has two long neck spines, and would be a *Ceratocephala*, while the third has a single long neck spine, and would have to be called *Acidaspis*. Except for these spines, the species show no important differences, and it is evident that in any natural classification they would be congeneric. Compared with the type-species of *Ceratocephala* and *Acidaspis*, *Acidaspis dufrenoyi* and *A. hoernesi* show marked differences in all parts except in the spines on the occipital ring.

Ceratocephala, Warder, Am. Jour. Sci. 34, 1838, p. 377. Type, *C. goniata*, ibidem, p. 378, fig. The typical species was badly described and figured by Warder, but all parts are now known. Among the striking features of this trilobite one may note the coalescence of the free and fixed cheeks, accompanied by the obliteration of the facial suture, the almost complete obliteration of the dorsal furrows on the cephalon, and the position of the eyes, far from the glabella, and half way to the front of the cephalon. On the thorax the horizontal furrow on the pleural lobe of each segment is weak, and the two low ridges separated by this furrow are equal. The pygidium has long subequal barbed spines.

Acidaspis, Murchison. Silurian System, 1839, p. 658. Type, *A. brighti* Murchison, ibidem, pl. 14, fig. 15. The glabella of the typical species is roughly triangular in outline, tapering rapidly forward. The eyes are situated far back and close to the glabella, and the whole neck ring is prolonged backward into a long heavy spine. No more than the cephalon of the typical species is definitely known. In the American *A. anchoralis* and *A. onealli*, which have the same sort of a cephalon, the thoracic segments are narrow, and the linear horizontal furrow separates a high narrow posterior ridge from a low narrow anterior one on the pleural portion of each segment. In these same species, the pygidium has two long lateral spines, between which are short spines, and outside of which are small spines. A similar pygidium has been referred to *A. brighti*.

Odontopleura, Emmrich. De Trilobitis, 1839, p. 53. Type, *O. ovata* Emmrich, ibidem, pl. fig. 3. The type, an entire specimen, is characterized by its broad form, an oval glabella which does not taper much toward the front, and the central position of the elevated ridge on the pleural lobe of each thoracic segment. The pygidium is not unlike that ascribed to *Acidaspis*, except that the spines are more nearly equal in size.

As one looks over the various Odontopleuridae which have been described, it is seen that there are a few which agree with the type of *Ceratocephala* in having the fixed and free cheeks in symphysis, eyes well forward, and pleura of thoracic seg-