

CORRECTIVE NOTES OF
MOUNT DIABLO BASE, THROUGH R.52 E.

CHAINS

Survey commenced, August 31, 1909 and executed with a W. & L.E. Gurley light mountain transit, No.1, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, April 20, 1909.

I examine the adjustments of the transit and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the Stan. cor. of T.1 N., Rs. 52 and 53 E., on the Mount Diablo Base, which is a lava stone, 6x6x3 ins. above ground, marked as described by the surveyor general, with no accessories; I dig pits, 30x24x12 ins., crosswise on each line, E. and W., 4 ft. and N. of stone 8 ft. dist., and raise a mound of earth, 5 ft. base, 2½ ft. high, N. of cor., in approximate latitude 37°52'N., longitude 116°04'W., I set off 37°52'N., on lat. arc, 8°37'N. on decl. arc, and at 4 p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

At 8h.53m., p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

August 31, 1909