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WILLIAMS AND NORGATE,
14, HENRIETTA STREET, COVENT GARDEN, LONDON,
AND 7, BROAD STREET, OXFORD.

ON *DIASCHIZA VENTRIPES*.—A NEW ROTIFER.

BY F. R. DIXON-NUTTALL, F.R.M.S.

(Read January 18th, 1901).

Plate 2. (Upper portion.)

Sp. Ch. *Body* almost cylindrical. *Lorica* normal *Diaschiza*-type.

Dorsal cleft narrow, straight. *Eye* cervical.

Foot ventral. *Toes* short, slightly decurved.

This little rotifer was found in large numbers in a pond in Knowsley Park, Lancashire, in water brought to me by my friend, the Rev. R. Freeman, throughout the autumn of 1900. From this pond more than a hundred species were determined on different occasions, omitting all the Bdelloida.

Included in the above hundred were *Furcularia eva* (one example); *Diglena clastopis*, *Coelopus cavia*, and *Stephanoceros eichornii* in great numbers; several *Pterodina bidentata*, *Cephalosiphon limnias*, etc. The *Diaschizae* found in this pond included *semiaperta*, *paeta*, *lacinulata*, *globata*, *ramphigera*, and *tenuior*.

Viewed laterally the body of *Diaschiza ventripes* is of equal height throughout, but the prone face and slightly concave ventral surface, together with the more convex dorsal outline, give it a rotund appearance. The posterior extremity does not taper slowly down to the foot, as in *D. ramphigera*, *tenuior*, etc., but ends in a clear sac-like projection over the base of the foot.

Viewed dorsally, the outline of the head is semicircular, of a diameter almost equal to that of the body at the neck, from which it is separated by a slight but well-marked constriction.

The width of the body gradually increases until two-thirds of its length, whence it tapers to the roundly truncate posterior extremity.

The lorica is transparent, consisting of the four flexible plates distinctive of the *Diaschizae*. The dorsal cleft is narrow, parallel-sided, widening a very little posteriorly. The other edges of the plates are curvilinear.

The eye is cervical and double, having the appearance of two eyes fused together, like that of *D. exigua*. It is placed on the lower part of a large brain.

The foot is short, quite *ventral*, and very much overhung by the posterior projection of the body, by which this species can be at once identified, and which has suggested the specific name. The toes are short, sharp, and slightly decurved. The usual setae on the foot common to all the *Diaschizae* are well marked.

In front of the corona there is a decided crater-like projection, which consists of the extended lips of the buccal orifice (the lower lip curves down), giving it the appearance of a bird's beak, as mentioned by Gosse in his description of *D. ramphigera* ("Supplement," p. 98). This feature is more or less developed in all the *Diaschizae*, and is not part of the trophi as suggested by him. All round the buccal orifice there is a ring of long setae, which are certainly tactile and most probably used to distinguish food from other matter.

The jaws are complex, apparently having two curved plates attached to the unci and rami, forming a hollow, which can be suddenly expanded, thus sucking in the food. This food often consists of diatoms longer than the width of the animal itself.

The small dorsal antenna is well marked at the centre of the circle of the head, above the large brain.

The lateral antennae are very small and carried far back in the lumbar region; they end in a small bunch of long setae.

This is a rather slow and graceful rotifer, quite a contrast to the active and restless species like *D. semiaperta* and *paeta*. It obtains its food by grovelling in the flocculent matter on branches of the waterweeds, and only swims apparently when it requires a change of pasture.

Total length, $\frac{1}{200}$ (127 μ); toes alone, $\frac{1}{1100}$ (23 μ); greatest width, $\frac{1}{340}$ (47 μ). Habitat: Knowsley Park, Lancashire.

I append an attempt at a dichotomous scheme of the

GENUS *DIASCHIZA*.

- | | | Size about |
|--|-----------------------|---------------------------------|
| A. Toes two-thirds length of body . | <i>D. valga</i> , | $\frac{1}{280}$ " (98 μ). |
| AA. Toes less than two-thirds length of body. | | |
| B. Eye present. | | |
| C. Eye cervical. | | |
| D. Head large ; body short, rapidly tapering | . <i>lacinulata</i> , | $\frac{1}{250}$ " (102 μ). |
| DD. Head not conspicuously large ; body longer ; gradually tapering. | | |
| E. Foot ventral, Lorica projecting over foot. | <i>ventripes</i> , | $\frac{1}{200}$ " (127 μ). |
| EE. Foot not ventral, lorica not projecting. | | |
| F. Large species, lips of buccal orifice very projecting . | . <i>ramphigera</i> , | $\frac{1}{130}$ " (195 μ). |
| FF. Small species, lips of buccal orifice not so prominent | . <i>exigua</i> , | $\frac{1}{300}$ " (85 μ). |
| CC. Eye frontal. | | |
| G. Body long and large, laterally compressed | . <i>semiaperta</i> , | $\frac{1}{100}$ " (254 μ). |
| GG. Body not laterally compressed | | |
| H. Body almost spherical, small ; toes slightly decurved | . <i>globata</i> , | $\frac{1}{300}$ " (85 μ). |
| HH. Body gibbose, but of medium length ; toes straight | <i>sterea</i> , | $\frac{1}{170}$ " (150 μ). |

BB. Eye absent.

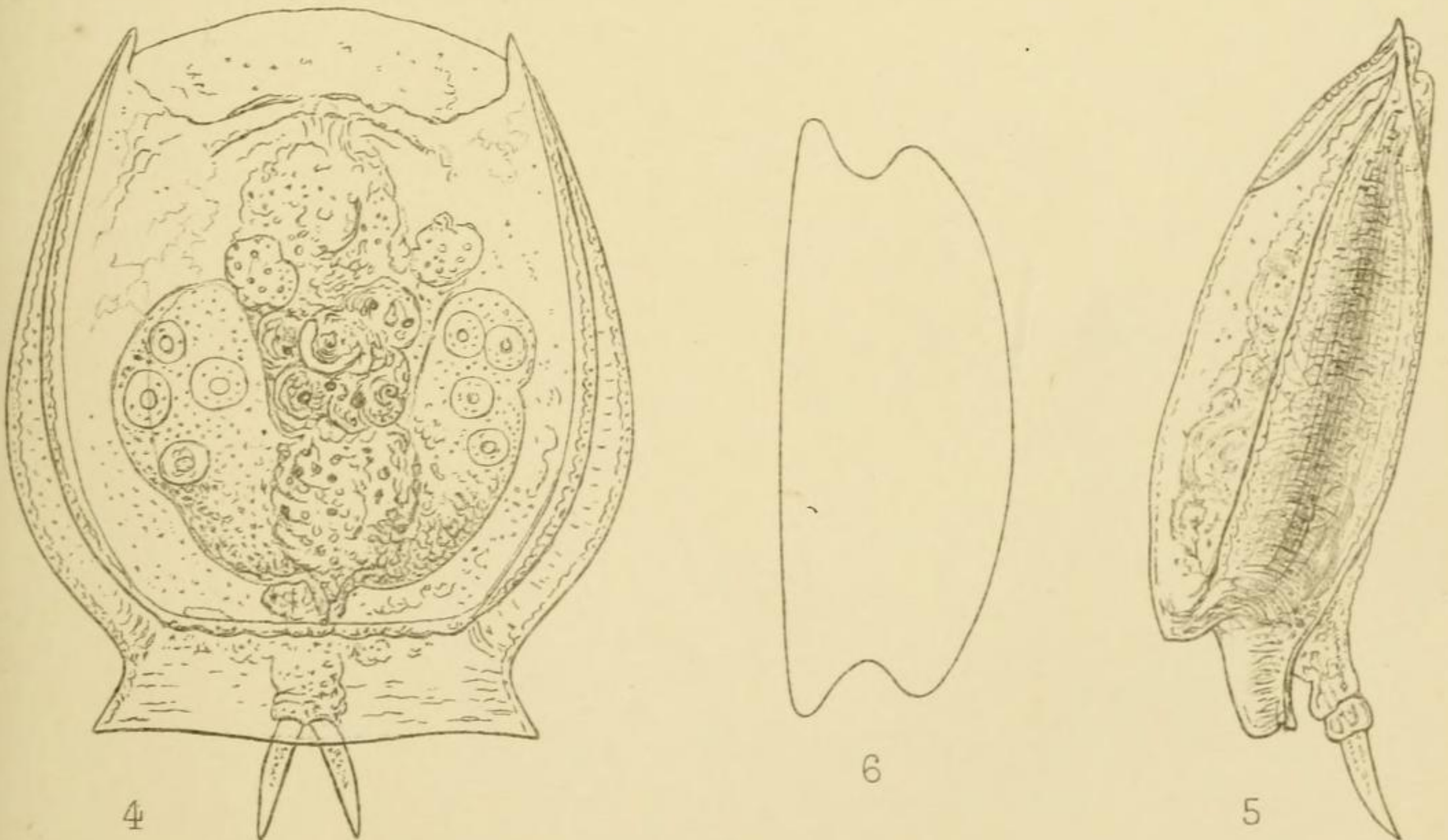
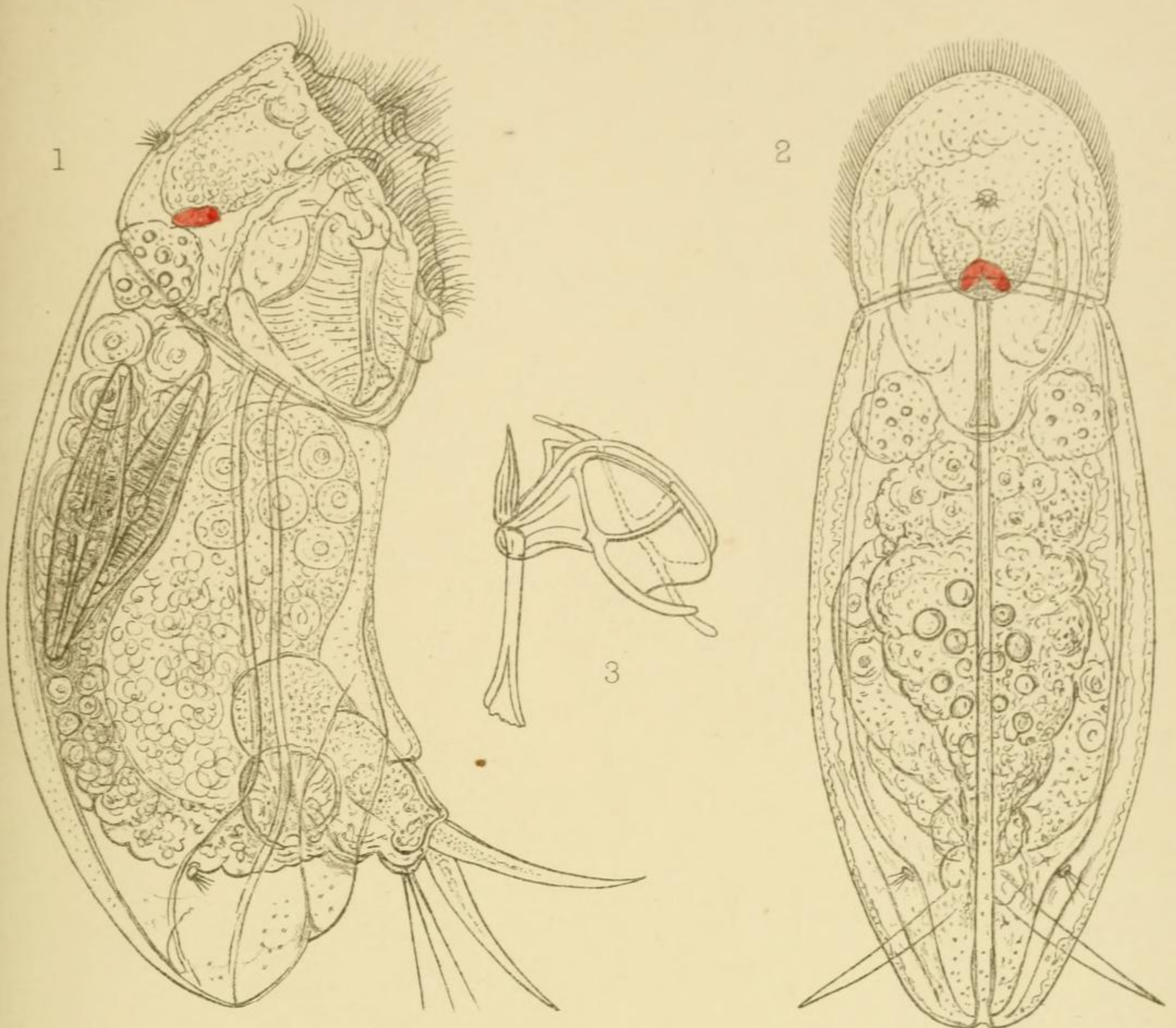
K. Gastric glands often tinted;
of even breadth through-
out; toes upcurved. *paeta*, Size about
 $\frac{1}{120}$ " (212 μ).

KK. Gastric glands never tinted;
tapering slightly fore and
aft; toes curved out at
points *tenuior*, $\frac{1}{150}$ " (169 μ).

D. Hoodii, *cupha*, *acronata*, and *fretalis* are omitted, not having yet been met with.

DESCRIPTION OF PLATE 2. (Upper portion).

- Fig. 1. *Diaschiza ventripes*, n. sp., lateral view \times 980.
" 2. " " dorsal view \times 980.
" 3. " " lateral view of jaws \times 1300.



F.R.Dixon-Nuttall del. ad nat.

West, Newman lith.

Diaschiza ventripes. n. sp.
Cathypna ligona. n. sp.