their edges are divided into branched protuberances; they also present the form of triangular discs, with very expanded bases, which divide into several branched prominences, these are papilliform towards their apices. On the calyces these triangular discs are especially developed towards the margins, and their points project over these. The basal portions of the tentacles, which constitute the operculum, contain only two or three long, thin spicules, which lie near one another, so diverging that they rest with their basal ends on the colleret. The tentacles, when closed, do not come into contact basally with one another, so that an eight-rayed uncovered portion remains. About eight curved, spiny spicules placed peripherally, each one in contact with the basal portion of a tentacle, form a colleret. This genus, in the habit of the polyps, and especially in the form of the opercular covering, shows a near affinity to the preceding genus, while the form and arrangement of the "Stachelplatten," as well as their great development, show a relationship to *Acis*.

Placogorgia atlantica, n. sp. (Pl. XXIII. fig. 5; Pl. XXVII. fig. 2).

The habit of the colony reminds one of *Eunicella verrucosa* (?); from a flat base, which creeps over a stone, the upright stem arises; this gives off, in one plane, branches from both sides, which rise at angles of from 45° to 90°, they then bend in an upward direction, running parallel to the principal stem, again branching off in a somewhat similar manner. The last simple twigs often arise perpendicularly and terminate in little thickened knobs. The length of the principal stem is 336 mm., with a diameter of 4 mm. at its base. The larger branches reach a length of 120 mm., with a diameter of 2·5 mm. The length of the terminal branches is from 14 to 35 mm., with diameters, where they join the stem, varying from 1 to 2 mm., and from 2 to 3 mm. at the tips.

The polyps are evenly distributed over the stem, branches, and twigs in close spirals. On the terminal twigs the bases of the polyps come into contact. On the stem the polyps are depressed; on the branches they assume the form of blunt cones, with a diameter at their base of 1·5 mm. and a height of from 0·5 mm. to 1 mm. The mouth of the polyp seems truncated, in repose the polyps are quite retracted and the opercular coverings lie horizontally over the oral regions. The spicules of the cœnenchyma are warty spindles, truncated at both ends, 0·38 mm. in length and 0·08 mm. in diameter, at first irregularly placed, they then become arranged in a ring-like form around the basal portions of the polyps; becoming at the same time feebly bent, also a little flattened and spiny, they are here 0·26 and 0·2 mm. long, with a diameter of 0·05 mm. On the calyces of the polyps the spicules take the form of large "Stachel-platten," with basal expansions, frequently branched; towards the oral region they appear pointed, that is, diverging into one or more points, others remain as broad plates, armed with branched spines on all sides. These spicules form three or four rows,