cœnenchyma are smaller. The axis is brittle, inflexible, yellowish-brown, smooth on the surface, brightly iridescent.

This species, represented by a colony broken into several pieces and wanting the base, is distinguished from those most nearly related to it by the copious branching, which takes place in different planes, so that the colony acquires a bushy appearance; by the development of numerous polyps on the stem, which have a somewhat different structure from those of the branches, and by the little zooids, which protrude from the cœnenchyma and give to it a roughened appearance.

The main stem rises in an erect manner, its length reaching 200 mm., and in the lower part it is 2 mm. in diameter. At short intervals it gives off branches at right angles, which are 1·5 mm. distant from one another. These form regular spirals around the stem, so that the fifth branch then comes to be in line with the first again. The little angular bendings which the stem undergoes at the point where each branch comes off, give to its axis a spiral appearance. The ramification of the branches takes place according to the usual rule. The main branch, which in the upper third of the stem reaches 30 mm. in length, is angularly bent in different planes, but usually horizontally to the stem, and gives off twigs of a like nature, from which arise twigs up to the fifth order. All stand at angles of 40° to 45° to one another. The internodes are, on an average, 4 mm. long.

On the stem are placed polyps, with very short calices and wide oral discs from which the eight tentacles arise, they are placed in spirals around the stem, and there are always two between each pair of branches. The tentacles are expanded in all, and the power of contraction appears to be less in the axial polyps than in those of the branches.

On the branches and twigs there is one polyp on each internode, on the thicker branches this is perpendicular to the base, on the terminal twigs it is directed obliquely outwards. Its base is expanded, the body being constricted in front of the calyx opening. The length reaches 2 mm.

The zooids are conical-shaped bodies of 0·12 to 0·15 mm. in length, 0·05 mm. in diameter, which are abundantly scattered in the cœnenchyma of the stem and branches, and cause the surface of the latter to appear as though roughened. Every zooid exhibits an ectodermal covering, which is considerably thickened on the summit of the conical body, and contains a number of thread-cells; at one side, between the base and the apex, is the mouth-opening, which in the different zooids appears sometimes circular, sometimes a mere slit, which seems to indicate the existence of a considerable extensibility of the opening.

No œsophageal tube can be recognised, and the digestive cavity passes directly into a longitudinal canal of the cœnenchyma.

The axis in the stem is hard and brittle, yellowish, with shining surface, which is strongly iridescent. In the branches the axis becomes more flexible and elastic.