

bristles, thus imparting a character to the species. The lobes are low and slightly pointed, and are directed outward and slightly upward. Toward the posterior end these processes are longer than the foot, and, indeed, increase in size from before backward.

The bristles of the tenth foot have nearly the same shape as in *Lumbriconereis fragilis*, and their shafts are also of a brownish-black colour; while the spines nearly correspond in number and colour. Indeed, nothing very diagnostic can be affirmed of the bristles or hooks of the Japanese form, except perhaps the larger size of the hooks and the very distinct serrations on the crowns. The latter differ from those of *Lumbriconereis fragilis* in the more evident distinction between the first (or lower) fang and the second, as well as the relatively larger size of the latter in some views in comparison with the superior serrations (Pl. XVIIA. fig. 16). Position, however, apparently modifies these appearances. The specimen, a female, is distended with ova.

The intestine contains greyish sand abounding in sponge-spicules, remarkable Radiolarians (?), composed of a minutely reticulated framework, with projecting processes more minutely reticulated. The spines on some cause the structure to resemble a minute *Molpadia*. A few Foraminifera, Diatoms, and fragments of Algæ are also present.

Within the circular muscular coat is a peculiar pennate arrangement, apparently of the outer fibres of the dorsal and ventral longitudinal muscles, the granular infolded parts being coloured brownish. The nerve-cords have a small median neural canal beneath the great superior one.

This species has certain affinities with the *Lumbriconereis heteropoda* of Marenzeller,¹ from the Bay of Miya, Southern Japan. The peculiarly elongate foot of the latter, however, is diagnostic, though the structure of the bristles is similar. The shape of the bases of the maxillæ diverges considerably. The posterior feet of Kinberg's *Lumbriconereis chilensis*,² from Valparaiso, show a similar bilobed arrangement in the posterior feet, but the lobes are much longer, and the structure of the bristles differs. In regard to the two bosses on the under surface of the snout, this form shows certain resemblances to the *Lumbriconereis jacksoni* of Kinberg,³ from Sydney, but in the dental apparatus (which appears to be of a type unusual in *Lumbriconereis*), the structure of the feet, and the outline of the head, the differences are pronounced.

Lumbriconereis japonica, Marenzeller (Pl. XXXVI. figs. 13, 14, 15; Pl. XVIIA. fig. 17; Pl. XVIII A. fig. 1).

Lumbriconereis japonica, Marenzeller, Denkschr. d. k. Akad. d. Wiss. Wien, 1879, Sep. Abd., p. 29, Taf. v. fig. 3.

Habitat.—Taken along with the foregoing at Station 232 (off the coast of Japan),

¹ Süd-japan. Annel., p. 30, Taf. v. fig. 4, and Taf. vi. fig. 1.

² Freg. Eugen. Resa, Taf. xviii. fig. 37; and Öfversigt k. Vetensk.-Akad. Förhandl., 1865, p. 569.

³ Öfversigt k. Vetensk.-Akad. Förhandl., 1864, p. 569.