

viduals of one and the same community are by no means so uniform among themselves as in the class of Polyps. The Acalephian communities are, indeed, generally polymorphous, and cases of great uniformity among their individuals are rare. For these communities we need comprehensive names, as much as for the Polyp communities. Now, just as the name *Polyparium* has been framed to designate a *Polyp community*, we may apply the name of *Hydrarium* to a *community of combined Hydræ*. In this sense, a bunch of Corynæ or of Tubulariæ united by their stems and stolons, a patch of Hydractiniæ rising from their common basis, a branching Campanulariæ or a Laomedæa communicating with others by stolons, or even a single stem with its lateral buds, constitutes *Hydraria*. And so also are Sertulariæ and Plumulariæ genuine *Hydraria*. The same name must also apply to the Siphonophoræ as far as they are communities. But here a distinction is at once suggested, in accordance with the special character of the individuals forming these communities. As long as the combined individuals are all Hydræ, the name *Hydrarium* correctly applies; but among Siphonophoræ, as among Corynoids and Tubularioids, there arise Medusæ buds from the Hydræ, and these buds are either single, or form by themselves communities of individuals in no way to be distinguished from genuine Medusæ, to which the name of *Hydraria* cannot be applied, but for which that of *Medusarium* seems very appropriate. I would therefore call *Medusarium* every bunch of Medusæ buds arising from a Hydra, in contradistinction to the single Medusæ buds produced by other kinds of Hydræ. For instance, the Hydræ of a Coryne *Hydrarium* never produce *Medusaria*, but always single Medusæ buds, while the Hydræ of a Tubularia *Hydrarium* always produce *Medusaria*. The structural combinations in these animals are so complicated, that, unless we make these distinctions, it will become necessary to resort to long circumlocutions correctly to describe them, and duly to discriminate the true nature of the different kinds of individuals united in one and the same community. It is evident, that a Tubularia community, so long as it produces no Medusæ buds, is simply a *Hydrarium*; but presently it brings forth Medusæ buds in large clusters, hanging from the single Hydræ in the form of *Medusaria*, and each Hydra produces several such *Medusaria*, which are as much parts of the enlarged community as the single Hydræ themselves. By this time the community is no longer a mere *Hydrarium*, but a *Hydrarium* bearing *Medusaria*. It is now a community of heterogeneous communities, which may well be called a *Hydro-Medusarium*.

The use of such names for these different communities and their combinations will greatly simplify our descriptions, and add much precision to our characteristics of the different families and genera of the Hydroids. For instance, the *Tubularioids* as a family may be described as *Hydro-Medusaria* arising from single *Hydræ* which by budding and by stolons become *Hydraria*; each adult Hydra producing in time