

dium is convex, strongly lobed and without a distinct marginal furrow. Axial lobe intermarginal, convex and divided into four annulations and an interior double ridge by four distinct transverse furrows; lateral lobes crossed by three main furrows and two shorter ones, corresponding to the furrow on the lateral lobe of the thoracic segments, thus outlining the anchylosed segments in the pygidium; a fourth segment and the terminal portion are also outlined by a faint ridge. Thorax unknown. This is a very distinctly marked species allied to *Bathyrurus armatus* Billings." (4).

Corda (1) was the author of the genus and the first to figure *Agraulos* (in 1847) but his drawing is so inaccurate that one can hardly recognize any similarity between it and the original type described by him as *A. delphinocephalus*. Later, Barrande (2) gave an excellent description of the same species under the name *Arionellus ceticephalus*, declining to use Corda's generic name. Barrande's figures are so accurate that the indices worked out from these compare favorably, indeed very closely, with those worked out on the actual specimens. Barrande does not appear to have noticed the presence of eye-lines, a primitive aspect of this species and of many other Cambrian trilobites. One has but to compare the indices (38-64) to appreciate how widely Corda's figure differs from those of Barrande. A drawing from an actual specimen found in the type locality of Skrey, Bohemia, is shown on the plate, Fig. 3. The first mention of *A. saratogensis* was by Walcott (3) in 1879 when he listed it as *Ptychoparia* (*A.*) *saratogensis*. In his next paper (5) he referred the species definitely to the genus *Agraulos*. A copy of his figure is shown on the accompanying plate in Fig. 2. Walcott, (7) in 1912, figures another specimen of the same species showing a strong circumglabellar furrow; glabellar furrows and ridge, as shown in Fig. 1. Both of the varieties above described occur at the same horizon at the Hoyt Quarry. Raymond, (8) in his "Revision of the Species which have been referred to the genus *Bathyrurus*," took *Agraulos saratogensis* as his type of the new genus *Phethopeltis*, as has been previously stated.

The writer made a critical and comparative examination of the features of the four types referred to above and has recorded a summary of his observations in the accompanying plate, which is to a large extent self-explanatory. Figures 1 and 2, representing the two variations of *P. (A.) saratogensis* are drawn from specimens from the Hoyt Quarry. Figure 3 is drawn from a specimen of *Agraulos ceticephalus* Barrande. Figure 4 represents *Phethopeltis armatus* (Billings). On the right of the figures are arranged in order the chief characteristics