Chains

RUBY VALLEY GUIDE MERIDIAN.

Survey commenced September 15, 1915, and executed with a Young and Sons transit No.6517 with Smith Solar attachment. The horizontal limb is 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.

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 p.m. and a.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of Tps. 34 and 35 N., Rgs. 55 and 56 E., latitude 40°50'30"N., longitude 115°43'W.; at 4 h 0 m, p.m., l.m.t., I set off 40°50'30"N. on the lat. arc, 3°11' N. on the decl. arc and determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground 5 chs. N. of the cor.

At 7 h 58 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.

Sept. 15, 1915.

Sept. 16, 1915.

At 7 h 45 m, a.m., l.m.t., I lay off the azimuth of Polaris 1°31' to the west and mark the meridian thus determined by cutting a small groove in the stone set Sept. 3, on which the meridian coincides with the mark determined by the solar.

At 8 h 0 m, a.m., l.m.t., I set off 40°50'30"N. on the lat. arc, 2°55'N. on the decl. arc and mark a point in the meridian determined with the solar by a cross on the stone already set 5 chs. N. of my station, this mark coincides with the meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively coinciding with the meridian established by the Polaris observation, therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian is N.18°15'W. the angle thus determined gives the magnetic declination as 18°15'E.

The lines of this survey were measured with a 5 chain steel tape and clinometer.

The cor. of Tps. 34 and 35 N., Rgs. 55 and 56 E. is a redwood stake 4x4 ins. by 3 ft. long, lying on the ground on a mound of earth. It is marked as described by the Surveyor General.

Thence I retrace
South between secs. 1 and 6, on the W. Bdy. of the Tp.

40.00 I search diligently but find no ¼ sec. cor.

80.00 I search diligently but find no cor. for secs. 1, 6, 7 and 12. Set a temporary corner.

From the temporary cor. of secs. 1, 6, 7 and 12,
I retrace
South between secs. 7 and 12.

40.00 I search diligently but find no ¼ sec. cor.

81.96 I find the cor. of secs. 7, 12, 13 and 18, falling 46 lks. E. of my line.
It is a cedar stake 2 ins. square by 14 ins. above ground set in the ground in a mound of earth. There have been markings, but they are no longer legible. There are no pits. Course of these two miles is S.0°10'E.