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Surveys and re-surveys in T18N, R29E.

chains

June 15, 1912.

At 8 a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}31'$ to the left, and mark the meridian thus determined, by cutting a small groove in the stone set June 14, on which the meridian falls 0.4 ins. east of the mark determined by the solar.

At 8 h. 6 m., a.m., l.m.t., I set off $39^{\circ}22'$ on the lat. arc. $23^{\circ}20'$ N. 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 observations; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 8 h. 30 m., a.m., is $N 17^{\circ}50' W$; the angle thus determined gives the mag. decl. $17^{\circ}50' E$.

The cor. of Tps. 17 and 18 N. Rs. 29 and 30 E. was a pine post, $2\frac{1}{2}$ ins. sq. by 1 ft. above ground, firmly set in the ground but with no accessories, marked with 6 grooves on each of the N., S., E. and W. faces.

I destroy all traces of this corner and reestablish it at the same point as follows:

Set an iron post 3 ft. long, 3 ins. diam. 24 ins. in the ground, with brass cap m'd.