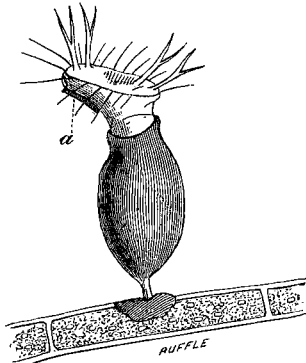


III.—On a New Operculated Infusorian from New Zealand.

By F. W. HUTTON, Professor of Zoology in the University of Otago.

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In the 'Monthly Microscopical Journal' for 1869, vol. i. p. 289, Mr. W. S. Kent described, under the name of *Cothurnia operculigera*, an infusorian bearing an operculum. Last November, in a fresh-water lagoon near Dunedin, I found a very similar form in considerable abundance. The New Zealand species, however, differs from *C. operculigera* in having the pedicle much shorter than the lorica, and in the aperture of the lorica being oblique.



Cothurnia furcifer. $\times 400$. a, operculum.

In adult specimens the lorica is of a deep chestnut brown, and opaque; it is generally more or less crumpled, but sometimes smooth. The aperture is round, entire, and oblique to the axis of the lorica. The average length of the lorica is $\frac{1}{100}$ ". The operculum (a) is circular, the same size as the aperture, and of the same colour as the lorica; it is attached to the animal just below the peristome, on that side towards which the aperture slopes. The pedicle is transparent, very short (one-sixth the length of the lorica), or occasionally absent; it is attached at its proximal end to the conferva, on which it lives, by a circular disk of about the diameter of the lorica, and of the same brown colour. The animal is colourless, considerably smaller than the lorica, and attached at the base without any stalk. The contractile vesicle is central. The peristome is surrounded by a moderate number of

rather long cilia, which lie nearly horizontally when the animal is fully expanded. Inside these are four much more robust cilia, which are once divided, like a hay-fork. These stand more upright; two are situated just above the operculum, and two on the other side of the peristome. Both these sets of cilia twitch spasmodically at uncertain intervals, but have no uniform motion. Lying internally to these are a set of very short cilia, which are constantly active both when the animal is protruded and when it is withdrawn into its sheath.

In the young the lorica is nearly transparent; and there is no operculum until the lorica is fully shaped out. It then commences to grow, but does not get the full size of the aperture until the lorica has become quite dark coloured. I have never seen two in a lorica.

I propose to call this species *Cothurnia furcifer*, from its four fork-like cilia. The likeness of this infusorian to the capsule of a moss is remarkable.
