SURVEY OF THE NORTH BOUNDARY OF T.23 N., R.26 E.

Chains Survey commenced September 11, 1911, and executed with a Young & Sons transit, with solar attachment. The horizontal limb is provided with two verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Reno, Nevada, found correct, and was approved by the Surveyor General for Nevada, August 12, 1911.

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 the meridian, determined by observations on Polaris, I proceed as follows:

At my camp, latitude 39°51½' N., longitude 119° W., I set off 39°51½' on the lat. arc; 4°43½' N. on the decl. arc, and at 4h.00m. p.m., l.m.t., determine with the solar a meridian, and mark the point thereof by a tack driven a stake about 10 chs. N. of my station.

At 8h.13m. p.m., l.m.t. by my watch which is correct, I observe Polaris at eastern elongation in accordance with the instructions in the Manual and mark the line thus determined by a tack driven in a stake about 10 chs. N. of my station September 11, 1911.

September 12, 1911, at 7h.00m. a.m., l.m.t., I lay off the azimuth of Polaris, 1°31½' to the west, and mark the meridian thus determined by a tack in the stake already set Sept.11, on which the meridian falls ½ inch west of the mark determined by the solar.

At 8h.00m. a.m., l.m.t., I set off 39°51½' on the lat arc; 4°28½' N. on the decl. arc; and mark a point in the meridian by the solar by a tack in the stake already set. This mark falls 0.4 inches east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines