

iorly than in the other two species. They are all large-eyed Phacopinids with the characteristic modifications of the subfamily. The diagnostic feature that separates this group from the coeval Silurian *Phacops* forms is the retention of the first pair of glabella furrows which are of a characteristic form and give rise to a partly detached frontal lobe somewhat as in *Delmanites*.

Genotype: *Phacops glocheri* Barrande.

Genus *Phacops* Emmrich s. str.

1819. *Somatrhelion* McMurtie, Sketches of Louisville and the falls of the Ohio; Louisville, 1819, pp. 74-75 (not sufficiently defined to be clearly recognizable).
 1839. *Phacops* Emmrich (partim), De Trilob. Dissert., p. 18.
 1843. *Phacops* Goldfuss (partim), Neues Jahr. Min., etc., 1843, p. 564.
 1845. *Phacops* Emmrich (partim), Neues Jahr. Min., etc., 1845, p. 38.
 1846. *Portlockia* McCoy (partim), Sil. Fossils Ireland, p. 50.
 1852. *Phacops* Barrande (partim), Syst. Sil. du Centre Boheme, I, p. 498.
 1864. *Phacops* Salter (partim), Mon. Brit. Tril., Pal. Soc., p. 14.
 1866. *Phacops* Hall, Pal. N.Y., 7, p. XXVII.
 1905. *Phacops* (= *Somatrhelion*) Reed, Geol. Mag., (5), 2, pp. 226, 228.
 1911. *Phacops* Wedekind (partim), Zeitsch. Deutsch. Geol. Ges., vol. 63, p. 317.
 1913. *Phacops* Raymond, Zittel-Eastman Textb. Pal., 2nd ed., p. 726.

As here restricted and based upon the genotype, the genus includes all of *Phacops* Wedekind with the exception of the Silurian group of *P. stokesii*. Although the author of *Phacops* did not choose a genotype for it, *P. latifrons* Brönn has been so designated by Barrande. He practically selected it in 1852 defining the usage of *Phacops* by referring to the type of *P. latifrons*.

The status of *Somatrhelion* McMurtie requires consideration, since, if established, as a synonym of *Phacops* s. str., it would have priority. McMurtie (1819) described a new genus and species, *Somatrhelion megalomaton*, from a specimen found in "a block of limestone from the falls [of the Ohio]". In the diagnosis given, it is said to have a corrugated (segmented), tripartite, convex body, the axis arched, with a row of tubercles on either side, and the head subrotund with very large eyes. The "mouth" is said to be "formed like that of a snapping turtle". It may possibly have a tuberculate surface, for the statement is made that there is "not the smallest

tubercle or wrinkle but what is preserved in its original form". The author must be referring to something more than the tubercles at the extremities of the axial thoracic segments or he would not make use of the superlative. Only one specimen was known. The tripartite and corrugated (segmented) body suggests a trilobite. The large eyes point to either a *Proetus* or a *Phacops*. Both are present in the Devonian at the falls of the Ohio. The very large eyes and the possibly tuberculate surface suggests a *Phacops*. Three forms are found in the vicinity. *Phacops rana* Green occurs in the Jeffersonville limestone and Sellersburg beds (Onondaga and Hamilton).^{*} *P. cristata* Hall is in the Jeffersonville limestone and just above the hydraulic beds of the Hamilton,^{*} while its var. *pipa* Hall is found in the upper Onondaga.^{*} They are all pronouncedly tuberculate, especially on the glabella. Indeed if we were certain of this character, *Somatrhelion megalomaton* McMurtie could be identified as a *Phacops* and as one of the three forms mentioned.

Vogdes (1893, p. 163) has listed McMurtie's species as a synonym of *Phacops rana* Green and Reed (1905, p. 226) suggests the possible use of *Somatrhelion*, but does not discard *Phacops* for it (1905, p. 226). The evidence certainly does not justify any decided conclusion. Therefore, since McMurtie's description although suggesting a *Phacops* is not at all conclusive, since only one specimen ever existed and that apparently is now lost, and as no one has adopted it although recognized by Vogdes, the writer prefers to regard it as having a doubtful status. As Vogdes observed long ago the generic name is very unsuitable anyway, applying as it does to the Trilobita as a whole.

Genotype: *Phacops latifrons* Brönn.

Subgenus *Portlockia* McCoy emend.

1839. *Phacops* Emmrich (partim), De Trilob. Dissert., p. 18.
 1843. *Phacops* Goldfuss (partim), Neues Jahr. Min., etc., 1843, p. 564.
 1845. *Phacops* Emmrich (partim), Neues Jahr. Min., etc., 1845, p. 38.
 1846. *Portlockia* McCoy (partim), Sil. Fossils Ireland, p. 50.
 1852. *Phacops* Barrande (partim), Syst. Sil. du Centre Boheme, I, p. 498.
 1864. *Phacops* Salter (partim), Mon. Brit. Tril., Pal. Soc., p. 14.
 1906. *Phacopidella* Reed (partim), The Lower Palaeozoic Tril. Girvan, III, Pal. Soc., p. 154.
 1911. *Phacops* Wedekind (partim), Zeitsch. Deutsch. Geol. Ges., vol. 63, p. 317.

^{*}Personal communication, E. M. Kindle.