Observatories in Canada

following extracts are taken from the Report of Progress for the year 1857, Geological Survey of Canada of which at the time Sir William E. Logan was director, while Sir Edmund Walker Head was Governor-General of British North America. The longitude differences by telegraphic circuit were all with Quebec, which in turn had been similarly connected with Cambridge Observatory (Harvard).

Contribute Observations logitude of communicated by Professor			
W. C. Bond	4	-44	30.70
Difference of longitude, Ouebec, Mann's Bastion, Citadel, and	-	76 m	
Cambridge Observatory	0	00	18.32
Mean of signals, both ways, September 21	0	00	18.26
Mean of signals, both ways, October 9	0	00	18.38
Hence longitude Quebec Observetory	4	44	49.02
Difference longitude, Toronto, Magnetic Ob. and Quebec, mean			
of signals, 44.51s. and 44.31s., both ways, January 17	0	32	44.41
Hence longitude Toronto Magnetic Observatory	5	17	33.43
Difference of longitude, Kingston, near Court House, and Quebec,			
mean of signals (05.60s. and 05.39s.) both ways, Feb. 20	0	21	05.50
Hence longitude, Kingston	5	05	54.52
Difference of longitude, Montreal, Viger Square, and Quebec,			• =
mean of signals (23.01s. and 22.38s.) both ways, March 12.	0	09	22.70
Hence longitude, Montreal, Viger Square	-4	54	11.72
Difference of longitude, Chicago (playground of the school			
situated to the northward of the Roman Catholic Church,			
Huron Street) and Quebec, mean of signals (41.44s. and			et.
41.60s.) both ways, May 15	1	51	41.52
Hence longitude, Chicago	5	50	30.54

In the text Ashe writes, p. 235: "Chicago being placed on some charts, in a longitude differing by upwards of forty miles from that on another, it was of the greatest consequence before making a map of Canada, that the right position of Chicago should be ascertained." From this it would appear that Chicago first learned where it actually was from Canadian observations! Continuing:

"The electric current was transmitted via Toledo, Cleveland, Buffalo, Toronto and Montreal, a distance of 1,210 miles, by one entire connection between the two extreme stations, and without any intermediate repetition, and yet all the signals were heard distinctly at either end of the line; the signals occupied only .08 of a second in passing along that distance."

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