Retracement of the west bdy. of T. 21 N. R. 44 E.

Chains.

Survey commenced Nov. 4, 1914, and executed with Young &
Sons light mountain transits Nos. 8572 and 8589, with
Smith solar attachments. The horizontal limbs being
provided with two opposite verniers reading to single
minutes, which is also the least count of the verniers
of the latitude and declination arcs.

Two steel tapes five chains long were used to measure all
distances, and were frequently tested with a one chain
tape kept for that purpose.

I test the adjustments of the instruments and find them
correct, then to test the solar apparatus, by comparing
the results of observations on the sun, with a true
meridian determined by observations on polaris,
I proceed as follows.

At camp in T. 21 N. R. 44 E., in approximate
latitude 39° 39' N., longitude 117° 03' W. At 2h 44m
p.m. l.m.t. I set off 39° 39' N. on the lat. arc; 15°
18' S. on the decl. arc, and determine a meridian with
the solar. I mark the meridian thus determined on a peg
10.00 chs. N. of the transit station.
                                        Nov. 4, 1914.

Nov. 5, 1914, at 4h 25m a.m. l.m.t. I commense following

the western progress of polaris, and when the star

reached its maximum position in azimuth, marked the

line thus determined with a tack driven in a peg set

firmly in the ground. I reverse the transit and make

a similar observation, the point coincides with the

first point.

At 6 a.m. I lay off the azimuth 1° 29½' to the east and

mark the meridian thus determined by a tack in the peg
                        true
set yesterday, the meridian falls 0.9 ins. to the west

of the meridian determined with transit No. 8572 and

0.5 ins. to the west of the meridian determined with

transit No. 8589.

At 8h 44m a.m. l.m.t. I set of 39° 43' N. on the lat.

arc; 15° 31' S. on the decl. arc; and determine a

meridian with the solar at the cor. of Tps. 21 and 22 N.

Rs. 43 and 44 E., which is a granite stone 8 x 8 x 8 ins.

above ground, marked 6 notches on the N., E., S. and W.

edges, and with mound of stone on S.

Thence I run

South, retraceing bet. secs. 1 and 6.

39.70   Fall 34 lks. east of the old ¼ sec. cor., which is a