

may draw up, in addition to this, another systematic arrangement (more nearly agreeing with the arrangement of the Calci-spongiæ hitherto in vogue) which gives thirty-nine genera and two hundred and eighty-nine species. A systematist who gives a more limited extension to the "ideal species" might arrange the same series of forms in forty-three genera and three hundred and eighty-one species, or even in one hundred and thirteen genera and five hundred and ninety species; another systematist, on the other hand, who takes a wider limit for the abstract "species," would use in arranging the same series of forms only three genera, with twenty-one species, or might even satisfy himself with one genus and seven species. The delimitation of species and genera appears to be so arbitrary a matter, on account of endless varieties and transitional forms in this group, that their number is entirely left to the subjective taste of the individual systematist. In truth, from the point of view of the theory of descent, it appears altogether an unimportant question as to whether we give a wider or a narrower signification to allied groups of forms—whether we choose, that is to say, to call them genera or species, varieties or sub-species. The main fact remains undeniable, viz., the common origin of all the species from one ancestral form. The many-shaped Calcareous Sponges furnish, in the very remarkable conditions of their varieties of aggregation (metrocomy), a body of evidence in favour of this view which could hardly be more convincing. Not unfrequently the case occurs of several different forms growing out from a single "stock" or "cormus"—forms which until now have been regarded by systematists, not only as belonging to different species, but even to different genera. Fig. 10 in the frontispiece