

To the Trustees of _____

School Section, No. _____

in the Township of _____

JOURNAL OF

Upper



EDUCATION,

Canada.

VOL. XIV.

TORONTO : MARCH, 1861.

No. 3.

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THE GRAMMAR SCHOOL METEOROLOGICAL STATIONS IN UPPER CANADA.

The extraordinary character of the weather both in Europe and America, during 1860, has caused the attention of scientific men to be earnestly directed to the importance and value of a more thorough system of meteorological observation. In France these observations are regularly taken at various points, and the results transmitted to Paris by telegraph, there to be published in the newspapers. In England several meteorological stations have been established at various points; and the London daily journals have a column specially set apart for the publication of meteorological information. During the late severe weather in England the papers were filled with reports on the subject, many popular errors were exposed, and the cause of meteorological science advanced. The London correspondent of a Toronto paper, under date of the 24th ult., thus refers to the subject:—"The Press has lately filled its columns with reports and communications respecting the extreme cold and the effects arising out of it. In recognition of the absorbing interest taken in anything relating to the weather by the British people, our chief newspapers have for some time past devoted considerable space to meteorological reports and their attendant phenomena; but to any one unaware of the national hobby, the importance given to this subject would seem incredible. Every one who owned a thermometer appeared to think the world at large ought to be informed of its daily statements through the medium of the press; and, to make

the matter more interesting, generally added an abstract of their observations for many years back. That thermometers, like doctors, differ, was convincingly shown from the different readings transmitted for publication on the same day and from the same place. Many ludicrous errors were exposed by this means, and much reliable information as to the degree of cold prevailing throughout the country was obtained. Among the reports whose accuracy is questionable, there was a statement from the North of England which mentioned that the thermometer stood there as low as fifteen and even twenty degrees below zero. This extreme degree of cold appears hardly possible to occur in this country without a total change in the character of its climate; and although the latter proposition has been seriously entertained and debated upon lately by our savants, yet this fact one is not disposed to grant. However, for a considerable time the mercury descended regularly below zero every night, so as to cause ice nearly two feet thick to form in our rivers and ponds." In the United States, chiefly under the auspices of the Smithsonian Institution at Washington, a great number of meteorological stations have been established. That institution has furnished valuable information on the subject, and provided tables, charts, and regulations and suggestions for taking observations in a correct and uniform manner. In Upper Canada (in addition to the Provincial Observatory in Toronto) meteorological stations have been authorized by law and have been established at various Senior County Grammar Schools, and the instruments, tables, charts, instructions, &c., for these stations have been furnished by the Educational Department at Toronto. Already the value of these stations has been appreciated by scientific men in the United States, as will be seen by the correspondence which we publish in connection with this brief notice. A list of the stations is also inserted, together with a record of the returns, &c., which have been transmitted to the Educational Department up to the end of 1860.

Every enlightened country in Europe is now more or less engaged in prosecuting inquiries in this particular branch of science. In other parts of Her Majesty's dominions in various quarters of the globe, meteorological stations have been long established. Although the science is yet comparatively in its infancy, yet from the aggregate of facts which have already been collected at various points, and in different countries, truths of the highest value and importance in scientific research have been unfolded; unsettled theories have been tested, and ques-