

voyage from Sydney to Wellington, lat.  $34^{\circ} 50' S.$ , long.  $155^{\circ} 28' E.$  In all only three specimens, of which the largest alone showed the eyes well. It measured 13 mm. long; tentacles 6—7 mm. long; eye peduncles 2 mm. long. Neither of the smaller specimens showed anything new. Tentacles with suckers, of which one is strongly magnified below (woodcut 9, B). Mouth with six suckers, two teeth, and radula; the latter, as far as I could make it out without injury to the animal, is drawn below to the right hand side (woodcut 9, c). The mouth leads into an œsophagus; this into a muscular stomach, in the muscular wall of which is a unicellular gland *à la nematode*. Sharply defined intestine (*o*) which I could not follow out to the anus on the process to the right (woodcut 9, f). Ganglion superius sends out the nerves to the eyes; between it and the ganglion inferius are the two otolithic vesicles (*n*). On the right side the generative gland is seen with reddish oil specks, and in the corner black pigment (*g*); to the left is a cellular body, probably an excretory organ. Subsequently it seemed to me as though there was a calamus in the hindermost portion of the animal; this must however, have been a mistake. Heart not seen."

Two of the three specimens were mounted in glycerine and labelled "Clionide, 17 June, 74, Sidney—Wellington;" from one of them the mounting fluid had escaped, leaving the specimen so much dried that no efforts were successful in restoring it; in what follows it will for the sake of brevity be alluded to as the "damaged" specimen.

The second specimen was in a much better state of preservation than the first, as may be seen from the drawing (Pl. XXXII. fig. 11); it will be called the "complete" specimen.

The third specimen was labelled "Clionide, 16 June, 74, Sidney—Wellington;" it had been stained with carmine and mounted in balsam, and will be referred to as the "stained" specimen. It is the largest and is mentioned by Suhm as being the only one which showed the eyes well. Probably it contributed more than either of the others to Lankester's restoration, which is here reproduced (woodcut 10), seeing that its disposition on the slide somewhat resembles his figure, and it is the only one destitute of suckers, and seeing that the explanation of his figure specially mentions that it was taken from a "somewhat older specimen" than Suhm's.

This absence of suckers is the most important character in Lankester's definition, for, as I shall mention later, the remaining points are such as either belong properly to the genus *Taonius* or are indicative of immaturity.

Professor Lankester admits that "they may possibly have been rubbed off by rough usage of the specimens," but he inclines "to believe that they are naturally absent in the later stage." It is to be noted, however, that the "complete" specimen does possess suckers, although owing to an unfortunate accident these escaped Lankester's attention; when the specimen came into my hands a large part of it was concealed by the dark cement which had been used in fixing down the cover-glass, and which had spread over