

THE ALCYONARIA.

Part I.

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THE *Alcyonaria* collected at the Ellice Group by Mr. C. Hedley, prove to be of more than ordinary interest, inasmuch as the Collection now dealt with includes four new species, and many rare or but little known forms.

There are three species of the genus *Sarcophytum*, one of which was originally described by Dana as *Alcyonium latum*, from Fiji; herein it is referred to the genus *Sarcophytum*, to which it undoubtedly belongs.

The genus *Lobophytum* is represented by six or seven species; two are described as new, and four others have been re-described and illustrated, with a view to aid in their determination in the future.

In dealing with the species described by the earlier authors, there is a considerable amount of doubt as to their specific identity, from the fact that the characters afforded by the spicules have generally been ignored, and only the external features given. In such cases I have thought it better to accept the species, when they agreed fairly well with the descriptions, rather than describe them as new.

Under this category are included *Alcyonium tuberosum*, Q. & G., *A. confertum*, Dana, and *A. viride*, Q. & G. The latter appears to differ greatly from the other species under notice, and Studer refers it to the genus *Lobularia* in his account of the *Alcyonaria* of S.M.S. "Gazelle."* Judging by the spicules alone, the species herein enumerated and referred to the genus *Lobophytum* are very heterogeneous, displaying great variation in the size and also in the tuberculation of the larger spicules; the tubercles are not in whorls but are irregularly scattered, this is so in *L. tuberosum*, *L. confertum*, and *L. densum*, which in this respect are closely allied to *L. marenzelleri*, and also in the size of the siphonozooids, which are minute and almost rudimentary.

* Monatsb. Akad. Wiss. Berlin, 1878, p. 634.