

Again there are to be seen in the American Section the *Eozoon Conodense*—the earliest known form of life, (which probably existed fifty or eighty millions of years ago,) and fossils from the Potsdam, Calciferous; Trenton Group; Hudson River Group (Cincinnati of the West); the Medina Clinton, and Niagara, (the formation of this City); Oriskany, Coniferous, Hamilton; Carboniferous Groups, etc. In range of life, here are forms from the earliest and lowest types, through the beautiful fossil corals, elegant crinoids, and nearly extinct group of Brachiopods, and other shells, to the extinct Cephalopods—the *Ammonites*; and from the Trilobites, the species of Fishes almost modern. In the Cabinet are also remains of plants such as those out of which coal was formed.

This is one of the largest collections in the Province, comprising many hundred species, and probably 2,000 specimens, besides the above mentioned minerals. During the late season Dr. Spencer collected nearly 1,000 pounds

weight of specimens, including a large quantity of the interesting corniferous corals, which he has not yet determined.

There are also modern corals and sponges, from Bermuda, and one of those beautiful glossy sponges *Euplectella Spavosa*, from the Phillipine Islands.

Recently Mr. Hugh Murray, Chairman of the Board of Education, kindly presented a collection of Modern Shells to the School Cabinet.

Through the liberality of the Board of Education the Institute obtained the choice collection of Canadian Birds, for which Mr. Norval, the Taxidermist, obtained a medal at the recent Centennial Exhibition at Philadelphia. Among other birds there is a case of Owls, another of Hawks, an American Eagle, and many smaller birds of brilliant plumage.

For want of case room, the collection of several hundred plants is not yet on general exhibition.

Lastly, there is a Skeleton of a man, about whose history many unanswered questions are asked.

## MONTHLY EXAMINATION, OCTOBER.

### STATICS.

1. State  $\square$  of fces, and from it deduce  $\triangle$  of fces.
2. What  $z = 1$  fces at  $135^\circ$  will have  $24V(2-V2)$  for resultant?
3. State prin. of mom'ts; apply it to find tension in a stg. wh. supports a wt. 30 lbs.; the two parts of the string making  $< 60^\circ$ .
4. A ladder leans against a vertical wall; show how to find the dir'n of its pres. against the ground. If the heavy end is against the wall show how this pres. is affected.
5. A cube, edge 8 ins., has a cube edge 2 ins., cut from one corner; find cen. gr. of rem.
6. Solve the Prob. in No. 3, (1) by  $\square$  of fces, (2) by  $\triangle$  of fces.

### SUBJECTS FOR COMPOSITION.

1. Milton as a writer of prose and verse.
2. Milton as an artist, as seen in his characters, his language, his verse, his narrative and description.
3. The *Sciences* in *Paradise Lost*, especially Astronomy, Architecture, Metallurgy, Geology, Geography, and Agriculture.
4. Compare Epic and Dramatic Poetry and Prose.
5. Give an account of the narrative in *Paradise Lost*.
6. Write a note on the use of figurative language.
7. The poetry of *The Restoration*.
8. The sublime in language.
9. The great periods in English Literature.