ment to the numerous communications regarding the Polycystina, which he had made to the Berlin Academy since 1838, and which he had published in his Mikrogeologie in 1854. It will always be the merit of this zealous and indefatigable microscopist that he first called attention to the great wealth of forms existing in this class; he separated systematically about 500 species, and published drawings of about 400; in addition to which he was the first to lay stress upon the great chorological and geological importance of the Radiolaria.

With these systematic and descriptive, chorological and palæontological works, however, which relate exclusively to the Polycystina, the merits of the famous naturalist of Berlin are exhausted as regards this class of animals. Of the organisation of the Radiolaria, Gottfried Ehrenberg remained entirely ignorant up till his death in 1876. All that a number of famous naturalists had observed during a quarter of a century as to the structure and life-history of the Radiolaria, all the important discoveries of Huxley (1851), Johannes Müller (1858), Claparède (1858), Cienkowski (1871), and many others (L. N. 1–22), and all that I had published in my Monograph (1862) on the basis of three years' study of their anatomy and physiology—all this Ehrenberg ignored, or rather, he regarded it all as worthless rubbish of science, as a chaos of devious errors, resting upon incomplete observations and false conclusions. His strange "special considerations regarding the Polycystina" (L. N. 24, pp. 339–346) and the general "concluding remarks" (L. N. 25, pp. 146–147) leave no room for doubt on this point. Ehrenberg indeed doubted to the last whether any observer had seen living Radiolaria at all (L. N. 25, p. 108).

The invincible obstinacy with which Ehrenberg maintained his preconceived opinion of the high organisation of the Radiolaria, and entirely ignored the contrary observations of other naturalists, is explained by the consistency with which he held to the end the "principle peculiar to himself of the universally equal development of the animal kingdom" (L. N. 16, p. 7). From the complicated arrangement of their siliceous shells he concluded that the animals inhabiting them must possess a structure correspondingly complex, and nearly related to that of the Echinodermata (Holothuria). Like all other animals the Radiolaria must possess systems of organs for locomotion, sensation, nutrition, circulation, and reproduction. Whilst Ehrenberg originally interpreted the Polycystina as siliceous Infusoria polygastrica, and regarded them as compound Arcellina, he afterwards classed them sometimes with the Echinodermata (Holothuria), sometimes with the Bryozoa, sometimes with the Oscillaria (see L. N. 41, p. 336). Although a decided opponent of the cell-theory he called them "multicellular animalcules" (Polycystina), interpreting the pores of the siliceous shell as cells. To-day the opposite term (Monocystina) might be adopted to express their unicellular organisation. It was a remarkable irony of fate that in the self-same year (1838) in which Schwann of Berlin made by his foundation of the cell theory the greatest advance in the whole