In the scheme proposed by Reuss the division is founded upon the character of the external orifice, the species having a simple rounded opening being assigned to Lagena, whilst those in which the aperture takes the shape of an elongated slit constitute a separate genus, Fissurina. From the narrow standpoint of a local fauna, where the number of anomalous examples appears relatively small, something may be said in favour of either of these methods of classification; but they fail equally to be of service, and are on the other hand a source of additional complication, if any attempt be made to apply them to large collections or to specimens gathered from wider areas.

There are no doubt some forms of Lagena which are only known in the entosolenian condition, but in a majority of cases the same variety furnishes both ecto- and entosolenian specimens. Moebius (Foram. von Mauritius, p. 67) speaks of the entosolenian forms as representing a higher phase of organisation than the ectosolenian, on account of the internal tube; but it may be pointed out that this peculiar feature is not confined to the Lagena, but is occasionally encountered in allied genera, notably in Nodosaria and Polymorphina; and that it is amongst the poorly-developed modifications of the respective types, such as Nodosaria calomorpha and Polymorphina angusta and Polymorphina lanceolata that the entosolenian condition is most frequently observed.

Again the slit-like orifice, the essential character of Reuss's Fissurinæ, though a common peculiarity of the compressed varieties, is often replaced by a rounded opening which may or may not be situated at the middle of a long depression. But it is needless to pursue this subject; enough has been stated already to make it clear that the characters of the aperture are altogether too inconstant to be employed even by way of specific distinction.

The sequence of forms throughout the genus is in fact too close and continuous and too much complicated by the overlapping of collateral varieties, to be capable of consistent or satisfactory arrangement of any sort. Parker and Jones treat all the known forms of Lagena as varieties and sub-varieties of a single species; and from a strictly biological standpoint, this perhaps most nearly represents their true relationship. It is possible, however, to divide the generic series into sections, grouped round a few sub-typical forms, each section embracing a number of easily distinguished subordinate varieties, and many of these varieties in their turn including several minor modifications. An attempt has been made to indicate a graduated relationship of this sort in the annexed Synopsis, and though imperfect and lacking precision, the result may answer the purpose of a classification in the absence of anything better.