Oistolaimus n. g.

Body of a rather short and clumsy shape. The cuticle is finely striated and set with scarce hairs, spread apparently irregularly over the surface of the body. Head with one ring of fine hairs, the position of which is between the low lips which surround the mouthopening. Lateral organ spiral-shaped and much like that known in the genus Desmodora; it is situated in the front end, just behind the lips. The buccal cavity is cup-shaped in its distal half; its proximal half, which is nearly cylindrical, is occupied by a short spear or arrow, the stem of which is slightly curved and which is provided with a barb on one side, much like that of a fish-hook. The arrow is no doubt protrusile, and strong muscles which evidently act as protractors are attached to its stem. The esophagus is of equal width in its distal half, but its proximal part forms a large oval bulb, in the interior of which is found a cavity, but no valvular apparatus. Tail short and conical. The vulva is found behind the middle of the body. A rudiment of the ovary is seen at some distance behind the vulva. It is to be supposed that the ovary is single and that the place of this and of the uterus is caudad to the vulva.

Oistolaimus ferox n. sp. Pl. I, figs. 2, 10, 11.

Locality: Auckland Islands. North-arm of Carnley harbour. Clay. Length: 0.7 mm. $\alpha = 14.5$. $\beta = 4.8$. $\gamma = 9.5$.

In the material from the North-arm of Carnley harbour was found a single female, not fully sexually developed. Though the specimen was in no good condition I resolved to deal with it on account of the interesting and easily recognizable construction of its buccal cavity, and because it represented a genus, hitherto not described.

The shape of the body is rather short and clumsy; it is of about equal width throughout its whole length, only gradually taperng near the extremities. The tail is conical and of medium length.

In the preserved specimen the body is slightly curved and tail is bent inwards towards the ventral side of the abdomen.

The cuticle is very finely striated, but it has not been possible to see whether rows of points are present or not. Fine and delicate hairs are spread, apparently irregularly, over the surface. Just below the cuticle is seen a layer of pigment consisting of minute deepbrown granules; this layer is not covering all the surface of the animal, but is interrupted here and there for a space; in the tip of the tail it is entirely lacking.

The head is truncate and, as far as I have been able to ascertain, the entrance to the buccal cavity is surrounded by eight low lips in the intervals of which is seen a fine hair of almost the same delicacy and length as those



Fig. 3. Oistolaimus ferox, ♀.

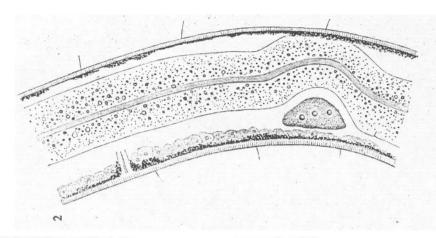
spread over the body-surface. The lateral organ is found in the frontend, just behind the lips. It is spiral-shaped and much like the lateral organs known in the genus <code>Desmodora</code>; it is relatively small and consists of only one loop and a half; the spiral line of the outmost loop does not end freely but bends inwards to the foregoing loop, a feature known, besides in the species of <code>Desmodora</code>, in some Cyatholaimi too, viz. <code>C. ocellatus</code> de Man and <code>C. microdon</code> <code>Ditl.</code>; but the most characteristic properties of this organ in the species under consideration are the paucity of the loops and the smallness of the whole organ.

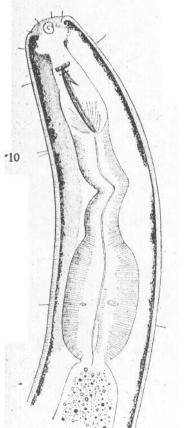
The buccal cavity is of a rather peculiar shape. In its distal half it is cup-shaped, broad and rather shallow. Its proximal part is cylindrical and contains a short spear or arrow the stem of which is slightly curved. In the front end this spear is pointed and provided with a sharp barb much like that of a fish-hook. To the proximal part of the arrow strong muscles are attached, pointing obliquely forwards and attached to the inside of the wall of the

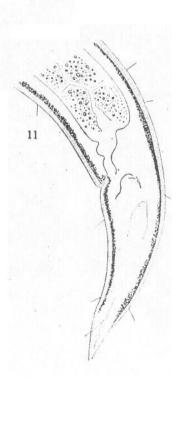
buccal cavity; no doubt these muscles act as protruders to the arrow. Just in front of the arrow a ring-shaped chitinous thickening is seen, serving — in my opinion — to steer the arrow when protruded. The arrow itself is solid and is by no means to be compared with the spear known in other freeliving Nematodes viz. Dorylaimi or Tylenchi.

The esophagus is of equal width in its distal half; its proximal part forms a large oval bulb in the interior of which a small cavity is seen. I am inclined to think that this bulb forms a sucking apparatus which may be able to bring the blood of the prey, wounded by the arrow, into the intestine of the Nematode. — The cells of the intestine are large and polygonal; they are filled with refringing granules.

No ventral gland has been observed. The vulva is found somewhat caudad to the middle of the body. The specimen being a young female not fully sexually ripe the genital gland is only found as a rudiment; it is situated just in the middle between the vulva and the anal opening and consists of a little, nearly egg-shaped syncytium with a few nuclei. It is to be supposed that the ovary is single and that the place of the female organ is caudad to the vulva in mature specimens, a fact not unknown in freeliving Nematodes.







- 2. Oistolaimus ferox n. g. n. sp. Vulva and ovarium. Winkel Homog. Imm. 2,2 mm. Comp. Oc. 4.
- Oistolaimus ferox n. g. n. sp. Front end. Zeiss Apochr. 2 mm. Comp-Oc. 4.
- 11. Oistolaimus ferox n. g. n. sp. Tail. Zeiss Apochr. 3 mm. Comp. Oc.'4.