ments without a pronounced ridge; there are also a few which agree with the type of Acidaspis in having a triangular glabella and a broad stout nucal spine; a few others which have the characteristics of Dicranurus, Selenopeltis, or Ancyropyge, but the great majority have an oval glabella and a prominent median ridge on the pleural portion of each thoracic segment, as in Odontopleura. Hence, the name given to the family by Burmeister is not only the oldest, but is particularly appropriate.

It is quite possible that the species which I have grouped under Odontopleura can and will be arranged in other subgenera or genera. The type is a very broad form, and a row of tubercles on each of the thoracic segments is a prominent feature of the ornamentation. With it could be associated O. prevosti Barrande, and O. hughsi (Salter). Another group, with a narrower form, fewer tubercles on the thorax, and fewer and longer spines on the pygidium, is exemplified by O. dufrenoyi, O. hoernesi, O. roemeri, and other Bohemian species. A third group, with thick, subequal pygidial spines, would include O. pectinifera Barrande, and O. cornuta (Salter). Then there is the exceedingly spinose O. mira Barrande, with very numerous and small pygidial spines, barbed lateral thoracic spines, and very tall eyes. For the present, however, it seems useless to break up the genus into such small groups.

To replace my definitions in the Zittel-Eastman text book, I would suggest the outline of the family which follows:—

FAMILY ODONTOPLEURIDAE BURMEISTER.

Opisthoparia with large free cheeks and eyes (usually), far back and close to the glabella. Lateral lobes of the glabella reduced to two or one. Thorax of 8 to 11 segments. All parts of the test usually very spinose, the spines usually of the horizontal type.

Odontopleura, Emmrich. Glabella oval in outline. The pleural lobe of each segment of the thorax has a narrow, strongly elevated median ridge. Ordovician to Devonian. Cosmopolitan.

Acidaspis, Murchison. Glabella roughly triangular in outline, tapering towards the front. The pleural lobe of each segment is divided by a linear furrow into a low anterior and an elevated posterior ridge. Ordovician and Silurian. Europe and North America.

Ceratocephala, Warder. Free and fixed cheeks anchylosed, eyes far forward and far from the glabella. The pleural lobe of each thoracic segment is divided by a shallow median fur-