he included several not very closely connected sponges, and of these, two in particular, evidently of different generic value, have been made the subject of controversy. These are Tethya cranium and Tethya lyncurium. For one of these it became necessary to create a new genus; and it is claimed by Gray and Carter that the first to recognise this was Nardo, who in 1833 proposed the genus Donatia to receive Tethya lyncurium; and if the genus Donatia were so contrived as to cut Tethya lyncurium adrift from Tethya cranium, the contention would of course be successful. Neither Nardo's definition, however, nor the species which he enumerates in illustration, bear out this supposition, The definition runs as follows:—"Donatia, aggregata tuberosa, rigida, tenacia, fere pumicosa in sicco, sarcoidea ponderosa in vivo, superficie varia, sæpe porosa, fulcimenta aculeiformia conspicua, rigida, simplicia vel polycuspidata quandoque granulosa in aggregatorum superficie, dispositione varia, pulpæ animalis ope coalita. Species: Donatia lyncurium N., cydonium N.; cuspidaria N.; obvolvens N.; longaculea N.," &c.

There is nothing in this piece of latinity exclusive of *Tethya cranium*, and as to the other species, all that we know of "cydonium" points to its *Geodine* character. *Donatia* may be regarded as a mere synonym of *Tethya*; nor could we expect much better when we call to mind that Nardo divided all sponges into three orders, including between them altogether not more than twelve or fourteen genera. Had Nardo not found a friendly exponent in Schmidt, his generic names would probably have all long ago been forgotten.

The exclusion of Tethya cranium we owe to O. Schmidt (1862); the revised definition of the genus for which he retained the name Tethya is as follows:—Tethya, Lamarck; corticatæ globosæ vel subglobosæ, cute crassa, fibrillis distincte contexta et corpuscula stellata continuente obductæ. Spicula simplicia fasciculata e centro vel e nucleo subcentrali radiantia usque ad superficiem.

By this definition and the citation of *Tethya lyncurium* as an instance, Schmidt has stamped the name *Tethya* upon *Tethya lyncurium* indelibly, and thus the "orange of the sea," as Lamouroux called it, will now always be known as *Tethya lyncurium*, Linn. For *Tethya cranium*, Schmidt proposed the new name *Craniella cranium*. An attempt to reverse this nomenclature was made five years later by Gray, who retained the name *Tethya* for *Tethya cranium*, and coined a fresh designation, *Donatia aurantium*, for *Tethya lyncurium*. The proposal was made too late, and would lead to much inconvenience; had it been suggested before Schmidt's restricted definition of *Tethya* was published, the name *Donatia* would probably have found wider acceptance; now it naturally meets with no support, always with the important exception of Carter's ingenious advocacy.

The variations of this, as of most well-known sponges, are so extreme, that it would need a laborious examination of a large series of specimens to define the limits of individual and collective differences. O. Schmidt at first (1862) recognised two