

Test of Instrument

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At app. noon with the lat. arc. unchanged, I observe the sun on the meridian; the resulting reading of the decl. arc is $14^{\circ} 22'$ N., which agrees with the computed declination of the sun.

At 3h 0m, p.m., app. t., with the lat. arc. unchanged I set off $14^{\circ} 20'$ N., on the decl. arc; and determine a meridian with the solar 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 instrument are satisfactory.

The magnetic bearing of the meridian at 3h 20m p.m., app.t., is $19^{\circ} 30'$ W.; the angle thus determined gives the magnetic declination $19^{\circ} 30'$ E.

Measurements on this survey were made with Lallie 5.00 ch. steel tapes, which were frequently compared with a U.S. standard 1.00 ch. steel tape, kept for this purpose only.

Slope angles were determined by means of clinometers the adjustments of which were made by comparing their readings with those of the transit.

Throughout this survey, the adjustments of the transit, were frequently examined and the solar apparatus tested at least once a week, by comparing the results of a.m. and p.m. observations, with those of the meridian established by Polaris observations.

Retracements of a portion of Subdivisions T. 44 N., R. 30 E.

From the reestablished cor. of secs. 23, 24, 25 and 26, T. 44 N., R. 30 E., by John R. English and Lemuel R. Mercer, U.S. Transitmen, in 1918 under Group No. 62, I find that the original cor. of secs. 23, 24, 25 and 26 as established by W.W. Skinner, G.W. Garside & C.S. Preble