

July 6th, 1858.—At same MILWAUKEE Station, (No. 3.)

Second Set.—After exchanging Signals with Chicago.

NAMES OF STARS.	Observed true altitudes of Star affected by corrections for refraction and errors of Sextant.	True Sidereal time of observation deduced.	Time of observation noted by Sidereal Chronometer, No. 2,557.	Chronometer No. 2,557, fast of Sidereal time by each observation
Alpha CORONÆ BOREALIS, West.....	° ' "	<i>h. m. s.</i>	<i>h. m. s.</i>	<i>h. m. s.</i>
	32 06 52.1	20 09 42.93	21 11 44.7	1 02 01.77
	31 46 43.5	20 11 35.09	21 13 37	1 02 01.91
	31 26 39.8	20 13 25.65	21 15 27.8	1 02 02.15
	31 14 59.1	20 14 30.44	21 16 32.6	1 02 02.16
	30 50 22.7	20 16 47.06	21 18 48.2	1 02 01.14

Mean result of 5 observations on Alpha CORONÆ BOREALIS, *h. m. s.*
West, (at 20*h.* 08*m.*) +1 02 01.83

Alpha ANDROMEDÆ, East,.....	° ' "	<i>h. m. s.</i>	<i>h. m. s.</i>	<i>h. m. s.</i>
	43 31 36.8	20 19 20.15	21 21 21	1 02 00.85
	43 42 22.1	20 20 19.03	21 22 19.5	1 02 00.47
	43 52 37.5	20 21 15.17	21 23 16.5	1 02 01.33
	44 07 30.5	20 22 36.63	21 24 38	1 02 01.37
	44 21 23.6	20 24 09.51	21 26 10.2	1 02 00.69

Mean result of 5 observations on the Star Alpha ANDROMEDÆ, East, (at 20*h.* 22*m.*) +1 02 00.94

Mean result of 5 observations on the Star Alpha CORONÆ BOREALIS, West, (at 20*h.* 08*m.*) as above +1 02 01.83

Second result, after signals:—Fast of Sidereal time by a mean of these results, from East and West Stars, (at 20*h.* 15*m.*) +1 02 01.38

First result, before signals:—Fast of Sidereal time by a mean of these results, from East and West Stars, (at 15*h.* 52*m.*) +1 02 00.67

Result adopted:—Chronometer No. 2,557, fast of Sidereal time for this Station, (at 18*h.* 03*m.*) +1 02 01.

The above result for the Milwaukee time, combined with the Chicago time-observations of July 5th and 7th, and the following telegraphic signals give us a fourth determination of the difference of Longitude between Chicago and Milwaukee, entirely independent of the other three, as follows, viz.: