

triaxon is tetractine tetraaxon, we shall substitute for it the equivalent "calthrops" ($\chi\eta\lambda\acute{\eta}$, $\acute{\eta}$, a horse's hoof; $\tau\rho\acute{\upsilon}\pi\acute{\alpha}\omega$, to pierce through; a hoof-piercer). The singular and plural forms of this word are the same. The "h" is inserted for euphony.

2. *Triod* ($\tau\rho\acute{\iota}$ - \omicron - $\delta\omicron$ s, $\acute{\eta}$, a meeting of three roads, Lat. *trivium*; here abbreviated on the example of "tripod"). When one actine is suppressed, the remaining three come to lie in one plane, and a triradiate spicule or triod, the commonest form of spicule in the Calcispongiæ, results. In von Lendenfeld's account of the spicule-nomenclature, which is taken from that accepted by our conference in London, this form is assigned to a triaxon group without notice of the fact that the triaxon group is that of the three rectangular axes.

Modifications of the Calthrops.

Modifications occurring frequently enough for special designations are not met with, occasionally one or more of the actines may dichotomise, but no instance is known in which this occurs other than as an isolated variation.

Modifications of the Triod.

As these rarely occur in the Tetractinellida, but are almost restricted to the Calcispongiæ, we shall not need to consider them here.

Tetracrepid Desma.

This sclere (Pl. XXIX. figs. 7, 8) is formed by the deposition of silica upon a small calthrops (microcalthrops), it presents therefore four rod-like arms proceeding from a centre, these (which as they immediately invest the actines of the crepis may be termed "epactines") may branch once or oftener, and usually terminate by subdividing into tubercles. In the Lithistida generally the desmas are united by the intergrowth, without fusion, of such tubercles, or by the growth of the ends of the cladi of one desma over some part of another, such as the sides of the epirabd or end of the epactine; this mode of union we shall term "zygosis," and the tubercles or laminæ by which it is effected will be distinguished as "syzygial," the union itself being a "syzygy."

Acrepid Desma.

In one group of Lithistids (Anomocladidæ) the desma does not form upon a crepis, at least not a spicular crepis; it presents a massive centrum, with what appears to be a large nucleus, and which may indeed actually be the nucleus of a crepidial scleroblast,