

Chains

Survey commenced Aug. 10, 1914; and executed with a Young and Sons, light mountain transit, No. 8518, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved by Assistant Supervisor of Surveys, G.D.D. Kirkpatrick.

I examine the adjustments of the transit and correct the level and collimation errors; then to test the solar apparatus by comparing its indications, resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 13, 18, 19 and 24; on the E. bdy. of the tp. which corner is a stake $1\frac{1}{2}$ ins. diam. by 18 ins. long set in a mound of stone and mkd. with 3 notches on the N. and S edges; latitude $41^{\circ}3'30''$ N, longitude $116^{\circ}57'W$ I set off $41^{\circ}3'30''$ N. on the lat. arc, $15^{\circ}37'N$ on the decl arc and at 4 h., p.m., l.m.t., determine a meridian with the solar, and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of my corner.

At 10 h. 17 m., p.m., l.m.t., I observe Polaris at eastern elongation in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground 5 chs. N. of my station.

August 10, 1914.

August 11, 1914.

At 7h. 30m. a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}32'$ to the west and mark the meridian thus determined by cutting a small groove in the stone set Aug. 10 on which the meridian falls 0.4 ins. east of the mark determined by the solar.

At 8 h., a.m., l.m.t., I set off $41^{\circ}3'30''$ N. on the lat. arc, $15^{\circ}25'N$ on the decl arc and determine a meridian with the solar, and mark a point thereof by a cross on the stone already set 5 chs. N. of my station.