- 8. What structures are found in a maple seed, and how do they differ from those in a grain of wheat.
- 9. To what series and classes do Fir trees, Indian Corn, and Ferns belong, and on what grounds can they be so referred?
- 10. Trace any Canadian plant through the grades of the classification from the species upward.
  - 11. Describe the flower exhibited; stating its parts and modes of inflorescence.

## Geology.

- 1. What are Feldspar, Hornblende, Conglomerate, Gneiss, Porphyry?
- 2. Explain :- Dip, Strike, Anticlinal, Formation.
- 3. What are Faults and Veins? Explain their nature.
- 4. State the general order of the geological ages.
- 5. State the general distribution of the Archwan in N. America.
- 6. What are the formation of the Upper Silurian in Canada? Give localities where they may be seen.
  - 7. State some characteristic Marine Invertebrates and plants of the Devonian.
- 8 State what you know of the geological Relations, Structure and Fruits of the Coal formation.
  - 9. Typical Rocks and Fruits of the Cretaceous in Europe and America?
  - 10. The principal numbers of the Post-pliocene, and mode of their formation?
  - 11. Describe any formation you have examined, with its fruits.

## Elementary Chemistry.

- 1. Name and characterize briefly the gasses obtained by heating the following substances:—CaCO<sub>3</sub>, [H<sub>4</sub>N] NO<sub>5</sub>, KClO<sub>3</sub>.
- 2. Steam is brought into contact with red hot iron filings. What change takes place?
  - 3. Describe any form of endiometer, and explain its use in the analysis of gases.
- 4. 10 grammes of Sodium are dropped into water. What volume of Hydrogen is liberated [standard temperature and pressure]?
  - 5. What is the difference between an anhydride and an acid?
  - 6. Describe any experiment illustrating the use of charcoal as a reducing agent.
- . 7. What changes are indicated by the following equation:-

 $MnO_z + 4H Cl = MnCl_2 + 2H_2 O + Cl_2$ 

- S. Fragments of Phosphorus are heated in a strong solution of Caustic Potash. What gas is produced? Give its properties.
  - 9. How is Sulphuretted Hydrogen prepared, and what are its properties?
- 10. Name the substances indicated by the following formulæ :  $H_2$  SOS4,  $[H_4N]$  Cl,  $H_2$  PO4,  $C_7H_4$ , SiO2

## RECENT EVENTS.

The Management of the Schools.—The Provincial Government has appointed a Commission to inquire into the administration of the public schools, composed of the following gentlemen:—Hon. G. Ouimet, Superintendent of Education, chairman; Messrs. E. J. Barbeau, L. H. Davidson, C. J. Doherty and Charles Glackmeyer, with Messrs. Provencher and R. D. McGibbon as secretaries. This