

of Seely (1885), who referred it to the Sponges, and *Siphonema* of Bornemann (1886), who placed it among the Algæ. It is made a calcareous Alga by Rothpletz (1891).

2. **Spongiozoans.** — *Eospongia* (*Astylospongia*) *Ræmeri* B. and *E. varians* B. occur at the Mingan Islands.

3. **Actinozoans.** — *Columnaria incerta* B. and *C. parva* B.; the Cyathophylloid, *Streptelasma expansum* H.; *Monticulipora patula* B., *M. adharens* B., from Canada.

4. **Echinoderms.** — (1) *Crinoids.* — *Palæocrinus striatus* (Fig. 627), the body, showing the five radiating ambulacral grooves at top; *Blastoidocrinus carcharidens* B. (2) *Cystoids.* — *Malocystites Murchisoni* B. (Fig. 628) has the body nearly spherical (whence the name, from the Latin *malum*, an apple), the ambulacral grooves irregularly radiating; *M. Barrandi* B., *Palæocystites tenuiradiatus* B., which is common, and has been identified but doubtfully, from crinoid stems from crystalline limestone of West Rutland (*Am. Jour. Sc.*, III. iv. 133); also *P. Dawsoni* B., *P. pulcher* B., *P. Chapmani* B., from Canada.

5. **Molluscoids.** — Other species are *Rafinesquina incrassata* H., which continues into the Trenton *Strophomena* (?) *plicifera* H., *Rhynchonella acutirostris* H., *R. altilis* H., *Rafinesquina fasciata* H., in the Upper Chazy; *Lingula Lyelli* B., *L. Huronensis* B., etc.; *Orthis imperator* B., a species nearly 1½ inches across.

NOTE. — Hall proposes (1892) the generic name *Rafinesquina* for the species of *Strophomena* of the type of *S. alternata*, restricting the name *Strophomena* to resupinate species like *S. planumbona*. He applies the name *Leptaena* to forms like *S. rhomboidalis*, and restores Pander's generic name *Plectambonites* to species commonly known as *Leptaena*, as *L. sericea* and *L. transversalis* (Hall, *Pal. N. Y.*, vol. viii., Genera of Paleozoic Brachiopoda, 1892).

6. **Mollusks.** — (a) *Lamellibranchs.* — *Cypricardites* (*Vanuxemia*) *Montrealensis* B. — a species nearly 1½ inches long.

(b) *Gastropods.* — Besides the species figured, other common kinds are *Raphistoma planistrium* H., *Pleurotomaria biangulata* H., *P. antiquata* H., *Bucania sulcata* (*Bucania* differs from *Bellerophon* only in having the outlines of the spire show externally on either side). *Metoptoma dubia* H., *Platyceras auriformis* H.

(c) *Cephalopods.* — *Orthoceras rectiannulatum* H., also found in the Birdseye limestone; *O. tenuiseptum* H., septa very thin and rather crowded; *O. velox* B., Montreal, Mingan Islands; *O. diffidens* B., Mingan Islands; *O. Allumettense* B. (which is also a Black River limestone species).

7. **Crustaceans.** — The Trilobites, *Illænus Arcturus* H.; *Asaphus obtusus* H., *A. (Isotelus) canalis* Conr., New York and Canada, *A. marginalis* H., and also Quebec group of Newfoundland. *Bathyurus Angelini* B.; *Ceraurus Satyrus* B., at Montreal. The earlier genera, *Dicelloccephalus*, *Crepicephalus*, *Menocephalus*, *Bathyporellus*, *Loganellus*, *Nileus*, are not represented, so far as known, in the Chazy or later periods.

The Ostracoids, *Leperditia Canadensis* Jones, Fig. 638, from Grenville, Huntley, and elsewhere in Canada; *L. amygdalina* Jones, from near L'Original, Canada.

In the gorge of the Kentucky River, near the mouth of Cooper's branch, Ulrich reports a limestone stratum (150' thick) as affording the Chazy species *Maclurea magna*, *Raphistoma planistrium*, *Rhynchonella dubia* H., *Sulcopora fenestrata*, *Leperditia Canadensis*, with *Orthis subæquata* Conr. a Trenton species, *Orthoceras explorator* B. a Quebec species and *O. furtivum* B. a Calciferous species; with also species of *Bathyurus*, *Dalmanites*, *Pterotheca*, and the Trenton Bryozoan *Mitoclema cinctosum* Ulr.

Other species described by Billings, in *Can. G. Rep.* of 1863, are *Monticulipora* (*Stenopora*) *fibrosa*; *Rhynchonella orientalis*, *Camarella varians*, *C. longirostris*, *Orthis platys*, *O. borealis*, *O. Porcia*, *O. acuminata*, *O. disparilis* Con. (from the Chazy and Trenton); *Pleurotomaria calyx*, *P. docens*; *Illænus globosus*, *I. Bayfieldi*, *Sphærexochus parvus* (from the Chazy and Black River), *Harpes antiquatus*.