

that neither Polyps nor Acalephs nor Mollusks will exhibit their natural appearance when taken out of the element in which they live, it is still to be lamented that both the star-fishes and sea-urchins are everywhere represented as they appear when taken out of the water, and all their soft appendages, so numerous and diversified, are drawn in or so contracted and collapsed as no longer to give the slightest idea of their natural beauty.¹ Like Aristotle, Rondelet still unites the Actiniæ and Acalephæ under the name of sea-nettles (*Urticæ marinæ*), distinguishing the former as the fixed sea-nettles and the latter as the free sea-nettles. Even Cuvier, in his earlier works, allows these animals to remain together, though it was he himself who separated them afterwards, for the first time, as members of two distinct classes. Rude as are the illustrations published by Rondelet, it is hardly possible to mistake in his fifth species the *Rhizostoma* of Cuvier, although the disk is too small and the arms too straight, and in the sixth the *Chrysaora* of Péron, although Linnæus refers that figure to the *Aurelia aurita*.

In the writings of Aristotle a single part of the Acalephe is distinguished by name,—the *mouth*, which occupies the centre of the body, of which nothing is stated except that it is fleshy. The passage already quoted from Pliny (Lib. IX. ch. 45) speaks of *leaves* (“ac prænatante piscicula frondem suam spargit”), no doubt meaning by *frons* the thin, expanded margin of the disk, and the appendages about the mouth, which he considers as a *root* (“ora ei in radice esse traduntur”), thus carrying out a comparison of these beings with plants. Rondelet, on the contrary, vindicates especially their animal nature when he says, that since they alternately expand and contract their blade, which serves as feet, and since they absorb food through the mouth and thus show themselves provided with the senses of touch and taste, which are essential to the animal life, he considers them as imperfect animals, and not as Zoöphytes, as Pliny does.² Speaking of the small sea-nettle, which is his first species, he mentions its short tentacles, and its resemblance to the large intestine, thus distinctly pointing to the genus *Actinia*, of which, he says, there are several varieties, some green, some blue, some blackish, with blue, yellow, or red spots. His second species seems to be a Tubulibranchiate Annelid, for he says it bites. His third species is another *Actinia*, with which he confounds the *Æquorea* of the Mediterranean.³

¹ In my next Monograph I shall have an opportunity of representing the North American Echinoderms as they appear in life.

² Cum igitur Urticæ frondem suam, quæ pedum vice est, modò dilatent modò contrahant, cum ore cibum accipiant, id est, cum tactu gustuque, qui duo sensus ad vitam animalium sunt necessarii, præditæ sint, non inter Zoophyta, ut Plinius, sed inter animalia

non omnino perfectæ, eas numerabimus. Rondeletius. Lib. XVII. p. 527.

³ It can hardly excite surprise to find, that, with as little knowledge as Rondelet possessed upon the subject of Acalephs in general, he should have confounded a *Medusa* and an *Actinia*, especially when it is remembered that the numerous radiating tubes of the *Æquorea* give it a greater resemblance to an