

## *Oxystoma oxycaudatum* n. sp.

Pl. I, figs. 2, 3, 4, 6, 9; Pl. II, figs. 1, 2, 4.

Locality: 57°58' L. N. 8°15' L. E. 525—550 m. 53 sea-miles N. of Hanstholm. 58°10' L. N. 9°19' L. E. 658 m. 40 sea-miles N.W.t.W.<sup>1</sup>/<sub>2</sub>W. of Hirshals. 57°39' L. N. 7°13' L. E. 313 m. 55 sea-miles N.W.<sup>1</sup>/<sub>4</sub>N. of Hanstholm. Research-steamer "Thor".

Length: ♀ 4 mm., ♂ 3,9 mm. ♀:  $\alpha = 27$   $\beta = 4,2$   $\gamma = 22,9$ . ♂:  $\alpha = 37,5$   $\beta = 4,1$   $\gamma = 21,2$ .

Nine specimens are present, two of which are males. This species is somewhat smaller than the preceding form; the male attains a length of nearly 4 mm., the female is inconsiderably longer. The shape of the body is also in this species relatively shorter and thicker than in the earlier described species.

The front-end tapers more quickly than in *O. rotundicaudatum*. The difference in the shape of the front-end in the two species is plainly seen in the figs. 4 and 5 Pl. I. The shape of the tail resembles that known in *O. elongatum* but the tip is much thinner than in this species. Pl. I, fig. 3.

The cuticle appears to be smooth and devoid of striation. The front-end has a ring of very small, tiny bristles; these are the only setæ or hairs perceived in the species under consideration. Setæ are upon the whole only weakly developed in the Oxystomes.

The large cells accompanying the lateral field also vary considerably in this species as to size and shape; the supposed efferent ducts mentioned under the preceding species are seen in great numbers in a specimen in which the cuticle has relaxed from the subcuticular layer: at all the ducts the subcuticular layer adheres to the cuticle. On account of this fact, which makes the place of the ducts very obvious, it is easy to count them under relatively low power. Along the dorsal side I have thus counted 75 of these supposed excretory ducts. In the species under consideration the ducts themselves are still more tiny and delicate than in *O. rotundicaudatum*, and it is only on a few suitable spots and by aid of immersion lens that I have succeeded in seeing with certainty the chitinized duct itself. In the said specimen I observed such ducts in the region from the tip of the tail to the surrounding of the vulva. I suppose that ducts are also present in front of the vulva, but it was impossible for me to observe this, because in my specimen the cuticle here adheres normally to the subcuticular layer, a feature which impedes the settling of the question.

The lateral field is much like that in *O. rotundicaudatum*, and the presumed secernating cells are also in this species varying in size as well as in shape.

The lateral organ is of the shape usual in Oxystomes. It is placed somewhat more caudad than in *O. rotundicaudatum*; it is considerably larger in the male ( $13 \mu$  in length) than in the female ( $8 \mu$  in length).

The buccal cavity is — as far as I have been able to ascertain — of quite the same shape as in *O. rotundicaudatum*, i. e. cyathiform in its foremost part and tubular in its hindmost.

The oesophagus is, in its distal part, very thin and devoid of perceptibly striated structure. The proximal half increases rather quickly and in some specimens a broad excavation is found in its base which embraces the foremost part of the intestine, Pl. I, fig. 9. It is probable that this feature is due to a contraction on account of preservation.

The intestine is composed of polygonal cells as in the preceding species. These cells vary considerably in size in different parts of the intestine as well as in different specimens. In some of the cells are found some peculiar refringing globular bodies, seen in Pl. I, fig. 2. I have not succeeded in ascertaining the nature of these bodies, whether products of secernation or possibly parasitic Protozoa. It is possible that it is only fat, as found by Türk in the cells of the intestine in some Thoracostomes.

The ventral gland is like that usual in other marine forms; it is rather small, almost pear-shaped and continues cephalad in a relatively short protoplasmatic duct, part of the secernating cell itself, such as is known in *Symplocostoma*, *Enoplus*, *Enchelidium* and many others. The porus excretorius is, as in the preceding species, strongly chitinized — a feature presumably common to all Oxystomes.

The female organ is single, and the vulva is situated considerably before the middle of the body. In a female, the length of which measures 4.07 mm., the situation of the vulva is 1.27 mm. from the front end. A chitinization much like that described in *O. rotundicaudatum* is found surrounding the vulva, Pl. II,

fig. 4. Most of the seven specimens being young individuals — only one of them has a single shell-egg in the uterus — I have not succeeded in ascertaining whether the ovary is reflexed or not.

The spicules are rather simple in shape; they are only slightly curved and taper gradually in width towards the apex. A little accessory piece is present, Pl. II, fig. 1. Their length attains  $78 \mu$ . The bursal musculature is strongly developed; supplementary organ and masculine papillæ have not been observed.

# Plate I.

- Fig. 1. *Oxystoma rotundicaudata* n. sp. Female gonad.  $\times 160$ .
2. *Oxystoma oxycaudata* n. sp. Cells from the intestine.  $\times 580$ .
3. *Oxystoma oxycaudata* n. sp. ♀. Tip of the tail.  $\times 525$ .
4. *Oxystoma oxycaudata* n. sp. Anterior end.  $\times 525$ .
5. *Oxystoma rotundicaudata* n. sp. Anterior end.  $\times 525$ .
6. *Oxystoma oxycaudata* n. sp. ♀. Posterior end.  $\times 160$ .
7. *Oxystoma* sp. ♂. Posterior end.  $\times 525$ .
8. *Oxystoma rotundicaudata* n. sp. Posterior end of oesophagus.  $\times 230$ .
9. *Oxystoma oxycaudata* n. sp. Posterior end of oesophagus.  $\times 230$ .
10. *Oxystoma* sp. ♂. Anterior end.  $\times 525$ .

## Plate II.

- Fig. 1. *Oxystoma oxycaudata* n. sp. ♂. Spicule. × 525.
2. *Oxystoma oxycaudata* n. sp. ♂. Entire animal. × 60.
3. *Oxystoma rotundicaudata* n. sp. Tip of tail with glandular efferent ducts. × 650.
4. *Oxystoma oxycaudata* n. sp. Region of vulva. × 650.
5. *Stenolaimus Marioni* Southern. Spicule. × 580.
6. *Micoletzkyia elegans* n. g. n. sp. Female gonad. × 160.
7. *Oxystoma rotundicaudata* n. sp. Region of vulva. × 580.

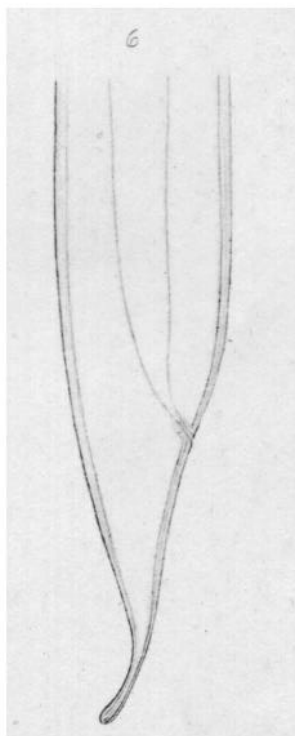
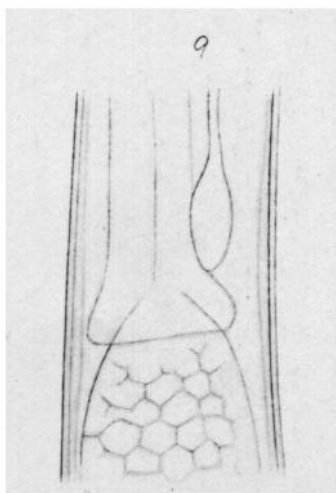
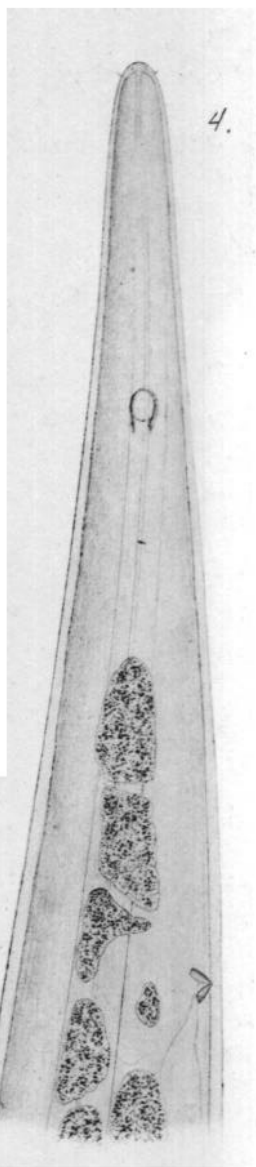
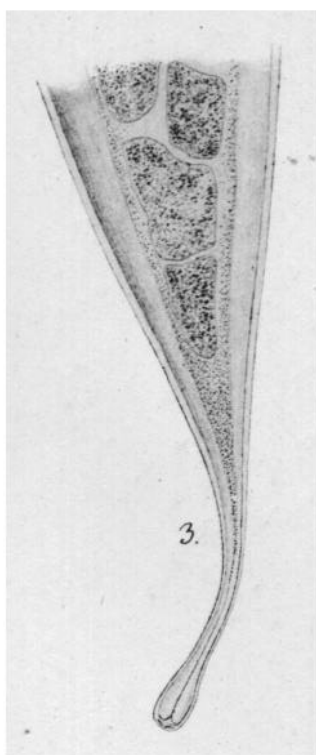
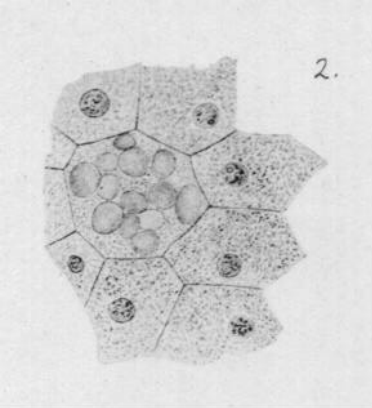
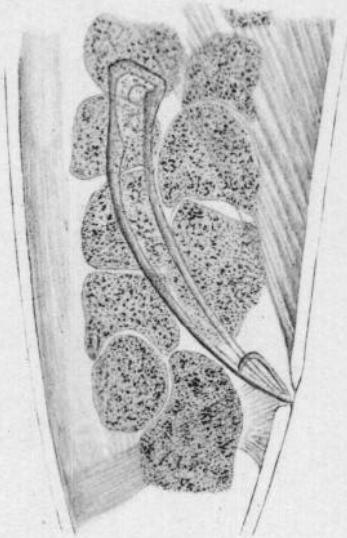
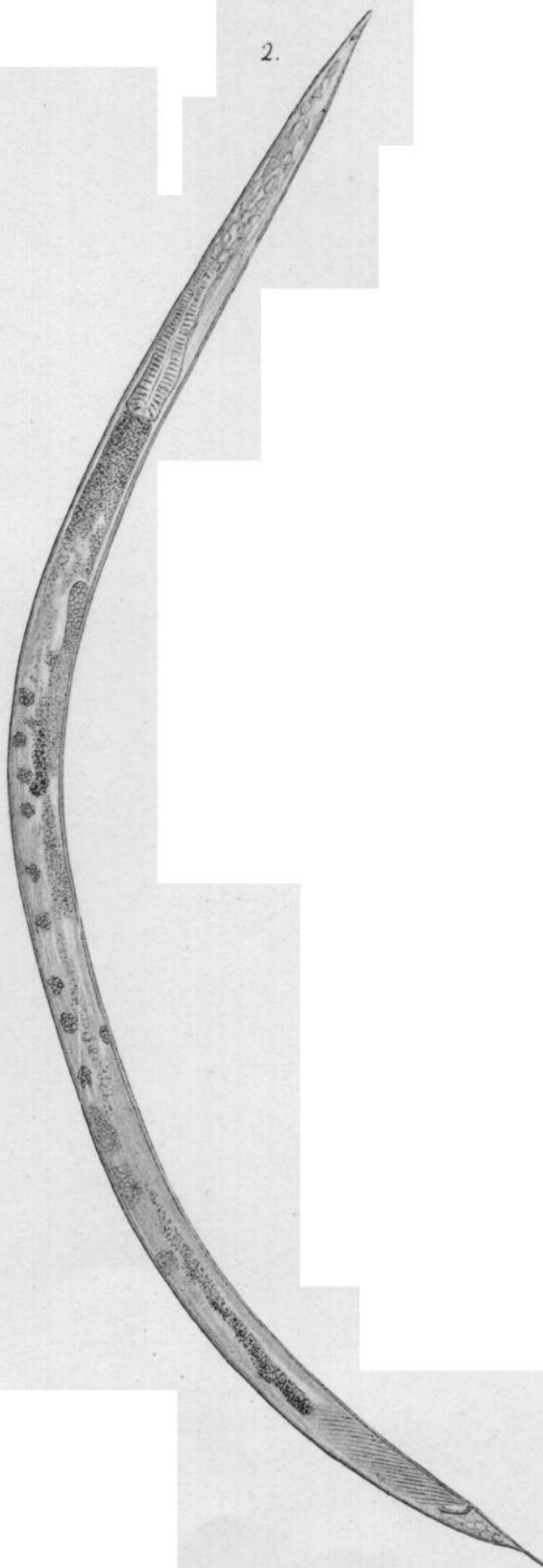


Plate I

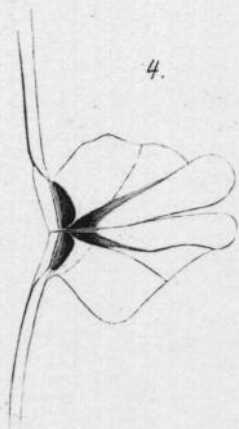
1.



2.



4.



**Plate II**