

East Boundary of T. 8 S., R. 67 E.

Charris

on the lat. arc, $20^{\circ} 39' N.$ on the decl. arc; and mark the meridian thus determined with the solar, by a cross on the stone 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, about $0.5''$ east and $0.11''$ west of the meridian established by the Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian, at 7 a. m., is $N. 16^{\circ} 18' W.$; the angle thus determined gives the mag. decl. $16^{\circ} 18'$ east.

At 12^h noon, I begin at the standard cor. of Tps. 8 S., Rgs. 67 and 68 E., which I established July 19, 1911, latitude $37^{\circ} 11' N.$, longitude $114^{\circ} 26' W.$

July 21: At this cor., I set off $20^{\circ} 36' N.$ on the decl. arc; and at 12^h 06^m p. m., l. m. t., observe the sun on the meridian; the resulting lat. is $37^{\circ} 11' N.$

Thence I run

North, bet. secs. 31 and 36

Over rolling land, through scattering shadscale, chafforal and Joshua; descend

4.60 Ravine, 50 ft. below Tp. cor., drains $S. 20^{\circ} W.$; ascend

10.10 Spur, 75 ft. above ravine, projects $S. 30^{\circ} W.$; descend

38.00 Ravine, 100 ft. below spur, drains $S. 30^{\circ} W.$; ascend

40.00 Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap mkd.

536 $\frac{1}{4}$ | 531

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and raise a mound of stone, 2 ft. base,