Survey commenced Dec. 20 1892 – I use Burt's Solar Compass with telescope attachment, and preliminary to survey I take an observation on Polaris finding my instrument to be in good adjustment, showing a needle variation of 17° 35' E.

Local M.T. of Obs. Dec. 20 '92.	5 h.	20.0 m.
U.C. Polaris Dec 15 (Table I)	7	39.1
Correction for 4 days (subtract)	0	15.8
U.C. Polaris Dec. 19th	7.	23.3
This taken from 29 h. 20 m. (5.20 + 24)		
gives Hour Angle of Polaris	21.	56.7
From Table II Azimuth of Polaris is	0° 50' E.	
N. end of needle reads	16° 45' E.	
The sum is the Variation, =	17° 35' E	