## The Canadian Journal.

TORONTO, FEBRUARY, 1853.



INCORPORATED BY ROYAL CHARTER.

Memorial of the Canadian Institute to the three branches of the Legislature to continue the Royal Magnetic Observatory under Provincial Management.

To the Honorable the Legislative Council of the Province of Canada, in Parliament assembled.

The Memorial of the undersigned members of the Canadian Institute, Humbly Sheweth,--

That your Memorialists have heard with much regret that Her Majesty's Government has determined to withdraw the Detachment of the Royal Artillery at present employed in making Magnetical and Meteorological Observations at the Observatory at Teronto, and to maintain that establishment no longer.

That your Memorialists being members of a Society incorporated by Royal Charter, for the purpose of promoting the cultivation of scientific pursuits in Upper Canada, view with great concern, the discontinuance of the only observations made systematically and upon a large scale, on any class of natural phenomena, in British North America.

That as regards the science of Terrestrial Magnetism, your Memorialists believe that all which has yet been effected in that subject, has but opened the way, to wider and more general enquiries; that the period over which the observations at present extend, is much too short to have elucidated completely the various a mual and secular changes which it has brought to light, and that a prolongation of those researches, more particularly, which have indicated a connection subsisting between the magnetic variations and the solar spots, and a secular period in both variations, is eminently recommended by their novelty and interest.

That your Memorialists believe that the discontinuance of the observations so long and so systematically made in every department of Meteorology at this establishment, will not only deprive all those interested in that difficult and introduce subject, of a centre of reference, of comparison, and of support, the local and immediate value of which is, perhaps, more generally felt, than that of any

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other class of observations, but will also cut off the possibility of a large class of highly important enquiries, more particularly those which relate to the gradual change of climate which Canada is supposed to be undergoing, to their influence upon Agriculture, and to the periodical recurrence of seasons marked by peculiar manifesta ions of disease, and other important practical characteristics; which require a long, unbroken, and strictly comparable series of observations for their solution.

That your Memorialists conceive that it will be a reproach to a country so populous as Canada, of so large a public revenue, and possessing a University so largely endowed, if it suffers an establishment to fall to the ground which is of confessed scientific importance, and in whose continuance scientific men in the United States and elsewhere have repeatedly expressed their warmest interest.

That your Memorialists believe that the time has rather come when its operations should be placed upon a less restricted basis, and be extended from the special objects for which it was originally founded; to make it a centre of reference for all that large class of pursuits which involve periodical phenomena; and to include those higher departments of science, and more particularly of Astronomy, to which every Canadian must aspire to see his country one day contribute.

Your Memorialists, therefore, pray that your Honourable Council, will be pleased to take such steps, as to your wisdom may seem best, to effect the further continuance, by Provincial authority, of the Observatory heretofore conducted at the expense of the Imperial Government in Canada, after the withdrawal of the Military detachment; by placing it in connection with the Provincial University, or by maintaining it as an independent Provincial Establishment.

And your Memorialists, as in duty bound, will ever pray.

The following extracts from a correspondence printed by the Royal Society for the information of its members, in 1850, are interesting, in connection with the subject of the foregoing petition, and well calculated to assure the public that in placing the Observatory at Toronto upon a stable basis, the Government will only be carrying into effect what has been called for by men of the most ensinent science in England and the United States. A country, whose public revenue approaches a million pounds currency, (£842,184, in 1851.) and whose enormous and costly public works attest at once the vigour of its resources, and the boldness with which it can be applied in measures of national importance, cannot be excused from bearing also a modest share in those burdens,—if they can be so called,—which a wise recognition of the claims of science has added, in almost every civilized land, to the necessary cost of civil administration or material developement. For what, after all, is Science? It is nothing but the investigation of those laws of nature and properties of matter, our acquaintance with which is the foundation of all national prosperity; and which, once mastered, enable us to subject the one, and bind the other, to our car of triumph. No country, capable of reciprocating the advantages she derives from others in this respect, can justly refrain from doing so.