

Chains

The survey was executed with a light-mountain solar transit made by Buff and Buff Manufacturing Company, Serial No. 9797, constructed in accordance with the standard specifications of the General Land Office. The horizontal circle has a diameter of $4\frac{1}{2}$ ins., with two double opposite verniers reading to single minutes; the vertical circle has a diameter of 4 ins., with one double vernier reading to single minutes; the telescope has fixed stadia wires, ratio 1:132, with focal constant of 1.2 lks. The instrument is equipped with the improved Smith solar attachment; radius of latitude arc $2\frac{1}{2}$ ins., and of declination arc $3\frac{1}{2}$ ins., each with verniers reading to single minutes. The instrument was in good condition, and having been placed in satisfactory adjustment prior to beginning the survey, and tested and found free from appreciable error, was approved by the district cadastral engineer on March 6, 1933. I examined all the instrumental adjustments before making the field tests hereinafter recorded.

The directions of the resurveyed lines were determined by solar transit method. At each point of intersection with the state boundary the direction of the closing line was verified by deflection from the line of the state boundary. The measurements were made with a Lallie steel tape 8 chs. in length; the tape is graduated every link for the first 100 lks. and thereafter at intervals of 10 lks. The tape was tested by comparison with a Lufkin standard and found correct. The measurements were made on the slope, the vertical angles were determined by a clinometer in good adjustment; the field notes show the horizontal equivalents.

March 12, 1933, at the station and on the meridian established by Andrew Nelson, described in the field notes of a Portion of the California-Nevada State Boundary, resurveyed under this group, every 30 minutes from 7 to 10:30 a.m. and from 1:30 to 5 p.m., I make proper settings on the arcs of the solar attachment and ascertain that the resulting orientation of the instrument, when compared with the meridian established by Polaris observation, has a maximum error of less than $1'30''$.

At a point on the California-Nevada State Boundary which is south, by calculation, of the $\frac{1}{4}$ sec. cor. secs. 1 and 36, on N. bdy. of T.24 S., R.55 E.; described in the field notes of the S. bdy. of fractional T.23 S., R.55 E.

Set an iron post 3 ft. long 1 in. diam., 30 ins. in the ground, for $\frac{1}{4}$ sec. cor. sec. 1, with brass cap mkd.
/T.24 S., R.55 E.

$\frac{1}{4}$ S 1

CAD

1934

raise a mound

of stone $2\frac{1}{2}$ ft. base and 2 ft. high N. of cor.

From this point the monument 117 on the state boundary bears N.46°11'W., 10.83 chs. dist.; a redwood post 4 ins. sq. 4 ft. long; set, marked and witnessed as described in the official record.

At a point on the California-Nevada State Boundary which