

S. Bdy, T. 23 N., R. 67 E.

Chains.

the meridian thus determined, by driving a small nail in the peg set Oct. 22, on which the meridian falls 0.3 ins. east of the mark determined by the solar. At 8<sup>h</sup>00<sup>m</sup> a. m., l. m. t., I set off 39° 52' on the lat. arc; 11° 18' S. on the decl. arc; and mark a point in the meridian determined with the solar, on the stake already set 5 chs. N. of my station; this mark falls 0.4 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p. m. and am. observations, defines positions for meridians, respectively about 0'16" west and 0'21" east of the meridian established by the Polaris observations.

The magnetic bearing of the true meridian, at 8<sup>h</sup>10<sup>m</sup> a. m., is N. 17° 43' W.; the angle thus determined gives the mag. decl. 17° 43' E.

Oct. 23:

At 10<sup>h</sup>00<sup>m</sup> a. m., l. m. t., I set off 39° 49' N. on the lat. arc; 11° 21' S. on the decl. arc; and determine a meridian with the solar, at the cor. of T. 22. and 23 N., R. 66 and 67 E., which I established June 9, 1913.

Thence I run

East, on a true line, along the S. bdy. of T. 23 N., R. 67 E., bet. sec. 31 and 6.

Over rough, mountainous land, through scattering timber; descending.

11.50 Dry wash, 10 lks. wide, in bottom of draw, 150 ft. below cor., course S. 45° E.

21.00 Top of low spur, slopes S. 30° E.; descend.

24.00 Dry wash, 3 lks. wide, in bottom of draw, course S. 45° E.; ascend.

31.50 Top of rocky spur, 100 ft. high, slopes S.; descend 75 ft.