

To the kindness of its Director we owe the following interesting details concerning its object and constitution.

The general object of that association is to promote the study of mineralogy and the allied sciences, chemistry and geology. It attains that object in a twofold manner—first, by encouraging personal investigation and discovery, and affording persons already conversant with scientific subjects an opportunity of exchanging and discussing ideas on the same; secondly, by fostering a taste for these studies among the students of the college and other young men, and, at the same time, acquainting them with the fundamental principles of mineral chemistry and geology.

The membership of the Mineralogy Society is open not only to students of the University, but to all outsiders interested in science. It includes Professors of the Faculty and other scientific gentlemen, as well as students and other young men standing on more or less advanced steps of the scientific ladder. Persons wishing to become members should apply to the secretary.

Meetings are held every Wednesday at 5 p. m., at which original papers are read and discussed, and popular science lectures are given, accompanied by experiments. Admission to the meetings is free, and a general admission ticket may be obtained by applying to the President of the Society. The chemical and mineralogical laboratory and museum of the College, which will soon be completed, are put at the disposal of members; and all necessary apparatus and reagents are furnished on special conditions.

In order to increase its sphere of usefulness, the Mineralogical Society respectfully requests the co-operation of the science-loving public, and particularly of those interested in mines, quarries, etc. Information of any kind and specimens of minerals, rocks and fossils are thankfully received; in return, the Society makes a determination of such specimens when requested and inserts the names of the donors in its publication. The society, having secured the services of the College Professor of Chemistry and of an eminent French chemist and analyst, is now in a position to supply the daily increasing demand for mineral analyses.

The Society was formed in March, 1880, by the Rev. C. F. Marsan, O.M.I., M.A., Professor of Chemistry, Mineralogy and Geology in the College of Ottawa, with the assistance of Mr. (now Honorable) P. S. Poirier, and other scientific gentlemen. Hon. Senator Poirier, whilst Postmaster of the House of Commons, occupied the presidential chair of the Society till the beginning of the present year, when his removal to the Maritime Provinces made it impossible for him any longer to conduct the business of the Society.

The following are the officers for the present year:—

Director: Rev. Prof. C. F. Marsan, O.M.I., M.A.

President: Mr. Walter A. Herckearath, of Mamersock, N. Y.

Vice-President: Mr. Wade Smith.

Recording Secretary: Mr. Jas. Foley.

Scientific Secretary: Mr. Alfred Lussier.

Treasurer: Mr. Patrick Griffin.

Chemist: Mr. Anatole Touchot.

Librarian: Mr. David Platen.

Curator of Museum: Mr. Duncan Campbell.

Scientific Committee: Rev. James Moloney, O.M.I.; Rev. Germain Gauvreau, O.M.I.

Pennsylvania made 68 per cent. of all the December steel rails, and 65 per cent. of all the ingots produced in the United States in 1885.

SCIENTIFIC NOTES.

SULPHUR.—It is reported that large deposits of sulphur have been recently discovered on the southern slopes of the Caucasus Mountains.

QUARTZ.—There seems to be a dispute, at present, as to whether the permanent polarity of quartz, lately discovered by Dr. Tumlitz, is diamagnetic or paramagnetic.

VESEVIUS.—After the late eruption of Vesuvius, on Feb. 6, the chloride crusts of lava in the vicinity were found to be very rich in copper, so that the bootnails of visitors to the spot became thickly plated with it.

WATER GAS.—A series of experiments in the reduction of iron ores, carbon monoxide, superheated steam, and water gas being employed as reagents, gave the following total results of oxidation for one series of specimens: Carbon monoxide 81.12 degrees, steam 81.75 degrees, water gas 86.48 degrees, thus giving water gas an advantage of 5.38 degrees over carbon monoxide, and 1.73 degrees over superheated steam.

HEAT.—A recent writer in the *Geological Magazine* ventilates an idea that is certainly novel and original, viz.: that the interior heat of the earth will yet be utilized by man. He is of opinion that the crust, which separates us from the molten mass below, is not so thick as is generally supposed, and considers it one of the possibilities of the future that we shall "bore down to the liquid layer, and conduct our steaming operations at the pit's mouth."

MINERALOGY.—The author of the *Requisites of Mineralogy*, recently published by Crosby & Lockwood, London, has devised a new torment for beginners. In addition to the specific gravity of elements as compared with water, which learners usually find sufficiently difficult to remember, Mr. Ramsay gives the specific gravity taking hydrogen as the standard unit. As an example of what students are required to tax their memories with, the specific gravity of native silver is given as ranging from 115, 123 to 117, 369.

GEOLOGY.—The latest as well as one of the most important contributions to geological science is *Geology, Chemical, Physical and Stratigraphical*, by Prof. Prestwich, of Oxford University, the first volume of which has just been issued from the Clarendon Press. Those portions of work are particularly valuable, which embody the results of the learned Professor's original researches. Prof. Prestwich belongs to the non-uniformitarian school of geologists, holding that the action of physical forces in the geological periods constantly varied in degree and intensity.

BOOK NOTICES.

AN INTRODUCTION TO THE STUDY OF THE COMPOUNDS OF CARBON, OR ORGANIC CHEMISTRY, By Ira Remsen. Ginn, Heath & Co., Boston, 1885.

This excellent text book, though published a few months ago, is very little known in Canada, we have therefore much pleasure in bringing it to the notice of our readers. It is impossible, in a brief sketch, to enumerate all the merits of this book. The author has evidently written it for students beginning the study of the com-

pounds of carbon with or even without a teacher. He carefully avoids, in the beginning, long theoretical considerations from which the beginners can derive no benefit. Throughout the book the relations of various series, the general properties of groups, and important laws of formation, are indicated only after the facts illustrating them have been described and experimented upon. Nothing so confuses the student as the grouping together of a mass of laws and speculations before acquainting him with facts, thus giving him the very false notion that natural science is a kind of castle in the air, too distant for clear observation. Another very common defect, from which Mr. Remsen's work is free, is excessive comprehensiveness. All cannot be told in a text book, so that if an author attempt to give the abridged history of every compound, his work becomes nothing but a dry nomenclature of facts and formulas. It is far better to choose some typical compound in each series, and give a full description of it; the knowledge then conveyed will be complete in its kind, and the student may afterwards, by himself, repeat the same work upon each of the other members of that series. To those acquainted with Wentworth's *Geometry*, or any other of the classical publications of Ginn & Heath, it is needless to say that this edition is a masterpiece of typographical neatness and beauty.

OTTAWA FIELD NATURALIST'S CLUB: Transactions No. 6; Vol. II, No. 2.

We have just received this, the best publication yet issued by our local scientific club. It has only one defect, it comes too late, and the reader cannot but feel disappointed when he finds out that all the papers included in that volume were delivered before March, 1885. Many of those papers are very interesting. We published in our issue of February, 1885, the paper of Mr. Chas. Willmott, "Minerals of the Ottawa District." Among other valuable papers Mr. William Lett's very interesting essay on the "Canadian Otter" deserves special notice. Mr. Latchford's "Observations on the Terrestrial Mollusca of Ottawa and Vicinity," must necessarily be in the hands of all students of our shells. Finally, geologists will find a valuable addition to our knowledge of the Trenton fossils in the notes on "Two New Species of Crinoids," by Mr. Walter R. Billings.

MINING NOTES.

NOVA SCOTIA.

It is reported that a rich gold lead has been discovered in Yarmouth county, not far from Puhnico.

Active prospecting was carried on in Lunenburg and Queen's counties last autumn, and the discovery of some important gold-bearing quartz veins was the result.

During the past month gold was discovered at Carlton, Yarmouth County, and applications for licenses to work have been made to the mines department at Halifax.

Early in February, two gold bricks were brought to Halifax from the Salmon River and Rawdon mines. That from the former weighed 1,297 ounces, and from the latter, 155 ounces.