

North boundary of T 31 N R. 30 E.

peg set August 20, on which the meridian falls 0.2 ins. west of the mark determined by the solar.

At 8^h 0^m a. m. l. m. t., I set off 40° 32', on the lat. arc., 12° 7½^m N. on the decl. arc.; and mark a point in the meridian determined with the solar, by a pencil mark on the peg already set 5 chs. N. of my station; this mark falls 0.2 ins. west of the meridian established by the Polaris observation.

The solar apparatus, by p. m. and a. m. observations, defines positions for meridians, respectively about 0' 10" east and 0' 10" west of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, 8^h 15^m a. m., is N 18° 31' W.; the angle thus determined gives the mag. decl. 18° 31' E.

A similar test was made for the Young & Sons transit, with Smith solar attachment, including the level and collimation adjustments.

August 23, 1912: At 8^h 59^m a. m. l. m. t., I set off 40° 35' N. on the lat. arc.; 11° 26' N. on the decl. arc.; and determine a true meridian with the solar, at the cor. of Tps. 31 & 32 N. Rs. 30 & 31 E. heretofore described.

Thence I run

West on a random line, along the N. bdy.

of T 31 N. R. 30 E., setting temp. ¼ sec. and sec. cor. at intervals of 40.00 chs.; and at

478.28 chs., intersect the W. bdy. of T 31 N. R. 30 E., 115 lks. S. of cor. for Tps. 31 & 32 N. Rs. 29 & 30 E., which is an eruptive rock 18 X 10 X 10 ins. above ground, marked and witnessed as described by the surveyor general.

The falling answers to a correction of 0° 08', or 19 lks. N. per mile, counting from the N.E. cor. of the Tps.; therefore I run

S. 89° 52' E., bet. secs. 6 & 31, on a true line.

7.80

Dry wash, 10 lks. wide, course N.

11.30

Dry wash, 10 lks. wide, course N.W.