

Burmeister (1843), and Beyrich; by the Englishmen, Portlock (1843), Salter, Phillips, and MacCoy; and the Frenchman, Marie Rouault (1847). Dalman and Burmeister proposed a precise nomenclature for the individual parts of the body, and the special terms were still further increased by Beyrich, Salter, and Barrande. For the purposes of systematic arrangement, Dalman and Goldfuss used especially the presence or the absence of eyes, Quenstedt the number of the body segments, Burmeister¹ the capability of rolling up, the characters of the pleura, and the general form of the body. Emmrich proposed to use the external characters of the eyes as a systematic feature, and pointed out the systematic importance of the "facial suture" in the head shield of the Trilobites.

The publication of Joachim Barrande's admirable monograph of the Bohemian Trilobites (1852, and Supplement 1874) marked a great advance in the knowledge of Trilobites. All that had been previously known about these fossil Crustacea is carefully considered in this work, and new observations of high value are added. In so far as Barrande elucidated the constitution of the eyes, the structure of the carapace, the phylogeny of a number of genera, his results have been fully accepted by later authors, but the application which he made of the characters of the pleura in his systematic scheme has not been adopted.

There could be little unanimity of opinion regarding the relations of the Trilobites to the living Crustacea, so long as nothing certain was known about the character of the appendages in the extinct group. Zoologists were always inclined to emphasise the resemblance of Trilobites with living Isopods, but Burmeister pointed out the essential difference between the two orders; after a series of comparative researches he concluded that the "feet" of the Trilobites had been of a soft character, much as is now presented in the Phyllopods, and that in many respects the Trilobites showed close affinity with the Xiphosura. Gerstaecker assigned (1879) the Trilobites to the Entomostraca (Gnathopoda) as an independent

¹ Hermann Carl Burmeister, born 1807 at Stralsund, studied Medicine and Natural Science in Greisswald and Halle, began his career as a gymnasium teacher and University tutor in Berlin; in 1837 became extra-Ordinary Professor of Zoology in Halle, in 1842 full Professor; in 1850 and 1856 travelled to Brazil, the Argentine and Chili, and in 1861 was called to Buenos Ayres to be Director of the Natural History Museum, which he had been instrumental in establishing; died there 1892.