1. Sternaspis princeps, n. sp. (Pl. I. fig. 1).

Along the middle of the ventral surface there runs a shallow furrow, and each half is divided by a diagonal keel into an anterior larger and a posterior smaller triangle. There are forty tufts of setæ on the margin of the shield. The whole body is studded with fine scattered chitinous setæ, each having at its base a number of smaller chitinous pieces grouped together into a small wart-like protuberance.

Of the two specimens preserved the larger is represented in fig. 1.

Habitat.—Station 169, July 10, 1874; lat. 37° 34′ S., long. 179° 22′ E.; depth, 700 fathoms; bottom temperature, 40°0; blue mud; trawled.

Genus 2. Echiurus, Guérin.

The proboscis has a deep furrow, but is not split in front. There are two anterior ventral hooked setæ, and one or two circles of posterior bristles. Two pairs of segmental organs, two internal anal vesicles (Analkiemen) with ciliated funnels.

2. Echiurus unicinctus, von Drasche (Pl. I. fig. 2; Pl. III. figs. 11, 12).

Echiurus unicinctus, von Drasche, Ueber eine neue Echiurus-Art aus Japan, &c., Verhandl. d. k. k. zool.-bot. Gesellsch. Wien, Bd. xxx. pp. 621-628, Taf. xxx. fig. 1, Jahrg. 1880, 1881.

Short proboscis. There is only one circle of posterior bristles. The paired appendages of the segmental organs are long and spirally coiled.

Out of twenty-one specimens the average length was 7 cm. and the breadth about The largest was $9\frac{1}{2}$ cm. long. All were much contracted. The grooved proboscis is not very sharply distinguished from the body, it has a conical form and is very short, not exceeding 6 mm. in its contracted state. The papillæ on the skin measure from 0.2 to 0.5 mm., and look like numerous little knots. They are not arranged in transverse rows except at special places, as for example close beside the The preserved specimens are of a bright yellowish-brown colour. ventral setæ. Immediately behind the base of the proboscis on either side of the median ventral line are the two moderately strong hooked setæ. At the posterior end of the body there is an anal region bordered by a single circle of golden stylet-like setæ, bent slightly outwards. In most of the specimens there were eleven of these setæ, but in some nine, ten, twelve, or thirteen. As in the other species of Echiurus, the circle of setæ exhibited a distinct gap on the ventral surface. Here and there reserve setæ may be seen. In regard to the musculature, it may be noted that the internal layer of circular muscles consists of about