

TESTS OF INSTRUMENTS.

the sun on the meridian; the resulting reading of the decl. arcs is $7^{\circ} 50' N.$, which agrees with the computed declination of the sun.

At 4h 0m p.m., app.t., with the lat. arcs unchanged, I set off $7^{\circ} 46.7' N.$, on the decl arcs and determine meridians with the solars which I find to agree with the true meridian.

As all of the solar observations during the usual hours of solar work come within $1' 30''$ of the true meridian, I conclude that the adjustments of the instruments are satisfactory.

Frequent tests were made of the solar transits during the progress of the survey by comparing their indications with the true meridian previously described and also by comparison with independent determinations of true meridian by direct altitude observations on the sun.

All measurements are made with Lallie 5 and 8-chain steel tapes, compared with a standard Lufkin steel tape and found correct. The measurements are made on the slope, the vertical angle determined, and the slope measurements properly reduced to the true horizontal distances.

The Seventh Standard Parallel North was double chained thru ranges 25, 27 and 28 East.

RETACEMENT OF THE RANGE LINE IN T. 36 N., BET. RANGES 25 AND 26 EAST.

Chains.

From the cor. of Ts. 36 and 37 N., Rs. 25 and 26 E., which is an iron post, 3 ins. diam., 12 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general,

Thence

South, on retracement searching for original corners at record distances.

40.00 No trace of orig. $\frac{1}{4}$ sec. cor., set temp. $\frac{1}{4}$ sec. cor.