

From these I have taken, as the errors at the times at which the interchange of time took place, the following:—

	s.
Dec. 5th throughout	slow 27.04
6th 7 h.	26.32
8	26.30
9	26.27
10	26.24

In signalling the time on the night of the 5th, the time signalled as an exact minute was the 33 seconds by the Chronometer, on the night of the 6th, the second signalled was the 34. The return signals from all stations, except Kingston, were made by hand either from Clock or Chronometer, and were estimated at Toronto, by ear. At Kingston the Toronto signals were taken down on a chronograph constructed by Prof. Dupuis, and the return signals were made by the Kingston clock, which was placed in circuit so as to beat every second except that at the exact minute.

The following shows the results of the comparison on the two nights:—

December 5th,—Toronto and Kingston.

Toronto sending.		Kingston sending.	
T. 11 16 33.00	K. 11 29 20.87	K. 11 46 0.	T. 11 33 12.30
27.04	43.25	43.27	27.04
<u>11 17 0.04</u>	<u>11 28 37.62</u>	<u>11 45 16.73</u>	<u>33 39.34</u>
	11 17 0.04	11 33 39.34	
	<u>11 37.58</u>	<u>11 37.39</u>	

December 6th,—Toronto and Kingston.

T. 9 28 34.00	K. 9 41 23.00	K. 9 57 0.00	T. 9 44 11.20
26.26	45.26	45.28	26.24
<u>9 29 0.26</u>	<u>9 40 37.74</u>	<u>9 50 14.72</u>	<u>9 44 37.44</u>
	9 29 0.26	9 44 37.44	
	<u>11 37.48</u>	<u>11 37.28</u>	

m. s.

m. s.

Mean difference on 5th, 11 37.48 On 6th, 11 37.38

December 5th,—Toronto, Ottawa.

T. 10 4 23.00	O. 9 52 35.50	O. 9 58 12.09	T. 10 9 57.30
27.04	27 11.21	27 11.23	27.04
<u>10 5 0.04</u>	<u>10 19 46.71</u>	<u>10 25 11.23</u>	<u>10 10 24.34</u>
	10 5 0.04	10 10 24.34	
	<u>14 46 67</u>	<u>14 46.89</u>	

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