

INSTITUTE OF NATURAL SCIENCE.

The Institute of Natural Science met last night, in the Provincial Museum. Although the weather was unfavorable, there was a somewhat larger attendance than usual. A paper on Fresh Water Sponges, A. H. McKay, B. A., B. Sc., of Pictou, was read before the Society. The Secretary stated that Mr. McKay had done much for the Natural History of our Province. The paper described various species of spongilla, taken from McIntosh's and other lakes, in Earlstown. There were exhibited also, under a powerful microscope, exquisitely sculptured specimens of diatoms, silicious spicules of *S. lacustroides*, *Myenia Leidii*, *M. crateriforma* and *M. Everettii*, all neatly got up on slides prepared by Mr. McKay himself. The diatomaceous deposits of these lakes are often several feet thick, and may yet be found to be of some industrial value. An interesting discussion followed, in which Dr. Somers, Messrs. Keating, Denton, and others took part. Prof. Lawson not being present, the meeting adjourned.—*Halifax Morning Chronicle*, 13th May.

NOTES.

BOTANY.

T. J. W. Burgess, M. D., of London, Ontario, has published a very readable account of a "Botanical Holiday in Nova Scotia," in the Botanical Gazette. He has noticed a large number of species not before published.

Dr Burgess is preparing a monograph of the Violaceæ of Canada, and we recommend our Botanists to send him as many species from Nova Scotia in flowers and fruit as can be found. He will be glad to exchange Western plants for such specimens.

Professor John Macoun, F.R.S.C., Ottawa, is about to prepare a monograph of the Canadian Willows. He wants for this purpose specimens of all our willows taken at different seasons to show the flowers, leaves and fruit. This is a most protean and difficult genus of plants, and we are glad to know that a man of the energy and experience of the Professor has at length undertaken it.

Principal McKay, of Pictou, Nova Scotia, is working up the Diatomaceæ of Nova Scotia, and hopes that every reader near a lake may send him a sample of the slime or mud deposits in it. He will give the sender an account of the microscopic organisms determined in it.

Recent discoveries in Botany seem to indicate the continuity of protoplasm from cell to cell by means of delicate threads which traverse channels through the cell wall.

Tischirch regards it as probable that chlorophyll plays "not merely a physical, but also a chemical, part in the process of assimilation," in opposition to Pringsheim, who supposes it to act merely as a light screen or shade to the protoplasmic contents of the cell.

The examinations in the medical courses in England have been much advanced under the new rules, which took effect in January last. These examinations "will have reference to the fundamental facts and laws of the morphology, histology, physiology and life history of plants as illustrated by the following types: Saccharomyces, Protococcus, Mucor, Spirogyna, Chara or Nitella, a Fern, Pinus and an angiospermous flowering plant." This must be the next movement in Nova Scotia.

Botany is required to be taught in