

Species belonging to the following genera are found in the collection :—

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| 1. <i>Calypterinus</i> , n. gen. | 5. <i>Amphilaphis</i> , n. gen. |
| 2. <i>Stachyodes</i> , n. gen. | 6. <i>Plumarella</i> , Gray. |
| 3. <i>Stenella</i> , Gray (<i>emend.</i>). | 7. <i>Caligorgia</i> , Gray. |
| 4. <i>Thouarella</i> , Gray (<i>emend.</i>). | 8. <i>Primnoella</i> , Gray. |

Genus 1. *Calypterinus*,¹ n. gen.

Axis simple, consisting of a horny matrix, largely filled with calcareous particles. Polyps arranged in regular verticils on the axis, of from five to seven each; at each verticil a portion of the axis is free from polyps, but the large wing-like calcareous spicules of the lateral polyps overlap and form a circular opening, which runs in a direct line all along that portion of the axis which is free from polyps. The polyps are thus in a measure bilaterally arranged. The basal portion unknown, but it would appear as if the polyps in this genus opened with their oral region looking downwards.

Calypterinus allmani, n. sp. (Pl. XI. figs. 1, 1a; Pl. XIV. fig. 5; Pl. XX. fig. 2).

This species is represented in the collection by two specimens of about 100 mm. in height. In the more perfect specimen, the axis towards the apparent basal portion is brittle and hard, 1 mm. in diameter, somewhat more horny and less calcareous towards the apex, but always leaving a well-developed horny matrix when treated with an acid. The cœnenchyma of the axis is thin, with large, oblong, minutely tuberculate, scale-like spicules, which allow the iridescent axis to be seen through them. The polyps are arranged in a bilateral manner on the axis, in verticils of from four to seven each; judging of the basal and apical portions of the axis by their hardness, it would seem that the polyps look downwards, but they appear to have in common with many of the members of the subfamily a power of folding themselves inwards on the axis. The polyps are 3 mm. in height, with a diameter of 1 mm. The intervals between the verticils of polyps varies, being sometimes not appreciable, and at other times it is about 1 mm. The spicules on the body of the polyp are arranged in three series—not counting a few small scales connecting the body of the polyp to the main axis; the first row consists of two large scales, wing-like, one overlapping the other at its base. In the case of the lateral polyps in each verticil, one of these scales from either polyp forms part of the arch of the tunnel, which runs in a direct line along the main axis; these scales measure about 2 mm. in length, and about 2 mm. in the widest part. These spicules will be best understood on reference to Pl. XIV. fig. 5, where the figure 5

¹ καλυξ, πτερίνος.