

HOMESTEAD ENTRY SURVEY NO. 129
 METES AND BOUNDS SURVEY OF MARSHEL WAGGONER, HOMESTEAD ENTRY
 SIUSLAW NATIONAL FOREST, OREGON.

CHAINS

Survey commenced July 30, 1914, and executed with a W. & L. E. Gurley light mountain solar transit No. 12985, the horizontal limb having two opposite double verniers reading to single minutes of arc, which is also the least count of the lat. and decl. arcs.

The instrument was approved by the Assistant Supervisor of Surveys for Washington and Oregon on May 25, 1914, at Portland, Oregon.

All measurements, unless otherwise specified, are made with a $\frac{1}{4}$ -inch steel tape, 2 chs. in length, compared with a Chesterman standard steel tape. Clinometers are used to determine slope angles and measurements are reduced to true horizontal distances. I examine the adjustments of the transit and correct all errors; then, to test the solar apparatus by comparing the results of observations on the sun made during a.m. and p.m. hours with a meridian established by observation on Polaris at eastern elongation, at a point near Frank M. Leach's house, claimant of H.E.S. No. 130, or approximately 50.00 chs. SE. of cor. No. 1 of this survey, I proceed as follows:

July 29, 1914, in lat. $43^{\circ}41'$ N., long. $123^{\circ}56'$ W., at 11^h 06^m p.m., l.m.t., I observe Polaris at eastern elongation, and mark a point in the line thus determined by a tack driven in a wooden stake, set in the ground, 7.00 chs. N. of my station.

July 30, 1914, at same station, 6^h 45^m a.m., I lay off the azimuth of Polaris $1^{\circ}36'$ to the West. This meridian exactly agrees with the Polaris meridian established by me at the same station on the morning of July 20, 1914, for H.E.S. No. 130.

July 30, 1914, at same station, at 7^h 0^m a.m., l.m.t., I set off $18^{\circ}40'$ N., on the decl. arc, $43^{\circ}41'$ N. on the lat. arc, and determine a meridian with the solar. This meridian coincides with the Polaris meridian.

July 30, 1914, at same station, I set off $18^{\circ}36'$ N., on the decl. arc, and at apparent noon, I observe the sun on the meridian; the resulting latitude is $43^{\circ}41'$ N.

July 30, 1914, at same station, at 5:00 p.m., l.m.t., I set off $18^{\circ}34'$ N. on the decl. arc, $43^{\circ}41'$ N. of the lat. arc, and determine a meridian with the solar. This meridian coincides with the Polaris meridian; I therefore conclude that my instrument is in perfect adjustment.

H. E. S. No. 129

Road Exemption

July 30, 1914: Preparatory to the survey of this claim.

Note: To place the road exemption through this claim on better ground, and make it better serve the purpose, I re-establish the location of the same in the following manner:

Beginning at a point on the North bdy. of H. E. S. No. 130, identical with the center of the road exemption through said claim, I run the center line of the road exemption through H. E. S. No. 129, setting temp. stakes for the cors. at angle points, 15.2 lks. right angle distance from the center line, and at the mean of the past and proceeding courses on the side lines of the road. On the East bdy. I set temp. stakes, 15.2 lks. right angle distance from center line, at the point of intersection of the side lines of the road and the end line of the claim. I was unable to find any evidence of the road exemption through this claim, having been marked in the field.

July 30, 1914.