which has ceased to secrete its sclere ; variable numbers of actines proceed from the centrum, usually from four to twelve ; when, as is usual, only four or five are present, they proceed from one face of the centrum, viz., that which is directed centripetally, and terminate by abutting with expanded ends on the centrifugal face of the centrum of the desmas situated in the next row further inwards. From the centrifugal face of the centrum actines are seldom produced, but a thick bushy growth of spines replaces them, these more or less conceal the syzygial ends of the actines, rendering the nature of the zygosis obscure.

Class II. MICROSCLERES (Microsclera).

Comparatively small or " flesh " spicules.

These, which are perhaps the most interesting group of spicules, since it is from them that the megascleres have been derived, and since they still present us with a remarkable
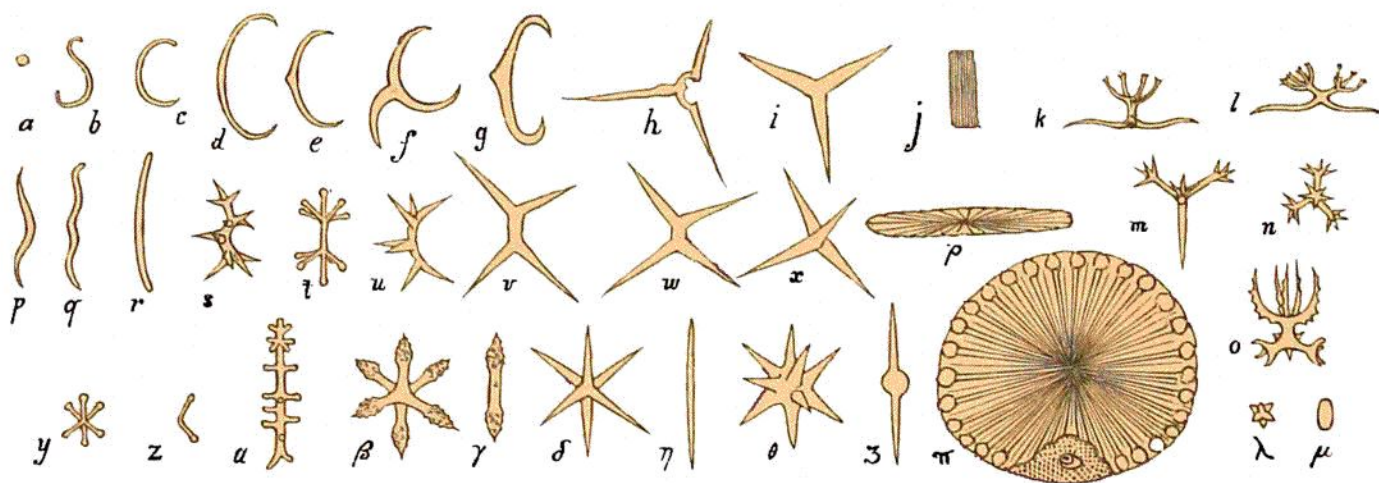

FIG. XII.—a, Globule ; b, c, sigmaspires ; d, sigma of a Holothuroid ; e, centractinate sigma of a Holothuroid ; f, microtriod with curved rays, produced from e by overdevelopment of the centractine ; g, centractinate sigma of a sponge ; h, microtriod of *Placina*, retaining traces of its sigmate origin ; i, microtriod ; j, orthodragma ; k, monolophous microcalthrops ; l, dilophous microcalthrops ; m, trilophous microcalthrops ; n, tetralophous microcalthrops ; o, candelabrum ; p, toxa ; q, spirula ; r, microstrongyle, derived from a sigma ; s, spiraster ; t, amphiaster ; u, metaster ; v, w, plesiasters ; x, microcalthrops ; y, chiaster ; z, reduced chiaster ; a, sanidaster ; β, anthaster ; γ, microxea produced by reduction of β ; δ, oxyaster ; η, microxea resulting from its reduction ; θ, spheraster ; ζ, centrotylote microxea resulting from its reduction ; λ, pycnaster ; μ, microstrongyle resulting from its reduction ; π, spherical starraster, showing the nucleus situated in the hilum ; ρ, elongate sterraster.

series of transitions within their own limits, are divided into two chief series, the radiate or astral, and the curvilinear or spiral. There are some few forms that cannot properly be said to belong to either of these groups, but they are so few and exceptional that it seems preferable to include them with the forms to which they are most nearly allied by descent, than to create special groups for their reception.