

ing the mode of its occurrence, however, it can only be looked upon as a remarkable variation in the characters of *Madrepora*.

Another curious feature in this same species is the condition of two of the septa in a large number of the lateral calicles. Two opposite septa are not only enlarged, as is often the case in many species of *Madrepora*, but become distinctly exsert and sometimes considerably so. In other calicles no trace of this exists.

In many species of the genus more or less marked differences exist between the terminal and lateral calicles, but, apart from the suggestive fact that in many species no such differences exist, it must be remarked that the terminal and lateral calicles are subject to considerable variation among themselves; so that it does not seem possible to regard the terminal polyps as presenting a case of dimorphism. Verrill remarks that dimorphism is unknown among the *Madreporaria* unless the terminal polyps of *Madrepora* be regarded as offering such a case.<sup>1</sup>

Two important papers, relating, among other things, to growth and budding in *Madrepora*, have recently been published, one by Mr. S. O. Ridley of the British Museum of Natural History,<sup>2</sup> and the other by Professor Duncan.<sup>3</sup> It seems to be clearly established that budding takes place from the *walls* of the calicles, and not from their *margin*. No case of marginal budding or fission has come under my observation.

Fifty species of the genus are in the collection. Of these it is probable that some will have to be made synonyms of others, for though, from the want of series of specimens, it has been impossible in many cases to determine with certainty their specific identity or difference, it is evident that many of the forms are very closely allied.

### 1. *Madrepora securis*, Dana.

*Madrepora securis*, Dana, Zoophytes, p. 486, pl. xliii. fig. 2.

Three large fragments of this species were obtained. One, from Banda, is simply an erect plate, grown obliquely on one side, the upper margin of which has lost its typical quadrate shape and become somewhat trenchant. The calicles, though tubiform, have the lower edge much stronger than the upper, and often become rather shortly cochleariform, as in *Madrepora labrosa*.

*Localities*.—Banda; Samboangan, Philippines.

### 2. *Madrepora cuneata*, Dana.

*Madrepora cuneata*, Dana, Zoophytes, p. 487.

A single small specimen and a fragment of this species were obtained. The thick lobes which arise from the spreading, incrusting, recurved and contorted plates, are very

<sup>1</sup> *Proc. Amer. Assoc. Adv. Sci.*, 1867, p. 150.

<sup>2</sup> *Ann. and Mag. Nat. Hist.*, ser. 5, vol. xiii. p. 284.

<sup>3</sup> *Ann. and Mag. Nat. Hist.*, ser. 5, vol. xiv. p. 188.