

descriptive portions of the text might have been very much extended, but the intention has been to limit them to cases in which the identity of the forms referred to is unmistakable; and they are sufficient to indicate the difficulties that have been created by the introduction of useless names, and the need that exists for the revision of the generic and specific nomenclature.

*Dimorphism.*—The terms “dimorphism” and “dimorphous,” which are of frequent occurrence in works on the Foraminifera, have been used in connection with two distinct phenomena, and appear to require a few words of explanation.

In their original sense these terms refer to shells exhibiting two modes of growth. Amongst the LAGENIDÆ, for example, it often happens that two allied genera, differing chiefly in the arrangement of their segments, are connected by an intermediate group which partakes to a greater or less degree of the morphological characters of both. Thus the characters of *Cristellaria* and *Frondicularia* are displayed by the dimorphous type *Flabellina*, the early chambers of which are planospiral, whilst the later segments are embracing and form a complanate rectilinear series. In the same way, *Dimorphina* presents the characters of *Polymorphina* and *Nodosaria*, the early segments forming an elevated spire, the later ones a single row, either curved or straight. It is sometimes difficult to say to which genus the intermediate forms more properly belong (perhaps no general rule applies), and it has been usual to treat them collectively as distinct genera and subgenera. Other examples of dimorphism are found amongst the TEXTULARIDÆ, but under somewhat different conditions from those which have been cited; and though manifested in a variety of ways it does not result in the formation of the same sort of intermediate groups. The dimorphism of the TEXTULARIDÆ depends, generally speaking, upon the tendency of the normally multiserial test to assume a simpler arrangement. Thus, a test biserial at its commencement becomes uniserial in its later growth (*Bigenerina*); one triserial to begin with becomes biserial (*Gaudryina*), or uniserial (*Clavulina*), and so on. In rare instances, examples of “trimorphism” may be met with, as in one of the elongated varieties of *Spiroplecta*, the segments of which are arranged planospirally at the commencement, subsequently as an alternating binary series, and finally in a single line.

“Dimorphism” therefore, as understood by d’Orbigny, Parker and Jones, Carpenter, and others, implies the existence of two modes of growth in the individual shell.

The recent interesting researches of MM. Munier-Chalmas and Schlumberger on the “Dimorphism of the Foraminifera” refer to quite another feature of the Order, namely, to the occurrence of the same species in two distinct forms. The late Dr. Philippe de la Harpe was the first to observe that there were certain Nummulites which were usually, if not invariably, distributed in pairs; and that these pairs, whilst agreeing as to general external characters, differed in point of size; furthermore that the internal structure of the