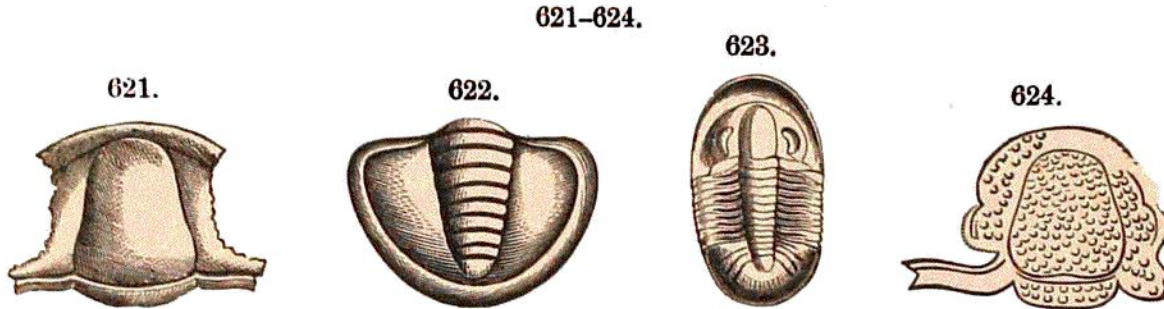


rock of Philipsburg, Canada East; *Piloceras Canadense* B., from the Mingan Islands, north of Anticosti Island; *P. Wortheni* B., from western Newfoundland. *Nautilus pomponius* B. is from Philipsburg; *N. ferox* B., Mingan Islands, is referred by Hyatt to the genera *Plectoceras* and *Litoceras*, there being no true species of *Nautilus* in Paleozoic rocks. At Philipsburg, Fort Cassin, and in Newfoundland, the fauna included also, according to Hyatt, species of the genera *Sannionites* (Fischer, Hyatt), *Endoceras* Hall, and *Actinoceras* Bronn (= *Ormoceras* Hall). On Hyatt's review of the genera of Fossil Cephalopods, see *Proc. Boston Soc. Nat. Hist.*, xxii., 253, 1883.



Figs. 621, 622, *Bathyrurus Saffordi*; 623, *Bathyrellus nitidus*; 624, *Bathyrurus* (?) *crotalifrons*. Figs. 621-623, Billings; 624, Dwight.

6. **Crustaceans.** — Among Trilobites, *Bathyrurus Saffordi* B. (Figs. 621, 622) is common in Canada, and occurs also in Newfoundland and Idaho; *B. crotalifrons* at Rochdale, N.Y.; *B. armatus*, Quebec and Saratoga County, N.Y.; *Ptychaspis speciosa*, *Ptychoparia Calcifera*, *P. Hartti*, are other Saratoga County species. *Bathyrellus nitidus* B. (Fig. 623) is from Cow Head, Newfoundland. None of these species occur in the Trenton.

The Calciferous fossils reported by S. Calvin from the Lower Magnesian limestone of Iowa are *Metoptoma alta* Whitfield, *Straparollus Claytonensis* Calvin, *S. pristiniiformis* Calvin, *Raphistoma Pepinense* Meek, *R. multivolvatum* Calvin, *Holopea turgida* Hall, *Orthoceras primigenium* V., *O. Luthei* Calvin.

2. Chazy Epoch.

In the Chazy limestone occur small concretion-like forms (Fig. 625) having the structure represented in Fig. 626, which are supposed by some to be of vegetable origin, and by others, a Sponge or the secretions of Hydrozoans.

The Corals of the period include Cyathophylloids, a tribe that dates from the early Cambrian; massive columnar Corals of the genus *Columnaria*; and species with quadrangular cells, of the genus *Tetradium* — this name, from the Greek for four, referring to the form of the cells (see Fig. 707, page 511, for a Trenton species).

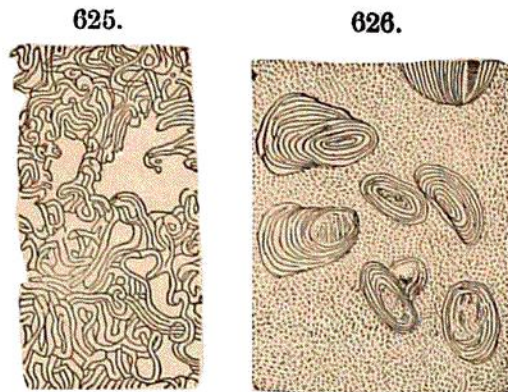


Fig. 625, *Girvanella ocellata*; 626, interior enlarged. Seely.

One of the Cystoids is represented in Fig. 628, and the body of a Crinoid in Fig. 627. The stem is wanting in each.