

## Chains

Survey commenced July 6, 1915, and executed with a Young & Son's transit No. 8483, with Smith Solar attachment; the horizontal limb being provided with two opposite verniers reading to 30" of arc.

The instrument was approved by the Asst. Supervisor of Surveys for Nevada and Utah.

August 4, 1915:

I examine the adjustments of the transit and find them correct; 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 obtained by observation on Polaris, I proceed as follows:

At my camp, which is located near the  $\frac{1}{4}$  sec. cor. of secs. 15 and 22, in lat.  $40^{\circ}55\frac{1}{2}'N.$ , longitude  $115^{\circ}06'W.$ , I set off  $40^{\circ}55\frac{1}{2}'N.$  on the lat. arc;  $17^{\circ}21\frac{1}{2}'N.$  on the decl. arc, and observe the sun at 5 h 0 m, p.m., l.m.t. I mark the meridian thus determined on a peg firmly driven in the ground, about 5 chs. N. of my station.

At 10 h 43 m, p.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual of Instructions lay off the azimuth,  $1^{\circ}31'$  to the W. and mark a point in the meridian, by driving a small nail in the stake already set about 5 chs. N. of my station. This meridian falls 1' to the right of the line obtained by solar observation.

August 4, 1915.

August 5, 1915:  
With instrument centered over station at camp, I set off  $40^{\circ}55\frac{1}{2}'N.$  on the lat. arc;  $17^{\circ}12'N.$  on the decl. arc; and determine a meridian with the solar at 7 h 0 m, a.m., l.m.t. This meridian falls  $\frac{1}{2}'$  left of the Polaris meridian.

The magnetic declination at 7 h 10 m, a.m., l.m.t., is  $18^{\circ}04'E.$

The lines were measured along the slopes with a 5 chain steel tape, the vertical angles read with a clinometer, and all distances reduced to the horizontal.

July 6, 1915:

At 3 h 0 m, p.m., l.m.t., I set off  $40^{\circ}58'N.$  on the lat. arc;  $22^{\circ}45'N.$  on the decl. arc, and observe the sun on the meridian at the old cor. of Ts. 35 and 36 N., R. 60 E., heretofore described.

Thence South on a retracement between secs. 1 and 6.

9.61 Intersect the 7th Standard Parallel, North.

47.75 Find no evidence of old  $\frac{1}{4}$  sec. cor.

87.24 The old cor. of secs. 1, 6, 7 and 12, bears East 53 lks. dist. It is a granite stone 18x9x4 ins. above ground, marked and witnessed as described by the Surveyor General.

The course of the mile is  $S.0^{\circ}21'E.$

July 6, 1915.

August 9, 1915:

At 3 h 0 m, p.m., l.m.t., at the old cor. of secs. 1, 6, 7 and 12, I set off  $40^{\circ}47'N.$  on the lat. arc;  $15^{\circ}59'N.$  on the decl. arc, and determine a meridian with the solar. Thence South on a retracement between secs. 7 and 12.

40.08 The old  $\frac{1}{4}$  sec. cor. of secs. 7 and 12, bears W. 3 lks. dist. It is a granite stone 15x7x5 ins. in a mound of stone, marked as described by the Surveyor General.

The course of this half mile is  $S.0^{\circ}03'W.$

80.54 The old section corner of secs. 7, 12, 13 and 18, bears west 9 lks. dist. It is a granite stone 20x12x6 ins. in a mound of stone, marked and witnessed as described by the Surveyor General.

The course of the last half mile is  $S.0^{\circ}05'W.,$  and