

Test consisting of one or more branching tubular columns springing from an adherent base. Basal portion convex, spreading, or tubular; column straight or irregularly bent, of nearly uniform diameter; branches ascending, somewhat thinner than the column, the distal extremity of each swollen or subglobular. Walls thin, arenaceous, beset with sponge-spicules, especially near the distal extremities. Height, from the base to the summit of the branches, $\frac{1}{10}$ th to $\frac{1}{4}$ th inch (2.5 to 6 mm.).

The test of *Haliphysema ramulosum* is generally of much larger dimensions than that of *Haliphysema tumanowiczii*, but the distinctive character of the species is the branching habit of growth. The length of the column before the first subdivision takes place, and the number of branches produced, are alike variable. In Dr. Bowerbank's original figure the columns are short and have no more than three or four branches apiece; in the specimen now figured,¹ Pl. XXVII, A. fig. 6, the column is abnormally long, and exhibits sixteen or seventeen terminal heads.

An even more striking peculiarity than the branching habit is the growth of several pedicels from the same expanded base, a feature well represented in the original figure. The beautiful drawings in Prof. Moebius' memoir, referred to in the synonymy, which have been assigned by the Rev. A. M. Norman to this species rather than to *Haliphysema tumanowiczii*, admirably illustrate the same multiple condition. In Dr. Bowerbank's plate, which represents a fragment only, the base is apparently tubular,—a sort of creeping stolon giving off the erect pedicels at intervals; but Moebius figures, *loc. cit.*, pl. i. fig. 3, a specimen with a convex base very similar in character to that of *Haliphysema tumanowiczii*, only more outspread, from which spring three columns, one of them simple and undivided, a second with two branches, and the third with three branches. It by no means follows that this is an invariable condition, and there is nothing to show whether the large multiramose specimen figured in Pl. XXVII, A. had originally an independent foot, or was one of several pedicels attached to a common basal chamber. Until more is known of the structure of the basal portion in cases where there are a number of columns, and of the connection subsisting between them, it is difficult to say whether the collective test should be regarded as a colony, or as an individual organism, of which the columns are analogous to the branching arms of some other arenaceous Foraminifera.

With respect to the minute structure of the walls of the test, the particulars already given in the description of the type apply equally to the present species. The projecting spicules, especially those that beset the distal extremities, are not directed forwards in a brush-like tuft, as commonly seen in the clavate forms of *Haliphysema tumanowiczii*, but radiate in all directions.

Mr. Carter informs me that in habitat, not less than in mode of growth,

¹ This is the specimen alluded to by the Rev. A. M. Norman,—Monogr. Brit. Spongiadæ, vol. iv. p. 38.