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CONTENTS OF THIS NUMBER:

PAGE

I. METEOROLOGY AND ASTRONOMY.—(1) Meteorological Observations at Grammar School Stations. (2) Meteorology in Italy. (3) The Lunar Eclipse of Good Friday.	49
II. THE COUNTY SCHOOL CONVENTIONS.—(1) Minutes of Resolutions passed after Discussion by each Convention; extracted from the Official Reports of the Conventions furnished to the Department by the Respective Chairmen and Secretaries. (2) School Conventions in Upper Canada. (3) Schedule of County School Conventions held by the Chief Superintendent of Education, 1866	51
III. PAPERS ON PRACTICAL EDUCATION.—(1) Singing in School. (2) Musical Education. (3) Music in Schools	58
IV. PAPERS ON CLASSICAL ARCHÆOLOGY.—(1) Ancient Busts and Statues at Cyrene. (2) French Excavations at Eleusis. (3) A Temple Discovered at Pompeii. (5) "Lost Cities." (6) Palace of the Institute, Athens. (7) Supposed site of the Garden of Eden. (8) Danish Remains in England	59
V. BIOGRAPHICAL SKETCHES.—No. 23. Robert Stanton, Esq. No. 24. Hon. G. R. Ogden. No. 25. J. J. Dunlop, Esq. No. 26. Sir Charles Lock Eastlake, F.R.S. No. 27. John Gibson	60
VI. PAPERS ON NATURAL HISTORY.—(1) The Bird's Petition. (2) A Cardinal or Small Bird. (3) Habits of the Seal. (4) Prince Albert's Pets	61
VII. MISCELLANEOUS.—(1) Ten Thousand Volunteers to the Front (2) Spirited and Patriotic Charge of the Chief Justice of Upper Canada.	62
VIII. SHORT CRITICAL NOTICES OF BOOKS.	63
IX. DEPARTMENTAL NOTICES	64

Superintendent, according to the form and regulations provided by the Department of Public Instruction; but the number and locality of such meteorological stations shall be designated by the Council of Public Instruction with the approval of the Governor in Council."

Under this provision, His Excellency the Governor in Council, on the recommendation of the Council of Public Instruction for Upper Canada, has authorized the establishment of meteorological stations at the following Grammar Schools:—Windsor, Goderich, Stratford, Simcoe, Hamilton, Barrie, Peterborough, Belleville, Cornwall and Pembroke.

Of these, all but Goderich have applied for and obtained the required instruments, and are, with one or two exceptions, in working order. It is hoped that all the ten stations will shortly be in a position to send regular and accurate returns of their observations; and as provision has been made for remunerating the observers for their work, those gentlemen may fairly be expected to give the necessary time and attention to the subject.

It will be seen, from the subjoined extracts from correspondence on the subject, that the Smithsonian Institution, at Washington, which collects and publishes a vast amount of valuable meteorological records, has, with great generosity, forwarded to this department a copy of its last annual report and of the large volumes of meteorological results as a gift to each of the Grammar School stations in Upper Canada. These books (which will be sent to the stations as opportunity offers) will, no doubt, be examined by each observer with great pleasure and attention, and it is hoped that a new encouragement will be felt in performing a work which is shown to be so important, and which is now being energetically carried on by great numbers of scientific men in all parts of the world. The following instruments are used at each station:—

One Barometer*, one Maximum and one Minimum Thermometer,* Wet and Dry Bulb Thermometers; * one Rain Gauge and Measure; one Wind Vane.

Observations are taken at 7 a.m. and at 1 and 9 p.m. daily, except on Sundays. The self-registering thermometers are read at 9 p.m. The rain is measured at 1 p.m.

Full abstracts of the daily records are to be sent to the Education Office monthly, in addition to a weekly report of certain observations, which is prepared for publication in any local newspaper the observer may select. The returns are duly examined, and care will be taken to publish none unless they are apparently to be relied on. We cannot of course, afford space for the detailed daily observations; but the observers' abstracts will be so kept and arranged as to be accessible for investigations for which the published *Monthly Results* do not afford the required data.

The only Stations of which we can give the *Monthly Results* for January and February, in this number, are Barrie, Belleville, Hamilton and Stratford.

* These instruments were supplied by Messrs Negretti & Zambra, and Casella, London, and the index errors have been ascertained by comparisons at the Kew Observatory in England, and at the Toronto Observatory. They are obtained by the stations, together with Registers and forms for Abstracts, from the Educational Depository, Toronto.

METEOROLOGICAL OBSERVATIONS AT GRAMMAR SCHOOL STATIONS.

It is our intention to publish in the *Journal of Education*, from month to month, abstracts of the observations at the Meteorological Stations, established in connection with the department, under the provisions of the grammar school law.

The Consolidated Grammar School Act provided that the head master of each senior county grammar school in Upper Canada should take certain observations in accordance with prescribed instructions, and that the county council should defray the cost of the necessary instruments. Abstracts of the observations were to be forwarded by the observer, monthly, to the Chief Superintendent of Education at Toronto. The senior schools (*i. e.* those situated in the county town of each county) had, under a previous enactment, been especially privileged by a preference over the junior schools in the distribution of the Grammar School Fund. As the law did not connect the increased grant with the performance of the duty of recording observations, and as many of the county councils neglected to make any appropriation for the purchase of instruments, although, in all cases, half the cost was paid by the department, the result ensued that several of the senior schools were never provided with the apparatus, and many of those stations for which the instruments were provided, made the returns in a desultory and unsatisfactory manner, which rendered the publication of a connected series impossible. There were, however, observers, to whom this remark does not apply, and who continued to send valuable abstracts which are preserved in the Education Office.

In 1865, the Grammar School Improvement Act, for the passage of which efforts had been annually made, was at length passed, and contained the following section:

"11. Each of the Grammar School Meteorological stations, at which the daily observations are made, as required by law, shall be entitled to an additional apportionment out of the Grammar School fund, at a rate not exceeding fifteen dollars per month for each consecutive month during which such duty is performed and satisfactory monthly abstracts thereof are furnished to the Chief