

The peculiar form of the diagram of Péron and LeSueur recalls the character of the classifications generally adopted in France at the time of its publication, consisting in dichotomic divisions and subdivisions, providing even for the position of unknown representatives of the methodical framework, and exhibiting more ingenuity than insight into the nature of true classifications. The chief object naturalists had in view in devising such arrangements was rather to facilitate the identification of genera and species, than to ascertain their natural relations. At that time Cuvier had not published his views upon classification; so that the idea of the subordination of characters, so fruitful in important results, did not yet pervade the systematic works of the beginning of this century.

It is much to be regretted, that the very extensive investigations of Péron and LeSueur, and the many admirable drawings of Acalephs made from nature by the latter during his travels in every part of the world, should have been but partially published, and should have remained unknown to most naturalists outside of France.

#### CLASSIFICATION OF THE SIPHONOPHORÆ BY LESUEUR.

Lesson, in his "Histoire naturelle des Zoophytes, Acalèphes," has published a classification of the Siphonophoræ by LeSueur, the original of which I have been unable to obtain. LeSueur calls these animals Radiaires mollasses composés, and divides them in the following manner:—

- 1st Group. *Isolated*: 1° Porpita and Verella. 2° Rhizophysa and Physalia.  
*United*: 1° Physophora and Stephanomia. 2° Protomedea and Amphiroa.

From the place this paper occupies in Lesson's account, I am induced to believe that it must have been drawn up about the time of the publication of the classification of the Medusæ proper by Péron and LeSueur.

Cuvier's influence upon the progress of the natural history of the Acalephs is not to be measured by the amount of special information he has contributed to the stock of our knowledge of these animals, but rather by the spirit he has infused into the study of Natural History. His recognition of the four primary groups of animals, based upon four different plans of structure, not only justified the separation of the Acalephs as a class, but established at the same time their true relation to the Echinoderms and Polyps in one great natural division: and though Cuvier made the mistake of uniting with them the Helminths and Infusoria, on account of the simplicity of their structure, he nevertheless disclosed the principle upon which their classification is finally to be settled; and the mistake he made on that occasion was only the result of his own departure from that very principle, when he allowed the consideration of the simplicity of the structure of the Intestinal Worms and of the Infusoria to overrule that of the plan of their structure.