EGGS OF A NEW SPECIES OF NEMATOID WORM FROM A SHARK

By G. A. MacCallum
Of Baltimore, Md.

On July 6, 1924, we examined at the United States Bureau of Fisheries at Woods Hole, a large shark, *Carcharhinus commersoni*, and I found on the white under surface of the nose, in front of the mouth, a curious figure, which appeared like a drawing made with a fine pen with India ink. The figure was formed by a delicate tracery of lines extending over a patch about 2½ inches by 1½. We could not imagine why such a tracing should be there, and, as nothing of the particulars could be made out with the naked eye, I sliced off portions of the figure and placed them under the microscope was surprised to find that the lines were made up of black eggs laid in the grooves between the scales. We had never seen anything like it before and were at a loss to know what form could have laid them there, how it was done, and how they were kept in place and not swept away when the fish made its way through the water. Careful examination has failed to show any female worm which could have laid them.

Vertical and horizontal sections of the skin were made, after decalcifying the scales with hydrochloric acid, and in these the eggs were plainly seen to be those of some small worm, and attached to the grooves between the scales by some transparent, very adhesive glutinous material which surrounds them. They are dark brown, almost black, where the shell is thickest, and are of an elliptical form, measuring 0.10 mm. in length by 0.005 mm. in width. Anteriorly each has a closed orifice at the end of a short neck.*

Dr. N. A. Cobb, who was kind enough to examine them, thought that they much resembled the eggs of *Trichocephalus dispar* in form, and later it was decided that they belong in all probability to a member of the genus *Capillaria*. Since it has been impossible to find the female worm that laid them, the question arises as to whether it may be that, as in the case of the common wild rat in which a nematode of this general type lays eggs in fine lines over

---


29109—25 1
the surface of the liver, the female after this is complete dies and disappears.

In another shark of the same species the same eggs were found in lines on the lighter colored portions of the anterior edges of the fins. Since they have not appeared in any other species of shark, I have named them as deposited by a member of the genus *Capillaria*, which should be called *Capillaria carcharhini*, new species. Although the other members of the genus are well known in other animals, this is possibly the only one recorded as having been found in a fish.

The type specimen has been deposited in the United States National Museum, Helminthological Collections under the number 7812.

**EXPLANATION OF PLATE**

*Capillaria carcharhini*, new species

Fig. 1.—Portion of skin of shark with eggs of the parasite.
2.—Interior of egg showing embryo.
3.—Exterior of egg.
Eggs of Capillaria carcharhini, new species

For explanation of plate see page 2