may be occasionally opposite. The main branches have a diameter almost equal to that of the stem at their respective points of origin, and may be 10 cm. long. They usually bear one to four branchlets at right angles, scarcely any two of which extend in the same plane. Some are directed downwards, others horizontally, and others again take a subvertical direction. In another portion of a stem (?) parallel to the longer one, and fused to it by a transverse branch, the branches sometimes form a marked acute angle with the axis, and in one instance three elongate branchlets arise close together. With these exceptions, two most marked characters of the species are (1) the rectangular mode of branching, and (2) the relatively distant, elongate, and usually simple branchlets frequently directed downwards. The only fusion present in the whole specimen is the one already referred to, by which one stem (?), through the agency of two of its branches, becomes fused to the one forming the greater part of the specimen. The spines are strong, triangular, and much compressed, with the apex more turned upwards in some than in others. No spiral arrangement is noticeable, but the spines are arranged in longitudinal rows, seven or eight of which may be seen from one aspect. The rows in some instances seem to be paired, that is, two spines in adjoining rows are opposite to each other. Pl. XI. fig. 9 represents one full cycle of the arrangement from the upper pair of spines adjoining the middle line to the pair beneath them. The spines have a length corresponding to about half the diameter of the axis, and the members of a row are very distant, usually separated by an interval equal to two and a half to three times their length. The polyps of the type specimen are very badly preserved, so that I have been unable to make a microscopic examination of them. They are evidently rather large and prominent; about three are arranged to a centimetre. The position of this species is uncertain pending an examination of the polyps. The spines are evidently of the *Antipathes* type and are similar in shape to those of *Antipathes arborea*, Dana, as figured by Pourtalès.

Habitat.—Mediterranean (Koch) Brit. Mus.; in 32 to 54 fathoms, on rocks covered with Corallines, Naples Zool. Stat.

Genus *Antipathella*, n. gen.

Antipathes (*pars*), Auctt.
Rhipidipathes (*pars*), M.-Edwards, Coralliaires, t. i. p. 320.

Zooids small, usually somewhat longer in the transverse axis, so that the tentacles are arranged biradially or in two parallel rows of three each. The stomodæum is elongated in the sagittal axis, the mouth usually but not invariably so. Sometimes the upper portion of the stomodæum is everted, in which case the mouth is rounded with a crenate inner margin. The tentacles are usually short and subequal, but those in the sagittal axis may be inserted at a slightly lower level than the others. There are ten mesenteries in the oral prominence, and six below, as in *Antipathes*. The reproductive elements are