

# County Surveyor's Record, Douglas County, Oregon

12015

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 HOMESTEAD ENTRY SURVEY NO. 143  
 METES AND BOUNDS SURVEY OF JOSEPH HUTCHINSON, HOMESTEAD ENTRY,  
 UMPQUA NATIONAL FOREST  
 OREGON

CHAINS

Survey commenced June 17, 1914, and executed with a W. and L. E. Gurley light mountain solar transit No. 12985, the horizontal limb having two 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 two 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 mer. determined by observation on Polaris, I proceed as follows:

On June 17, 1914, at a point 1 ch. East of claimant's house, in lat.  $43^{\circ}04'N.$ , long.  $122^{\circ}43'W.$ , at 1h53m a.m., l.m.t., I obs. Pol. at eastern elong., and mark the point in the line thus determined by a tack driven in a wooden peg set in the ground 5 chs. N. of my station.

At same station, at 6h45m a.m., on June 17, 1914, l.m.t., I lay off the azimuth of Pol.  $1^{\circ}35'$  to the west, and mark the mer. thus determined by a tack driven in a wooden stake driven in the ground 5 chs. N. of my station.

The mag. bearing of the true mer. at 7h a.m., l.m.t., June 17, 1914, is  $N.20^{\circ}57'W.$  The angle thus determined gives the mag. decl.  $20^{\circ}57'E.$  The mean mag. decl. is  $20^{\circ}51.4'E.$

At same station, at 7h a.m., June 17, 1914, l.m.t., I set off  $23^{\circ}24'N.$  on decl. arc,  $43^{\circ}04'$  on the lat. arc, and determine a meridian with the solar. This mer. coincides with the mer. established by Pol. obsn.

At same station, June 17, 1914, I set off  $23^{\circ}23'N.$  on decl. arc, and at apparent noon, I obs. the sun on the mer., the resulting lat. is  $43^{\circ}04'N.$

At same station, at 5 p.m., June 17, 1914, l.m.t., I set off  $23^{\circ}25'N.$  on the decl. arc,  $43^{\circ}04'$  on the lat. arc, and determine a mer. with the solar, which coincides with the mer. determined by Pol. obsn. I therefore conclude that my instrument is in perfect adjustment.

## H.E.S. No. 143

June 19, 1914.

Beginning at Cor. No. 1, identical with Cor. H/2 of listing survey No. 6-590, Tract 1, a post, mkd. and witnessed as described by the listing surveyor, in place of which I set a porphyry stone,  $24 \times 10 \times 8$  ins., 14 ins. in the ground, for Cor. No. 1, mkd. 1 H E S 143 on NE. face, with a cross (+) on top; from which

A fir, 8 ins. diam., bears  $N.19^{\circ}10'E.$ , 27 lks. dist.,

A hemlock, 6 ins. diam., bears  $N.42^{\circ}00'W.$ , 2 lks. dist.,

both trees blazed and scribed 1 H E S 143 B T.

The NE. cor. of sec. 13, T. 29 S., R. 1 W., W.M., a stone, mkd. and witnessed as described by the Surveyor General, bears  $S.84^{\circ}14'W.$ ; 151.13 chs. dist.

Pits and mound impracticable at this and all other cors.