nowise disqualifies the specific designation from being used with a new generic name, and since, for the last fifty years, it has been continuously employed by a succession of authors to designate the same sponge, it is likely to continue to be so employed, unless more cogent objections than those alleged by Vosmaer are forthcoming.

Good accounts of the general characters are given by Johnson and Bowerbank; the histology is described in my paper on the species (loc. cit.). Vosmaer found in his specimens "a stronger developed dermal mesodermic layer with smaller subdermal cavities" than I figured in mine, and conjectures that this may be due to a "different state of contraction." The fact I do not doubt, the explanation I do not understand, but this is of no consequence as Vosmaer's description explains itself. There is, as he truly says, relatively more mesodermal tissue in the outer part of the cortex in his specimens than in mine, and consequently the subdermal cavities are smaller; the relative abundance of mesoderm is connected with the growth of the sponge, in one sponge there may be more, in another less (indeed, in the same individual the cortex may vary from the structure shown in Vosmaer's figure to that represented in mine), and in a young sponge there is less than in a fully grown one; evidently Vosmaer's specimens were more fully grown than mine, which are not more than 10 mm. in diameter. complains of my illustrations of this species as being "diagrammatic," I take the opportunity of explaining that there are no grounds for this charge; my drawings are accurate tracings by "camera lucida," mere outlines, and very inartistic, no doubt, but absolutely faithful, and, after all, on comparing them with Vosmaer's more finished figures, I fail to see that they convey less real information (loc. cit., pl. ii. fig. 10).

O. Schmidt fell into great confusion with respect to this sponge. One almost doubts whether he could ever have seen it, or surely he would not have referred it to *Tetilla*. His genus *Craniella* is evidently, however, founded on the characters of this species. The two slides of mounted spicules presented by Schmidt to the British Museum as examples of *Tethya cranium* are evidently from two quite different sponges, one from Iceland may be *Tetilla polyura*, the other from Florida some species (not *cranium*) of *Craniella*.

Craniella infrequens (Carter).

Tethya cranium, var. infrequens, Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. xviii. p. 405, pl. xvi. fig. 48, 1876.

" ,, Norman, Bwk., Mon. Brit. Spong., vol. iv. p. 43, 1882.

" ,, Hansen, Norske Nord. Exped.; Spongiadæ, p. 18, pl. v. fig. 5, and pl. vii. figs. 17, 18, 1885.

Sponge similar to Craniella cranium.

Spicules.—I. Megascleres. 1. Somal oxea. 2. Cortical oxea, 0.58 by 0.032 mm. 3. Protriæne, rhabdome 0.032 mm. in diameter; cladi 0.14 by 0.026 mm., chord 0.16 mm. 4. Anatriæne, cladi 0.16 by 0.02 mm. chord 0.22 mm.