if my supposition that Nausithöe is a young Pelagia is correct, the middle lobe of the genital pouches $(b\ b)$, of my $Fig.\ 2$, are not yet developed.

I have ventured to introduce here these remarks, which may seem irrelevant, in consequence of the deep conviction which has gradually grown up in my mind, that there is a uniformity of plan among Acalephs far more strongly impressed upon all their various types than could be inferred from the manner in which they have been described, or from the manner in which they are represented. I venture to make this case a test of the validity of this conviction, even though I have, in so doing, to question the accuracy of so sagacious an observer as Gegenbaur.

SECTION II.

THE GENERA OF PELAGID.E.

Thus far the genera admitted among the Pelagidae have been distinguished by the number of their tentacles, Pelagia proper containing those with eight tentacles, Dodecabostrycha those with twelve, Heecadecabostrycha those with eighteen, and Polybostrycha those with twenty-four or more tentacles. As characterized by Péron and LeSueur, the genus Chrysaora is very indefinite, as he simply assigns to it a peduncle perforated in the centre, entirely distinct arms, which do not branch, and a large central cavity. Eschscholtz has characterized it more precisely, by showing its affinity with Pelagia, as founded upon the pouch-like appendages of the main cavity and the insertion of the tentacles, which are more numerous. On this last account, however, Eschscholtz, who considers the number of tentacles as of trifling importance, is inclined to regard Chrysaora as hardly generically distinct from Pelagia; but if, instead of considering only the number of these appendages, we take into account their connection with the lobes of the margin, it will be at once apparent, not only that Chrysaora, as defined by Eschscholtz in imitation of Péron and LeSueur, is a distinct genus, but that it embraces, like Pelagia, several distinct generic types.

Pelagia proper embraces all those species thus far referred to the genus, which, like Pelagia noctiluca, cyanella, and panopyra, have sixteen equally developed pouches, each of which branches off into two distinct sacs near the margin, and are there so combined that the marginal lobes embrace one sac of two adjoining pouches, and that in the indentations dividing these lobes there are, alternately, one eye and one tentacle, the whole margin being divided into sixteen lobes, with