

Chains

at 3h., a.m., l.m.t., I lay off the azimuth of Polaris $103^{\circ} 31'$ to the east and mark the meridian thus determined by cutting a small groove in the stone East Sec. 12, on which the meridian falls. 0.4 ins. east of the mark determined by the solar.

at 8h. 10 m., a.m., l.m.t., I set off $40^{\circ} 24'$ N. in the lat. arc. $23^{\circ} 19'$ S. on the decl. arc, and mark a point in the meridian determined with the solar by a cross on the stone already set 5 chs. N. of my station, this mark falls 0.3 ins. east of the meridian established by the Polaris observation.

The solar apparatus by p.m., and a.m. observations, defines positions for meridians, respectively about $0^{\circ} 21''$ west and $0^{\circ} 16''$ east of the meridian established by the Polaris observation, therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h. 20 m., a.m. is N. 18° W.; the angle thus determined gives the mag. decl. 18° E

Thence I run

N. 1° W. bet. sec. 35 and 36

Descending N. slope of high mountain.

19.75 Small ravine, course N. E.

27.00 Small mountain spur, slopes N. E.

37.25 Ravine, course N. W.

40.00 On westerly slope of hill

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

535
 $\frac{1}{4}$

536 ✓