

## On the First Stage of the Medusa *Eucheilota clausa* (Hincks) [ = *E. hartlaubi* Russell ].

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With 3 Figures in the Text.

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IN the last number of this Journal (Russell, 1936) I described under the name *Eucheilota hartlaubi* the adult and various stages of a medusa that is fairly common in the Plymouth plankton but had up till then remained undescribed. This medusa was identified with an unnamed medusa which Hartlaub had figured as having been reared from the hydroid *Lovénella clausa* Lovén.

On March 10th, 1936, some *Lovénella clausa* kept in this laboratory by Mr. W. J. Rees liberated medusæ. Mr. Rees kindly handed these over to me so that I could follow the early development. When first liberated the medusa was conically bell-shaped (Fig. 1) and there were scattered nematocysts on the exumbrella. There were two fully developed opposite perradial tentacles, and two non-tentacular perradial bulbs. Rudiments of spiral cirri were developing on either side of the tentacular bulbs. There were four interradial marginal cirri each of which was situated on the umbrella margin about midway between the tentacular and non-tentacular bulbs. On the tentacle sides of each of these marginal cirri was a marginal vesicle with a single concretion. The medusa was 0.75 mm. high by 0.75 mm. broad. The colour of the tentacular and non-tentacular bulbs and the stomach was pale straw. By the next day the umbrella had assumed a more oval bell-shape and the colour of the bulbs and stomach was now a bright orange-yellow. On March 12th the medusa was now 0.9 mm. high and the rudiments of cirri were developing on one side of each non-tentacular bulb (Fig. 2).

On March 14th two of the interradial marginal cirri had disappeared in one specimen. On the 15th another had lost two cirri, and one had lost all four; on March 16th three specimens had lost all four marginal cirri (Fig. 3). The medusæ were not reared further but it was obvious that the next stage would be the development of tentacles on the two non-tentacular bulbs to produce a medusa with four tentacles similar to that in Figure 1 of my last paper (1936).

When I described the medusa *Euceilota hartlaubi* a small paper written by Hincks (1871) three years after his 1868 monograph had escaped my notice. In this paper Hincks describes and figures the gonotheca and newly liberated medusa of *Lovenella clausa*. His description of the medusa is similar to that just described, except that he makes no mention of any cirri developing at the sides of the tentacular bulbs. Possibly his medusa

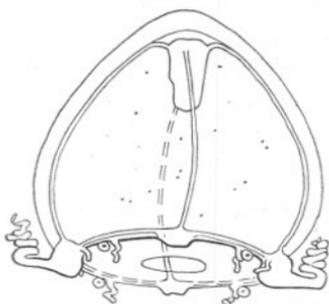


FIG. 1.



FIG. 3.

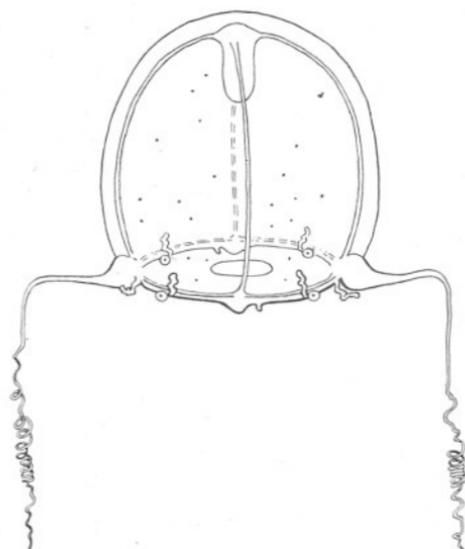


FIG. 2.

FIG. 1.—Newly liberated medusa, *Euceilota clausa*, 0.75 mm. high by 0.75 mm. broad ; Plymouth, 10.iii.36.

FIG. 2.—*Euceilota clausa* two days after liberation ; Plymouth, 12.iii.36.

FIG. 3.—*Euceilota clausa* seen from below after the four interradial marginal cirri had been lost ; semi-diagrammatic ; Plymouth, 15.iii.36.

was liberated at a slightly earlier stage. The marginal vesicles also are drawn by Hincks as being on the non-tentacular sides of the interradial marginal cirri.

Since Hincks described and figured this first stage of the medusa under the name of the hydroid *Lovenella clausa*, the specific name *hartlaubi* can no longer be kept, and the species must be known as *Euceilota clausa* (Hincks).

## REFERENCES.

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