of Biological Science, that Ehrenberg, all his life the most zealous opponent of that theory, published his great work on the Infusoria, and at the same time established the "family of multicellular animalcules or Polycystina" (L. N. 16, p. 4).

The "short systematic survey of the genera of cellular animalcules" given by Ehrenberg in 1875 (L. N. 25, p. 157), is only a new edition, increased by sixteen genera, of his first systematic arrangement of the Polycystina of 1847 (L. N. 4, p. 53). Since I have already given a full discussion of this in my Monograph (L. N. 16, pp. 214–219), I need only here remark that a correct understanding of his very inadequate generic diagnoses is only possible by the aid of his figures. Relying upon these I have retained almost all Ehrenberg's genera, although entirely new definitions of most of them have been necessary.

The same is true also of the two orders which Ehrenberg distinguished in his class of "Zellenthierchen." The first order is constituted by his "Netzkörbchen" (Monodictya or NASSELLARIA) formerly known as "Polycystina solitaria"; they include our Cyrtoidea, the greater part of Hertwig's Monopylea. Ehrenberg's second order is the "Schaumsternchen" (Polydictya or SPUMELLARIA), previously called "Polycystina composita"; they include the Peripylea of Hertwig, as well as the Spyridina (our Spyroidea), which belong properly to the NASSELLARIA. Although Ehrenberg's statements regarding the organisation of both these orders were quite erroneous, and his knowledge even of the structure of their shells very defective, I still thought it advisable to retain his names for the groups, since they constituted his one successful effort in the systematic treatment of the Radiolaria (compare L. N. 41, p. 336).

The sketch of a systematic arrangement of the Radiolaria (L. N. 37), which I published in 1881 on the basis of the study of the Challenger Radiolaria, resembles, in respect of seven orders being distinguished, the new system which R. Hertwig founded in 1879, in consequence of the variations which he discovered in the structural relations of the central capsule (L. N. 33, p. 133). It differs, however, inasmuch as his Sphærozoea (my Polycyttaria) are here divided into two orders, Symbelaria (Collosphærida) and Syncollaria (Sphærozoida). In that sketch too I separated for the first time the two subclasses Holotrypasta (Porulosa) and Merotrypasta (Osculosa). The fifteen families established by Hertwig were then raised to twenty-four. The six hundred and thirty genera, which I then distinguished, are still for the most part retained, some, however, in a restricted sense, or with amended definitions.

The differential characters of the orders and families of the Radiolaria, given in the Prodromus in 1881, were amended in a further communication which I gave in 1883 regarding the orders of the Radiolaria (L. N. 46, p. 17). There I reduced the seven orders to four, the structural relations of the central capsule being precisely the same in the Polycyttaria and Collodaria as in the Peripylea. The survey of the affinities of the class was thus rendered much simpler and clearer, and the