precise relative position, like the precise outline of the whole organism, is liable to almost constant change. The tentacles are capable of great elongation; processes are absent from a considerable part of the distal half, but are uniformly developed on the remainder of each tentacle; to judge from specimens in which they are contorted, they are cylindrical and capable of being coiled in a close spiral with many whorls. In life the tentacles are yellow and the remainder of the animal colourless.

The longer axis never exceeds 1 cm. in length.

We have examined specimens of this form from the coast of Orissa and from the Ennur backwater near Madras, as well as from all parts of the Chilka Lake. The animal swims as a rule from 2 to 4 feet beneath the surface.

In many of our specimens taken in July the jelly, more particularly in the neighbourhood of the stomodaeum, funnels and tentacle-sheaths, contains a large number of minute and apparently immature Dистomid trematodes. They are accompanied by eggs, hardly smaller than themselves, resembling those found in the canals of the young of Acromitus rabanchati (p. 102, antea). On the external surface of a few individuals we found Protozoa of the genus Trichodina.

The type-specimens of the race are numbered Z.E.V 5936/7 in the books of the Indian Museum.