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REPORT

OF THE

CANADIAN OBSERVATIONS

OF THE

TRANSIT OF VENUS.

6th DECEMBER, 1882.

OBSERVATORY, TORONTO,

13TH MAY, 1883.

To THE HON. A. W. McLELAN,
Minister of Marine and Fisheries,
Ottawa.

SIR,

I have the honor to report in reference to the preparation for, and results of the observations in Canada of the Transit of Venus of 6th Dec., 1882.

Having, in the spring of last year, had the honor to be entrusted by the Government with the general arrangements, in Canada, for observing the transit, and with procuring the necessary instrumental equipment, I instructed Lieut. Gordon, R. N., to proceed to England, and purchase various instruments, and to take the opportunity of visiting Oxford, to ascertain the exact way in which the English observers were being trained, and if possible himself to obtain some instruction. I also requested him to endeavour to obtain a practice model for use in Canada, as the time was very short for having anything made. In carrying out these instructions he was fortunate enough to be successful in every particular; he also obtained from the Admiralty the loan of four Chronometers.

Early in September the model was erected at McGill University, Montreal, and Dr. Jack, President of the New Brunswick University, Professors Johnson and McLeod, of McGill University, and Mr. Chandler, practised with me in taking observations of the contacts on the model. It is unnecessary to enter into any details of this practice; I may, however, state that Professor McLeod who was the only one of the party who succeeded in obtaining observations of the actual transit, nearly always agreed with myself, within half a second, in the time he assigned to the contacts; except when the circumstances of observation were very unfavourable owing to tremor from passing vehicles, or when sudden changes in the illumination occurred, which sometimes happened when the mirror in connection with the model was used.

After leaving Montreal, I visited Quebec, Fredericton, and Kingston, and on my return to Toronto, ordered such small additional appliances as were necessary to complete the equipment of these observatories for the purpose of the transit,