Chains

Survey commenced July 21, 1915 and executed with Young and Sons transit No. 8599 and Keuffel and Esser transit No. 20575, both instruments are provided with Smith Solar attachments. The horizontal limbs are provided with two double verniers placed opposite to each other and reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs. Both instruments prior to surveys on Group No. 36 were approved by G.D.D.Kirkpatrick, Assistant Supervisor of Surveys for the States of Utah and Nevada.
Measurements on these surveys were made with a 5ch. steel Lallie tape and the slope angles obtained by the use of a clinometer.

July 21, 1915.

Sept. 28, 1915: At a point near camp situated in the S.E. cor. of sec. 10, T. 21 N., R. 48 E., latitude 39° 42'N., longitude 116° 33½' W., at 4h. 00m.,p.m.,l.m.t., I set off 39° 42'N. on the lat. arc; 1° 52½'S. on the decl. arc and mark a point in the meridian determined with the solar by driving a tack in a hub set 5 chs. N. of my station.
At 7h.07m.,p.m.,l.m.t., by my watch which is correct I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point in the line thus determined by a tack driven in a hub set approximately 5 chs. N. of my station.

Sept. 28,1915.

Sept. 29, 1915:At 7h. 35m.,a.m.,l.m.t., I set off the azimuth of Polaris 1° 29.2' to the west, and mark a point in the meridian thus determined by a tack driven in the hub already set 5 chs. N. of my station. This mark falls 0.5 ins. E. of the point determined with the solar.
At 8h. 00m.,a.m., l.m.t., I set off 39°42'N. on the lat. arc; 2° 7½'S. on the decl. arc; and determine a meridian with the solar which falls 0.2ins. to the E. of the point determined by Polaris observation.
The solar apparatus by a.m. and p.m. observations defines positions for meridians, respectively about 0' 10"E. and 0' 26" W. of the meridian determined by Polaris observations. therefore I conclude that the adjustment of the instruments are satisfactory.
The magnetic bearing of the true meridian at 8h. 15m.,a.m., l.m.t., is N.17° 50'W.; the angle thus determined gives the nagnetic declination 17° 50'E.
The above observations were made with transit No. 8589 by H. W. Reppert. Similar tests to the above were made by W.R. Johnston with transit No. 20575 and the same was found to be in good adjustment.

Sept. 29,1915

Surveyed by H.W.Reppert.
July 21,1915:- At 9h.00m., a.m.,l.m.t., I set off 39°44'N. on the lat. arc; 20° 36'N. on the decl. arc; and determine a meridian with the solar at the corner of Tps. 21 and 22 N.,Rs. 48 and 49 E., which is a cedar post 4x4x30 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.
Thence I run
South on a blank line on the E. bdy. of T. 21 N.,R. 48 E. and at 481.20 chains I intersect the 4th.Standard Parallel N. 2.68 chs. W. of the temp. point for the standard cor. of Tps. 21 N.,Rs. 48 and 49 E., which was set 80.00 chs. W. of the Standard corner of secs. 31 and 32 of T. 21 N.,R.