MONDAY, JANUARY 28, 1889

Rule for finding Lat near noon

Forenoon

10 h 16 m 16 s 51 m 48
3 h 6 9 1 41
22 20 14 53 29
11 17 40 36 19
11 02 34 22 37
4 30 58 56 Lat
10 58 04 Long 169 25
12 00 00 July 6th 94
1 01 56
8 25 9
2 20 8
8 46 7

Chronometer time with Horatio.

Horatio	Cal
12 29 00	12 34 85
	2 04
	12 27 31
12 30 00	12 12 16
	18 55
	12 31 13

TUESDAY, JANUARY 29, 1889

To find the Longitude by setting sun.

If the lower limb be observed, subtract 21 miles from the Sum, and add 21 miles to the half sum to find the remainder.

If the upper limb be observed, use 53 miles instead of 21 miles.

	h	m	s			
Chronometer time	11	01	43	Lat	35 38	Log 09004
				Pd	70 39	02525
					1 06 17	
					21	
					105 56	
					52 58	9 77980
					21	
					53 19	9 90415
						19 79924
						9 89962

To find the Latitude by double Altitudes

		Alt	Alt
Chronometer time	1 24 55	76 26	64 17
	2 37 15	12	12
	1 12 20	76 38	64 29
		64 29	76 38
		12 09	141 07
	Col 1.	6 04	70 33

	Col 1.	Col 2.	Col 3.
Elapsed time Cosec	10. 80408		
Declination Sec	10. 00087		
A ——— Cosec	10. 80495	Cosine 9. 99460	Cosec 11. 20010
Half sum alts Cosine	9. 52242	Cosec 10. 02552	Cosine 9. 99460
Half diff alts Sine	9. 02402	Sec 10. 00244	B 3.40 S L 19470 South Cosec (Bluer than 90° (like Dec. Nor Lat)
C ——— Sine	9. 35139	Cosine 9. 98875	Cosine 9. 98875
Z less than 90° North or South like bearing of zenith)		Sec 10. 01131	Z 13..01 N.
			E 9. 21 Sine 9. 21076

Lat 9..07 North Sine 9. 19951