

of the head, also the snout and interorbital space, are studded with minute or very small spines resting upon a stellate base. A series of larger spines runs along the median line of the back and tail, commencing immediately behind the occiput. A group of three similar spines occupies each side of the shoulder; a short series composed of three or four spines along the supraorbital margin and above the spiracle. The spines along the ridges of the snout are also somewhat enlarged. Greyish-brown above with a trace of a darker spot on each side of the body. Lower parts white, with large sub-symmetrical brown patches. In very young specimens the lower parts are uniform white.

*Habitat.*—A large male specimen,  $24\frac{1}{2}$  inches long, was obtained on the cruise of the "Knight Errant," at Station 9, on August 23 (1880), in 608 fathoms, together with three small ones, of which two are males  $6\frac{1}{2}$  inches long, and one a female 8 inches long. A fourth very young male specimen was caught at Station 4 in about 400 fathoms.

The Norwegian expedition obtained one male only, at 115 kils. west of the Norsk Islands, Spitzbergen, at the depth of 459 fathoms.

Mr. Collett's description of this species is so detailed, that I need only refer to those points in which our specimens differ from his, or in which I can supplement his observations.

The most important difference between the specimens obtained by the Norwegian and British expeditions is the number of scapular spines, which in the former is only two, whilst four of our five specimens show three placed in a triangle.

In our old specimen the two dorsal fins are joined at the base, but a small spine intervenes between them in our young specimens. The young specimens are more uniformly covered with those minute spinelets described in the adult fish, but the larger spines are much more acute and prominent, longer and claw-like. The number of the median series varies: in the adult there are  $8 + 19$ , in the three young males  $6 + 10$ ,  $8 + 16$ , and  $11 + 21$ ; in the young female  $7 + 17$ .

This deep-sea species of Ray shows some striking peculiarities. The teeth are remarkably slender, small, irregularly and widely set, different from those of other British Rays. In young specimens, at any rate, those of the male do not differ from those of the female. The mucous membrane behind the upper jaw forms a pad with a lobulated surface. The mucous cavities of the head are extremely wide; and finally, the accessory copulatory organs have a spongy appearance and are flexible, the cartilage by which they are supported being a simple slender rod. Fig. A represents the adult male three-sevenths of the natural size; fig. B, a young of the natural size; and fig. C is a separate view of the mouth of the adult specimen.