surface of the primary branches a number of elongate branches arise which are directed upwards, taking an almost vertical direction. These constitute the most important branches of the corallum, and may be 10 to 18 cm. in length. They usually become considerably thickened some distance above their origin, and bear a further series of branchlets, without definite arrangement, which may be 0·5 to 1·5 cm. apart, and 3 to 4 cm. long. In addition to these, forming the framework so to speak of the colony, the stem, branches, and branchlets, all bear a number of lateral pinnules which are usually alternate, but the arrangement is often irregular. An enormous development of certain of these pinnules gives rise to the secondary branches and branchlets. They are usually from 0·5 to 1 cm. long, and about 0·2 cm. apart, but near the apex of the corallum certain pinnules are much elongated and bipinnate, or more rarely tripinnate. Fusions are frequent in all parts of the corallum.

The polyps are small and rounded, showing a tendency to become elongated in the direction of growth, as is usual in this genus. The tentacles are short rounded lobes arranged in a ring around the oral disc, or in the more elongate individuals the tentacles are more nearly arranged in two rows at each end of the long axis of the stomodæum. The mouth is situated in the centre of an elevated and rounded oral disc, as large as one of the tentacles. On the larger branches the polyps are frequently distributed in two alternate rows, one on each side of the median line on the anterior surface. They also extend to the posterior surface, but are not so numerous there nor arranged with such regularity. On the branchlets and pinnules the polyps are arranged in a single row along the anterior aspect of the corallum. The various polyps on a pinnule are closely crowded, particularly in the younger portions of the colony. There are usually about seven to a centimetre on the pinnules.

The spines are short, conical, but somewhat compressed, and are generally bent slightly upwards, and have moderately sharp points. They are arranged in steep spirals from left to right, and also in longitudinal rows. Four rows may be counted from one aspect of a pinnule, the members of a row being about two lengths apart. It will be seen by a reference to Pl. I. fig. 3, that the members of a spiral are placed at regular intervals one above another, so that, of the four series figured, the right hand row is inserted at a point on the axis slightly above that on the left hand. In *Antipathella assimilis* (*cf.* Pl. I. fig. 6) this is not the case. This species is readily distinguished from other members of the genus, on account of the fact that its branches and branchlets form long, narrow, and slender pinnate fronds, rarely more than 2 cm. across the pinnæ. *Antipathella speciosa* comes nearest to it in this respect, but in the species under consideration the whole corallum is relatively long and narrow, the growth is not so regular, and the pinnules of neighbouring branchlets do not appear to be so firmly fused together into a reticulum.

Habitat.—Station 308; January 5, 1876; lat. 50° 8′ 30″ S., long. 74° 41′ 0″ W.; Strait of Magellan; depth, 175 fathoms; bottom, blue mud.