Chs

West bet. secs. 6 and 31.
Over mountainous land.
Ascend 290 ft. on SE. slope to top of ridge.

40.00 Set an iron post 3 ft. long, 1 in. in diam., 24 ins. in the ground for ¼ sec. cor., with brass cap mkd:

S 31
¼
S 6
1914

and raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor.
July 25, 1914.

August 25: From the ¼ sec. cor. between secs. 6 and 31, above described, I continue my line west.

89.60 Ridge, bears N. and S.; descend 30 ft. on W. slope to closing corner.

96.83 Intersect the East Bdy. of Tp. 39 N., R. 19 E., at a point 28.95 chs. North of the ¼ sec. cor. on the E. Bdy. of sec.1, and at the point of intersection set an iron post 3 ft. long, 3 ins. in diam., 12 ins. in the ground to bed rock and in a mound of stone for the closing corner of Tps. 39 and 39½ N., R. 20 E., with a brass cap mkd:

	T39½N
T39N	R20E
R19E	S31
CC	
S1	S6
S12	T39N

1914

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

This mile consists of mountainous land with southeasterly slope. Soil is very rocky and unfit for cultivation. Sparse growth of sage and a very few mahogany trees.

August 25, 1914.

SUBDIVISION OF T.39 N., R. 20 E.

July 18: At my camp in T.39 N., R. 20 E. in section 16, lat. 41°15.5'N., long. about 119°44'W., at 9 h 14 m P.M., l.m.t., I observe Polaris in [illegible] in accordance with Manual of Instructions, and mark a point in the line thus determined on a stake firmly driven in the ground about 5 chs. north of my station.

Time of observation, July 18 P.M.....9h 14.0m
Equivalent to A.M. time July 18 .....21 14.0
U.C. Pol., July 18, Greenwich, ... 5h 47.9m
Red. to local longitude 1.3
U.C. Pol. at Obsn. station, July 18 5h 46.6m 5 46.6
Hour angle of Polaris at Observation 15h 27.4m
Subtract from 23h 56.1m
Time argument for table 8h 28.7m

Azimuth of Polaris at obsn., 1°12.3'E. July 18, 1914.

July 19: At 8 h 0 m A.M., l.m.t., I lay off the azimuth of Polaris 1°12.3' to the west, and mark a point in the true meridian, thus established, by a tack driven in a wooden peg, firmly set in the ground, about 5.00 chs. N. of my station.

At 9 h 0 m A.M., l.m.t., I set off 41°15.5' on the lat. arc and 20°56'N. on the decl. arc, and determine with the solar a meridian, which, I note, differs less than 30" from that established by the Polaris observation. At this station I set off 20°55'N. on the decl. arc, and at apparent noon observe the sun on the meridian, the resulting latitude is 41°15.5'.

At 3 h 0 m P.M., I set off 41°15.5' on the lat. arc, and 20°54'N. on the decl. arc and determine with the solar