

T. 11 N., R. 44 E.

38° 48' N., on the lat. arc; 19° 59' N. on the decl. arc; and determine a meridian with the solar, whence a flag on brow of ridge, about 20 chs. dist. bears S. 0° 51' W.; then to test this indication of the solar I make a series of three altitude observations of the sun for azimuth, each with the telescope in direct and reversed positions observing opposite limbs of the sun, and reading the horizontal deflection angles from the flag to the sun:

Observations	Telescope	Sun Watch time	Vertical Angle	Horizontal Angle
1	Direct	4h23m56s	28° 53'	92° 33'
6	Reversed	4h29m58s	28° 10'	92° 51'
	Mean	4h26m57s	28° 31' 30"	92° 42'
2	Direct	4h25m22s	28° 35'	92° 10'
5	Reversed	4h28m32s	28° 26'	93° 15'
	Mean	4h26m57s	28° 30' 30"	92° 42' 30"
3	Direct	4h26m16s	28° 25'	92° 53'
4	Reversed	4h27m38s	28° 37'	92° 30'
	Mean	4h26m57s	28° 31' 00"	92° 41' 30"

Mean true bearing of flag is S. 0° 51' 08" W.
Indicated error of solar attachment is 0° 00' 08".

All azimuths in this record are referred to the true meridian thus determined, by the method of deflection angles and calculated courses.

The lines were measured with a Lufkin 8 ch. and a Lallie 5 ch. steel tape, in length each graduated every link for the first 100 lks., and the remainder at intervals of 10 lks.; both tapes were compared with a 1 ch. standard at the time of beginning the survey, and found correct. All measurements were taken on the slope; the vertical angles were determined by clinometers in good adjustment, the field notes show the horizontal equivalents.

All lines and connections of this survey were run by direct methods.

DEPENDENT RESURVEY OF THE 2nd STANDARD PARALLEL NORTH
ALONG A PORTION OF THE SOUTH BOUNDARY OF T. 11 N., R. 44 E.

Reestablishment of surveys executed by C. C. Tracy, U. S. Deputy Surveyor in 1867.

Random Lines

Beginning at the original standard cor. of Tps. 11 N., Rs. 43 and 44 E., hereinafter described.

East, along the S. bdy. of sec. 31, with retracements.

39.96 Fall 66 lks. N. of the original standard $\frac{1}{4}$ sec. cor. of sec. 31, hereinafter described.

80.03 Fall 128 lks. N. of the original standard cor. of secs. 31 and 32, hereinafter described.

The true course of the W. $\frac{1}{2}$ mile is, therefore, S, 89°