

Chains. and compare them with the meridian determined by Polaris observations. These lines not varying more than one minute of arc from the true meridian, I conclude that my solar is in adjustment. At 12h.00m. ^{M.} 1.m.t., I observe the sun on the meridian, for altitude. The resulting latitude is $41^{\circ}00\frac{1}{2}'N$. All measurements were taken with a five chain steel tape, and the slope angles read with a clinometer.

June 14, 1914.

June 15, 1914: At 7h.10m., a.m., 1.m.t., I set off $41^{\circ}58'N$. on the lat. arc; $23^{\circ}19'N$. on the decl. arc; and determine a meridian with the solar, at the temp. cor. of secs. 32 and 33.

Thence I continue my retracement

East along the Seventh Standard Parallel North. At intervals of 40.00 chs., I make diligent search for old cors., but find none.

Retrace $2\frac{1}{2}$ miles.

June 15, 1914.

June 16, 1914: At 9h.00m., a.m., 1.m.t., I set off $40^{\circ}58'N$. on the lat. arc; $23^{\circ}21'N$. on the decl. arc; and determine a meridian with the solar, at the temp. $\frac{1}{4}$ sec. cor. of sec. 35.

Thence I continue my retracement

East along the Seventh Standard Parallel North.

438.88 The temp. $\frac{1}{4}$ sec. cor. of sec. 36, set by me on April 27, 1914, bears N. 26 lks. dist. This point being 200.00 chs. due west of the old Standard cor. of secs. 32 and 33, T. 36 N., R. 66 E., the length of the line joining the cor. of T. 36 N., Rs. 64 and 65 E., to the above named standard cor., is 638.88 chs.; and the bearing, $3\frac{1}{4}$ lks. N. per mile, or approximately $N.89^{\circ}59'E$. The above length makes the average length of the miles 79.86 chs., and the half miles 39.93 chs. Therefore, I go to the temp. cor. of T. 36 N., Rs. 65 and 66 E., set by myself on April 25, 1914, and reestablish