stelligerus, Carter[1]; *Vioa johnstoni*, O. Schmidt,[2] and several new species to be described later.

The list of astrophorous Monaxons not directly related to *Tethya* is sufficient to show that the astrophorous character is by no means so very exceptional in the Monaxonid group. A feature which to my mind is more suggestive of affinity to the Stellettidæ is the association of one or more very small asters with the spheraster, one of these smaller forms being sometimes a chiaster with terminally tylote actines, of essentially the same characters as the chiaster of species of *Myriaster* and *Anthastra*, this suspicion of alliance suggested by the association of two asters, one of them a chiaster, is, however, weakened by the fact that the chiaster is a very simple and apparently somewhat primitive form of spicule and might very well be independently evolved in widely different sponges.

The existence of a considerable number of astrophorous Monaxonida requires to be recognised in classification, a task which is much facilitated by the excellent arrangement of the Monaxonid sponges proposed by Messrs. Ridley and Dendy; into this I shall introduce as few changes as possible.

Putting on one side the Homoraphidæ, it will be observed that the Monaxonida of Ridley and Dendy fall readily into two groups, those distinguished by the presence of sigmaspires, sigmas, or chelæ, and those in which the microsclere when present is some form of aster, it may be a euaster, or a spiraster, or some closely related form. I propose, therefore, to recognise these two groups as suborders, the former as the Meniscophora, the latter as the Spintharophora.[3] The Meniscophora will include the family Heteroraphidæ, Ridley and Dendy, and the Desmacidonidæ, O. Schmidt; the Spintharophora, the Axinellidæ, Suberitidæ, Spirastrellidæ, and Tethyidæ, and such other aster-bearing sponges as will be described and discussed later. The Homoraphidæ, since they are without the guiding microsclere, will be relegated to a third suborder, the Asemophora.

It will probably be objected that the Spintharophora include many sponges, and even a whole group of sponges (Suberitidæ), which are totally devoid of microscleres; to this it may be replied that the alliance of these sponges without microscleres to those with which they are associated, is discoverable on other grounds, and that once united to aster-bearing sponges, a group arises to which a name may be given as generally characteristic without being necessarily applicable to every constituent individual, for a name cannot always contain in itself a definition. Further, we have already seen that the absence of a microsclere is a matter of less importance than its character when present (*vide* Introduction), hence when in a natural group of sponges microscleres are generally absent, it becomes a matter of great interest to discover cases in

[1] *Ann. and Mag. Nat. Hist.*, ser. 5, vol. vi. p. 124.

[2] *Loc. cit.*, p. 78, pl. vii. fig. 17.

[3] μηνίσκος, ὁ, a lunula; σπινθήρ, ὁ, a sparkle.