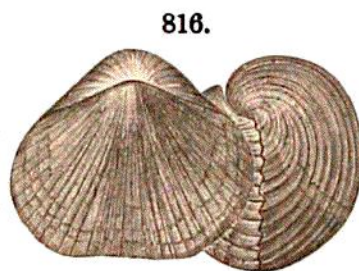


Pentamerus limestone, and 810, 810 *a*, *P. pseudo-galeatus*, of the Upper Pentamerus; Fig. 814 is of *Spirifer macropleurus*, characteristic of the Shaly limestone. Species of *Spirifer* and *Orthis*, and Gastropods of the genus *Platyceras* were numerous.

The *Pentamerus* (*Anastrophia*) *Verneuili*, Fig. 816, is a common species in the Shaly limestone; it occurs abundantly in the Helderberg Mountains, and also in Schoharie, Carlisle, and other places.

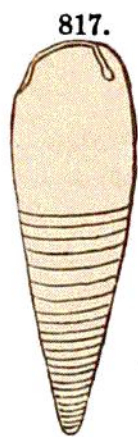
Orthocerata were few in species, of the genera *Orthoceras*, *Gomphoceras*, *Cyrtoceras*, *Oncoceras*, and others. A *Gomphoceras*, *G. parvulum*, of Whiteaves, Fig. 817, occurs in beds of probably the lower part of the series in Manitoba. Fig. 817 *a* shows the form of the aperture.



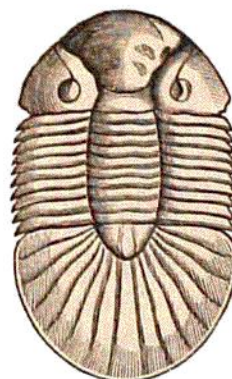
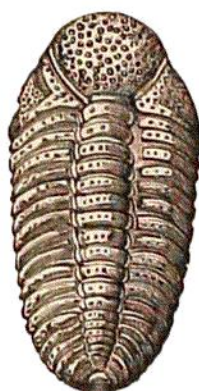
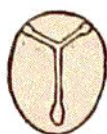
816.
Pentamerus (*Anastrophia*) *Verneuili*. Hall.

Among Trilobites occur species of *Dalmanites*, *Lichas*, *Acidaspis*, *Phacops* (Fig. 818), *Bronteus* (Fig. 819). *Dalmanites pleuropteryx* Green, *D. nasutus* Conrad, *D. tridens* Hall, having the front of the head-shield at the center prolonged into a beak, and three-pointed; *Lichas Bigsbyi* Hall, *L. pustulosus* Hall, ornate with tubercles and having the margin of the pygidium deeply dentate, are among the species.

817-819.



817 *a*.



CEPHALOPOD. — Fig. 817, *Gomphoceras parvulum*; 817 *a*, upper view showing aperture. TRILOBITES. — Fig. 818, *Phacops Loganii*; 819, *Bronteus pompilius*. 817, 817 *a*, Whiteaves; 818, Hall; 819, Billings.

An upper view of the head of *Acidaspis tuberculata* is shown in Fig. 820, a section of a segment of the thorax in 821, and the pygidium or caudal extremity in 822. Fig. 824 is a dorsal view of the young of the same Trilobite, when but a *twenty-fifth* of an inch long, as described by C. E. Beecher. As the figure represents, the larve is nearly all head; only a small lower part of the figure corresponds to the posterior portion of the body. Fig. 825 shows the larval *Acidaspis* in profile.

The genus *Monticulipora* and many others and a few Polyp-corals are described by Hall in *Pal. N. Y.*, vol. vi.; Crinoids and Cystoids in Part vi., vol. iii.; also Brachiopods, Gastropods, Cephalopods, and Trilobites in the same; Pteropods in vol. vii.