

from the interest attaching to the types represented. At the same time no form has been discovered in this family of sufficient distinctness from the known genera to rank as the representative of a new generic type. Those extraordinary forms allied to *Esperia*, with which the researches of Professor G. O. Sars, Sir Wyville Thomson, Mr. Carter, and Professor O. Schmidt have made us familiar, viz., *Chondrocladia* and *Cladorrhiza*, are present to the number of at least nine species, of which

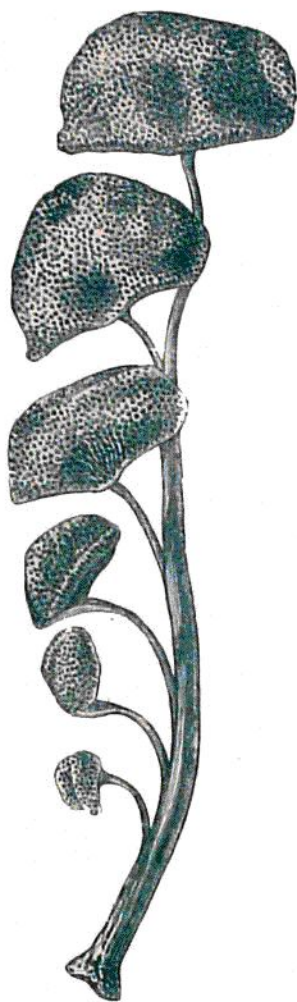


FIG. 187.—*Amphilectus challengerii*, Ridley, as seen from the front, reduced to one-half natural size. Moluca Sea, 825 fathoms.

three *Cladorrhizæ* and as many *Chondrocladiæ* are certainly new to science; among the points of interest which they present not the least is the fact that the majority of the species do not exhibit the same shrubby form as the original species to which these names were applied, but a shape the peculiarities of which led Professor Schmidt to found the genus *Crinorrhiza* for a specimen belonging to this division of the Desmacidines obtained off Barbados. *Crinorrhiza* has a relatively small, subglobular body, from the equatorial aspect of which radiate in a horizontal direction a number of strong spicular tufts; a central root may also be present. While, however, Professor Schmidt considered these, certainly remarkable, external characteristics of sufficient importance to justify the erection of a genus, the Challenger specimens show that the spiculation of the five species which exhibit them belongs to two distinct types, the one that of *Chondrocladia*, the other that of *Cladorrhiza*. It therefore becomes necessary (having regard to the superior weight which must be admitted to attach to spicular characters in contrast to those derived from the external form) to abandon the genus *Crinorrhiza*, as constituting a mere growth-type, comparable to the 'artificial genera,' *Amphoriscus*, *Olynthus*, &c., recognized by Professor Haeckel among the Calcarea. Of the more familiar genera *Esperia* has nine or ten species, of which probably one-half are new to science. *Esperia rotalis*, Bowerbank, is remarkable for ranging from Britain to Port Jackson; a new species from the Cape is distinguished by its immense tricurvate and bihamate spicules. *Alebion* is represented by some new species in which the 'bipocillate' spicule attains a

size and beauty hitherto unknown. *Myxilla* is rich in individuals, but there is a sameness about the characters of the species which contrasts strongly with the manifold forms assumed by *Esperia*; a new species from Japan will be termed *Myxilla japonica*.

"A type characterised by a smooth acute skeletal and an equianchorate parenchyma spicule, to which the name *Amphilectus*, Vosmaer, has been restricted, produces one of the few new Monaxonida possessing a striking external habit. *Amphilectus challengerii*