Cydippe of Eschscholtz CYDIPPID.E, and at the same time pointed out two groups among these Acalephs, which seem to me to constitute in reality two distinct families. To one of these groups he refers the compressed species, of which the Eschscholtzia cordata of Kölliker is the type; to the other, he refers the more rounded species, of which the Cydippe Pileus of Eschscholtz is the type. But, in enumerating the species which he would associate with the latter, he mentions those which are quite as remarkable for their compressed form as the Eschscholtzia We have therefore to make a preliminary survey of the whole group cordata. before we can proceed any further in characterizing this family. It is obvious that when Eschscholtz characterized the genus Cydippe he had chiefly round or oval species in view, the only ones belonging to this type he ever saw. It is, further, unquestionable that his genus Cydippe is synonymous with Pleurobrachia of Fleming, and that, since Pleurobrachia is the older name, it must be retained. The plea entered by Eschscholtz for discarding it, rests on a mistake: Fleming did not call his genus Pleurobranchæa, but Pleurobrachia, on account of its lateral arms, and it can never be confounded with Pleurobranchaa, so named on account of its lateral gills. The name Cydippe must therefore be dropped as a generic name, though there is no objection to retaining it as a family name. The genus Mertensia Less,1 which Gegenbaur would suppress, is a good genus, as remarkable for its lateral compression as Eschscholtzia cordata, and therefore not belonging strictly to the type of Cydippe. The genus Eschscholtzia Less. was established for round species. It was therefore a mistake on the part of Kölliker to refer We shall see hereafter, that the genus Janira his Eschscholtzia cordata to it. Oken also contains oval species belonging to the Cydippidæ proper, and that several other species, referred either to Eschscholtzia or Cydippe, constitute also distinct genera of that family.

What I have already said is sufficient to show that Gegenbaur was on the

<sup>1</sup> Lesson has made a singular mistake in naming this genus, which he intended to dedicate to the oldest observer of the species he regards as its type. Now, the oldest observer of this arctic Acaleph is not II. Mertens, the naturalist of the Russian exploring expedition in the Seniavin, but Friderich Martens, of Hamburg, the precursor of Scoresby in the exploration of the seas of Greenland and Spitzbergen, whose work was printed in 1675, and whom Lesson quotes again and again as Mertens. I shall therefore make good the mistake of Lesson, and compensate for his error, by calling another genus of the same family Martensia, the type of which was first observed by H. Mertens, and described by the latter under the name of Beroe octoptera. It is much to be regretted that Gegenbaur should have overlooked the claims of Mertensia Less. to a distinction as genus, and on that account proposed to transfer the name Mertensia to another type. But this cannot be done, not only because the genus Mertensia Less. must stand, but also because the transfer of one generic name to another genus, even when that name has become vacant, leads to confusion, instead of simplifying our scientific nomenclature. The rule I insist upon here is of long standing.