

The foregoing structure may be said to be characteristic of the anterior feet. Thereafter the inferior bristles gradually become more slender, and the rows are shorter and mostly in a single line. At the thirtieth foot the following condition occurs:—Superiorly is the branchia, then a lanceolate and flattened dorsal cirrus, with a slight external convexity at its base. The long spinous bristles with smooth shafts exist in front; then a similar series are present in the ventral division, interspersed with a few stoutish and slightly curved hooks as before, only they are more slender. Behind the latter bristles is the short and somewhat conical cirrus.

At the posterior end of the fragment the stoutish ventral hooks are even more slender, and this is the chief change in bristle-structure.

The branchiæ commence as small lanceolate processes on the eighth bristled segment, and they remain comparatively small till about the eighteenth segment.

The alimentary canal contained masses of coarse shell-debris, sand, and a few Foraminifera.

In transverse section the cuticle is thin, while the hypoderm is dense. The latter forms a firm layer of streaked areolar tissue, somewhat resembling that in the Nemerteans, though considerably closer in texture. Brownish pigment occurs in this layer in the dorsal median line. The circular muscular coat is of average thickness. Instead of the rounded or ovoid dorsal muscles of *Aricia norvegica*, this species has flat muscles in section, thickest externally where each forms a somewhat rounded lobe, and separated internally by the pedicle for the blood-vessels and alimentary canal. They are also cut into fasciculi by the vertical fibres which pass through them, and again unite on their inner surfaces with neighbouring bands so as to form a closely interwoven layer. The ventral longitudinal muscles are much larger, but similarly extended, and pierced by the vertical fibres, which also unite to form a layer of closely mixed fibres internally. The oblique muscles are much more slender than in *Aricia norvegica*, a feature probably connected with the great development of the sheet of vertical fibres just mentioned. The nerve-area is bluntly conical, its investment resting on the circular muscular layer externally, and having the large ventral blood-vessel and the inferior pedicle of the alimentary canal internally (superiorly). The alimentary canal forms a finely folded glandular tube anteriorly. The entire body is flattened from above downward.

#### *Aricidea*, Webster.

*Aricidea fragilis*, Webster (Pl. XLIII. figs. 4, 5; Pl. XXIIA. fig. 18).

*Aricidea fragilis*, Webster, Ann. Chætopoda of the Virginian Coast, p. 55, pl. ix. figs. 127–132.

*Habitat*.—Dredged at Station 47 (off the American coast, near New York), May 7, 1878; lat. 41° 14' N., long. 65° 45' W.; depth, 1340 fathoms; surface temperature, 42°·0; sea-bottom, blue mud.