

Bellerophon. *Turbo Shumardi* Vern. is a fine large shell, $3\frac{1}{2}$ inches in diameter, from the Falls of the Ohio. It was named after B. F. Shumard of St. Louis. It is well figured by Hall. Among *Cephalopods*, 30 species of *Orthoceras* are reported by Hall; besides these there are 12 of *Gomphoceras* (4 in the Schoharie grit), as many of *Cyrtoceras* and *Gyroceras* (4 Schoharie grit), 9 of *Trochoceras*, all from the Schoharie grit; 1 *Goniatites* (Fig. 874), *G. mithrax* H. (*Tornoceras mithrax* Hyatt, and referred to the Corniferous with some doubt), 2 *Discites*. Hyatt states that most of the species of *Gomphoceras* have a triangular aperture instead of lobed like that on page 561, and that they accordingly belong to his genus *Acleistoceras*. The species of *Gastropods*, etc., are described and figured in Hall's *N. Y. Pal.*, vol. v. *Gyroceras undulatum* H. is a type of *Halloceras* of Hyatt; *G. Jason* H. is *Rutoceras* Hyatt; *Trochoceras pandum* H. is *Endoceras* Hyatt; *T. clio* H. is *Sphyradoceras* Hyatt; *T. eugenium* H. is *Nædoceras* Hyatt.

7. **Crustaceans.**—The most common Trilobites are: Fig. 875, *Dalmanites selenurus*, having a two-pointed tail; and Fig. 884, *Proetus crassimarginatus* H. There are also: *Calymene platys*, the latest American species of the genus, and one of the largest perfect specimens being 4 inches long, and an imperfect one indicating a length of 8 inches; over 20 species of *Dalmanites* (one over 16 inches long), besides the Lower Helderberg species *D. pleuropteryx*; also, of *Homalonotus* 1 species, of *Phacops* 3, *Lichas* 7, *Acidaspis* 2 (Fig. 879, *A. callicera*), *Proetus* over 15, *Cyphasps* 4, and the new genus *Phæthonides*, 3 species.

The figures of Trilobites on page 587 represent the following sub-genera, as recognized by Hall: Under *Dalmanites*: *Odontocephalus* (*D. selenurus* Eaton); *Corycephalus* (*D. regalis* H.); *Coronura* (*D. aspectans* Con.); *Cryphæus* (*D. Boothi* Green). Under *Lichas*: *Hoplolichas*; *Ceratolichas*. For figure of *Palæocreusia*, see Hall's *N. Y. Pal.*, vii. pl. 36.

8. **Vertebrates.**—For descriptions and figures of the Fishes mentioned and others, see Newberry, in *Ohio Pal. Rep.*, i. and ii., where the figures of the large species are of natural size, and also his 4to *Rep. U. S. G. S.*, 1889; also papers by Cope, Claypole, Whiteaves, and others. From the Lower Devonian of Campbelltown, Canada, Whiteaves has described fin-spines of *Ctenacanthus latispinosus* and *Homacanthus gracilis*. The *Cephalaspis Dawsoni* is from below the middle of the Gaspé sandstones, from the beds affording *Prototaxites Loganii* and other plants. That the beds are Lower Devonian is doubtful.

At Owl's Head, on Lake Memphremagog, near the northern borders of Vermont, the coral-reef rock is overlaid by mica schist; and, although it is partially metamorphic, many of the specimens of fossils are tolerably perfect. Among the species, Billings has recognized *Syringopora Hisingeri* B., *Favosites basalticus* Goldf., *Diphyphyllum stramineum* B., and *Zaphrentis gigantea* Lesueur. Besides these, according to Hitchcock, *Atrypa reticularis* has been identified by Hall.

Between northern Vermont and Cape Gaspé there are many localities of Devonian fossils. One locality, given by Logan, is on the Chaudière River, where occur, besides *Favosites Gothlandicus* and *F. basalticus*, the species *Syringopora Hisingeri*, *Diphyphyllum arundinaceum* B., a small *Productus* resembling a Corniferous species, a *Zaphrentis*, *Spirifer duodenarius* H., *S. gregarius* Clapp, *S. acuminatus* H., a *Cyrtina* like *C. rostrata* H., etc. Other localities occur at Dudswell and on Famine River.

Species of Brachiopods range as follows: From the Oriskany to the Hamilton, *Spirifer fimbriatus* Con. (= *S. Conradanus* S. A. Miller); from the base of the Lower Helderberg or beyond to the Chemung, *Atrypa reticularis* and *Stropheodonta perplana*, but with some slight characteristic features in the successive periods; from the Oriskany to the Chemung, *Stropheodonta demissa*; from the Upper Helderberg to the Chemung, *Atrypa aspera*; from the Schoharie grit to the Hamilton or Chemung, *Orthis Vanuxemi*, *Orthothetes Chemungensis*; common in the Upper Helderberg and Hamilton, *Spirifer acuminatus*, *Meristella nasuta*.