Chains

the solar.

At 7h 56m a. mn., L. mn. t., I set off 37° 11' N. on the lat. arc, 20° 18' N. on the decl. arc, and mark the meridian thus determined with the solar, by a cross on the stone already set 5 lks. N. of my station; this mark falls 0.2 ins. west of the meridian established by the Polaris observation.

The solar apparatus, by p. mn. and a. mn. 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 8h 16m a. mn., is N. 16° 10' W.; the angle thus determined gives the mag. decl. 16° 10' east.

From the standard cor. above described, I run East on the tangent, S. of Sec. 31

Over rough, rolling land; ascend.

6.00 Commence abrupt ascent, bears N. 20° E. and S. 20° W.;

36.25 Point of spur, 1000 ft. above sec. cor., projects N. 20° W.; also ridge from which spur projects, bears S. 30° W. and S. 60° E.; descend swale in ridge.

40.00 N. 0.4 lks. from the tangent

Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for Standard 1/4 sec. cor, with brass cap mkd.

S 31
1/4
1911

and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

42.00 Ridge, 20 ft. below top of spur, bears N. 60° W. and S. 60° E.; descend along N. slope

65.00 Commence abrupt ascent, ascent through broken ledges, course N. 20° W. and S. 20° E.

80.00 N. 1 lk. from the tangent.

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for Standard cor. of Secs. 31 and 32, with brass cap mkd.