or single, and then forming the simple termination of a long narrow canal, which completely traverses the cortex. Cortex thick, usually differentiated into a collenchymatous outer and a fibrous inner layer.

Spicules.—I. Megasclere. 1. *Strongyloxea*, of the same form as in *Tethya ingalli* and *Tethya seychellensis*, from 1·6 by 0·0193 mm. to 2·54 by 0·0387 mm.

II. Microscleres. 2. *Cortical spheraster*, very variable in form, centrum always large, actines conical, oxeate; smooth or sparsely spined, or dichotomose; from 0·039 to 0·097 mm. in diameter.

3. *Somal* and *choanosomal asters* similar; both very variable, a centrum is usually present, the actines are conical or cylindrical, oxeate, or more usually truncate or strongylate, from 0·0118 to 0·02 mm. in diameter.

Colour.—Dull orange to bright chrome-yellow when alive, greyish-white in spirit.

Habitat.—Mediterranean Sea:—the Adriatic (Quarnero, Zlarin, Lesina, Corfu), coast of Algiers. English Channel:—South Devonshire (Plymouth, Budleigh Salterton, Torquay), Cornwall (Towey Harbour), Sussex (Hastings), Guernsey (Tremaine Bay, 13 fathoms), Brittany (Roscoff, Isle of Douon, lowest spring tides). Atlantic Ocean:—Ireland (Westport Bay, county Mayo and Connemara), West Florida. German Ocean:—Norway (from Trondjheim to the North Cape; Kors Fjord, 180 fathoms). Arctic Ocean:—Lat. 71° 12·5′ N., long. 20° 30′ E., 135 fathoms; lat. 72° 9′ N., long. 24° 42′ E., 145 fathoms.

Remarks.—The general agreement of zoologists to call this sponge *Tethya lyncurium* is opposed by Carter, who advocates the claims of *Donatia aurantium.* In the following short history justification is found for the accepted view. Partly owing to the well-marked characters of the sponge, partly to the truthfulness with which they are portrayed by Donati, there is no mistaking the species which this clear-sighted observer intended in his description commencing "Tetie sferica . . . ." These two words, however, do not constitute a name in the Linnean sense, and, as they are pre-Linnean, may be dismissed. Linnæus then named the sponge *Alcyonium lyncurium* (1767), and "*lyncurium*" as the specific designation is therefore happily inalienable.

Pallas, however, in his excellent description (1776) unfortunately adopted another, and the name "*aurantium*" given by him is that advocated by Gray and Carter; I do not precisely see on what grounds. The sponge is so readily recognised, even without microscopical examination, that it must have been perfectly well known to the naturalists of Linnæus's time and to their immediate successors; Lamarck and Lamouroux identify it and adopt Linnæus's name without hesitation.

The discussion is thus narrowed down to the selection of the generic name. Lamarck is author of the genus *Tethya*, or as he sometimes spelt it "*Tethea*," but under this name