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BOOK 2931

Book "T"
(Subdivisions)

FIELD NOTES

OF THE SURVEY OF THE

Subdivision Lines

of

Township 16 North, Range 15 West.

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

Albert Smith, Jr., U. S. Surveyor,

and

Thomas A. Hayden, U. S. Transitman,

~~In the capacity of U. S. Surveyor~~, under instructions dated December 28, 1914,
issued by the United States Surveyor General to govern surveys included in
Group No. 41, which were approved by the Commissioner of the General Land
Office, January 22, 1915.

Survey commenced December 4, 1915.

Survey completed December 25, 1915.

and executed under assignment
Instructions dated Nov. 29-1915

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BOOK 2931 Book "T"

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Subdivision of T. 16 N., R. 15 W.

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Chains.

Survey commenced Dec. 4, 1915, and executed jointly by Albert Smith, Jr., U. S. Surveyor, and Thos. A. Hayden, U. S. Transitman, with Young and Sons' light mountain transits Nos. 8583 and 8396, respectively, with Smith solar attachments. The horizontal limb of each transit 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.

These instruments were approved Nov. 29, 1915, by the Assistant Supervisor of Surveys for Arizona and California, conditional upon satisfactory field performance.

In the surveys executed by us, slope measurements were made, slope angles read with the clinometer, and the correct horizontal distance computed for each item of topography.

In the following field notes, the initials A. S. and T. A. H. refer to Albert Smith, Jr., U. S. Surveyor, and Thos. A. Hayden, U. S. Transitman, respectively.

We examine the adjustments of the transits, and correct all errors; then, to test the solars, by comparing their indications, resulting from solar observations made during a.m. and p.m., hours, with a meridian determined by observations on Polaris, we proceed as follows:

At our camp in the NE. quarter of sec. 32, T. 16 N., R. 15 W., in lat. $34^{\circ} 42' N.$, long. $113^{\circ} 51' W.$, at 8 hrs. 0 m., a.m., l.m.t., we set off $34^{\circ} 42' N.$ on the lat. arcs; $22^{\circ} 5\frac{1}{2}' S.$ on the decl. arcs; and determine a meridian with each solar, and mark a point in each line thus determined by tacks driven in stakes, 5 chs. N. of our stations.

Dec. 4, 1915: At apparent noon, we set off $22^{\circ} 9\frac{1}{2}' S.$ on the decl. arcs; and observe the sun on the meridian with each solar; the resulting lat. in each case is $34^{\circ} 42' N.$

At 4 hrs. 0 m., p.m., l.m.t., we set off $34^{\circ} 42' N.$ on the lat. arcs; $22^{\circ} 3\frac{1}{2}' S.$ on the decl. arcs; and determine a meridian with each solar. Each meridian thus determined coincides with the meridian determined by morning observation.

At 5 hrs. 27 m., p.m., l.m.t., by our watches, which are set to correct local mean time, we make hour angle observations on Polaris, in accordance with the Manual of Instructions, and mark points in the lines thus determined by tacks driven in stakes, 5 chs. N. of our stations.

Dec. 4, 1915.

Dec. 5, 1915.

We compute the azimuth of Polaris as follows:

Time of U. C. of Polaris, Dec. 4.	8 hrs. 39.9 m., p.m.
Correction for longitude.	-1.3
Corrected time of U. C.	8 hrs. 38.6 m.
Time of observation.	5 hrs. 27.0 m., p.m.
Hour angle.	3 hrs. 11.6 m.
Azimuth corresponding to hour angle	$1^{\circ} 2\frac{1}{2}' E.$

At 8 hrs. 4 m., a.m., l.m.t., we lay off the azimuth of Polaris, $1^{\circ} 2\frac{1}{2}'$ to the west, and find that the meridian thus determined coincide with the meridians determined by morning and afternoon observations with the solars.

The solar apparatus by a.m. and p.m. observations, define positions for meridian which coincide with the meridian determined by observations on Polaris; therefore we conclude that the adjustments of the instruments are satisfactory.

The magnetic bearing of the true meridian, at 8 hrs. 10

Subdivision of T. 16 N., R. 15 W.

Chains.

m., a.m., is N.15° 15' W.; the angle thus determined gives the mag. decl. 15° 15' E.

Dec. 5, 1915.

A. S. and T. A. H.

Dec. 11, 1915: A. S.

From the cor. of secs. 1, 2, 35 and 36, on the S. bdy. of the Tp., which is an iron post, established by R. D. Armstrong, U.S. Transitman, as described in Book "A"., I run

N.0° 1' W., bet. secs. 35 and 36.

Over rolling land, through dense undergrowth.

40.00 The point for $\frac{1}{4}$ sec. cor. falls on rock in place, 3 X 2 X 1 ft. above ground, on which

Cut a cross(X) at the corner point, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. side of cross; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Desc. to

56.00 Center of wash, 2.50 chs. wide, course SSE. Road in wash, brs. NNW. and SSE. to Walter's Ranch.

59.90 Center of wash, 2 chs. wide, course SE. Road in wash, brs. NW. and SE. to Walter's Ranch. Asc. 170 ft. to

79.00 Spur, slopes SW. Desc. 10 ft. to

80.00 Set a stone, 12 X 12 X 12 ins., 8 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked with 1 notch on S. and E. edges; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Land, rolling.

Soil, rocky; 3rd rate.

No timber.

Undergrowth, greasewood, mesquite, cat claw, cedar and cacti.

40.00 N.89° 57' E., on a random line, bet. secs. 25 and 36.

80.06 Set temp. $\frac{1}{4}$ sec. cor.

Intersect E. bdy. of Tp., 20 lks. S. of the cor. of secs. 25, 30, 31 and 36, which is an iron post, established by Carl Dyson, U. S. Transitman, as described in Book "A".

Thence I run

S.89° 48' W., on a true line, bet. secs. 25 and 36.

Over mountainous land, through scattering undergrowth.

Asc. slightly to

1.26 Ridge, brs. NW. and S. Desc. 320 ft. to

33.26 Gulch, 50 lks. wide, course SW. Asc. 95 ft.

40.03 Set a granite stone, 16 X 7 X 6 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Dec. 11, 1915: At this cor., I set off 22° 56 $\frac{1}{2}$ ' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 42' N.

54.21 Spur, brs. S. Desc. 10 ft. to

55.16 Asc. 25 ft. to

67.86 Desc. 35 ft. to

70.06 Asc. 30 ft. to

80.06 The cor. of secs. 25, 26, 35 and 36.

Land, mountainous and rolling.

Soil, sandy and rocky; 3rd and 4th rate.

No timber.

Undergrowth, cat claw, cedar, cacti and mesquite.

Dec. 11, 1915.

Subdivision of T. 16 N. R. 15 W. 3.

Chains.	<p>Dec. 12, 1915: At 8 hrs. 0 m., a.m., l.m.t., I set off 34° 42' N. on the lat. arc; 22° 58' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25, 26, 35 and 36.</p> <p>Thence I run N.0° 1' W., bet. secs. 25 and 26. Over mountainous land, through dense undergrowth. Asc. 205 ft.</p> <p>40.00 Set a granite stone, 12 X 12 X 10 ins. 8 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, 1$\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.</p> <p>45.00 Top of asc.; desc. 25 ft. to</p> <p>50.00 Center of wash, 75 lks. wide, course SW. Asc. 40 ft. to</p> <p>56.12 Desc. 15 ft. to</p> <p>62.87 Asc. 120 ft. to</p> <p>80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, marked on brass cap</p> <p style="padding-left: 40px;">1915 on S. rim; T16N R15W in N. half; S23 in NW., S24 in NE., S25 in SE. and S26 in SW. quadrant;</p> <p>and raise a mound of stone, 2 ft. base, 1$\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.</p> <p>Land, mountainous. Soil, rocky; 3rd rate. No timber. Undergrowth, cat claw, mesquite, cedar and cacti. Dec. 12, 1915.</p>
40.00 79.86 9.36 24.56 29.85 39.93 40.48 68.36 79.86	<p>Dec. 14, 1915: At 9 hrs. 5 m., a.m., l.m.t., I set off 34° 42$\frac{1}{2}$' N. on the lat. arc; 23° 9' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26.</p> <p>Thence I run N.89° 48' E., on a random line, bet. secs. 24 and 25. Set temp. $\frac{1}{4}$ sec. cor.</p> <p>79.86 Intersect the E. bdy. of Tp., 2 lks. S. of the cor. of secs. 19, 24, 25 and 30, which is an iron post, established by Carl Dyson, U. S. Transitman, as described in Book "A".</p> <p>Thence I run S.89° 47' W., on a true line, bet. secs. 24 and 25. Over mountainous land, through dense undergrowth. Asc. 375 ft. to</p> <p>9.36 Ridge, brs. NW. and SE. Desc. W. slope, 330 ft. to</p> <p>24.56 Head of wash, course SW. Asc. 30 ft. to</p> <p>29.85 Desc. 70 ft.</p> <p>39.93 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap</p> <p style="padding-left: 40px;">1915 on S. rim; $\frac{1}{4}$S24 in N. and S25 in S. half;</p> <p>and raise a mound of stone, 2 ft. base, 1$\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.</p> <p>40.48 Gulch, course S. Asc. 100 ft. to</p> <p>68.36 Desc. to</p> <p>79.86 The cor. of secs. 23, 24, 25 and 26.</p> <p>Land, mountainous. Soil, rocky; 3rd rate. No timber. Undergrowth, scrub oak, cat claw, yucca, mesquite and cacti.</p> <p>Dec. 14, 1915: At this cor., I set off 23° 10' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 42$\frac{1}{2}$' N.</p>

4. Subdivision of T. 16 N. R. 15 W.

Chains.	N.0° 1' W., bet. secs. 23 and 24. Over mountainous land, through dense undergrowth. Desc. N. slope, 100 ft. to 9.12 Center of wash, 1.20 chs. wide, course SW. Asc. SE. slope, 215 ft. 10.00 Road, brs. NE. and SW. to Walter's Ranch. 40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{4}$ S23 in W. and S24 in E. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Desc. 25 ft. to 50.00 Asc. 130 ft. to 65.80 Ridge, brs. NW. and SE. Desc. NE. slope, 40 ft. to 69.17 Center of wash, 70 lks. wide, course SE. Asc. S. slope, 45 ft. to 80.00 Set a granite stone, 14 X 10 X 10 ins., 10 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, marked with 3 notches on S. and 1 notch on E. edge; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 3rd rate. No timber. Undergrowth, scrub oak, cat claw, cacti and mesquite. Dec. 14, 1915.
40.00	Dec. 15, 1915: At 1 hr. 9 m., p.m., I back sight on flags on the line run yesterday, and run N.89° 47' E., on a random line, bet. secs. 13 and 24. Set temp. $\frac{1}{4}$ sec. cor. 79.81 Intersect E. bdy. of T., at the cor. of secs. 13, 18, 19 and 24, which is an iron post, established by Carl Dyson, U. S. Transitman, as described in Book "A". Thence I run S.89° 47' W., on a true line, bet. secs. 13 and 24. Over mountainous land, through dense undergrowth. Asc. 20 ft. to 2.80 Desc. 10 ft. to 5.80 Wash, course SW. Asc. 140 ft. to 17.80 Desc. 20 ft. to 20.52 Asc. 605 ft. 39.90 $\frac{1}{2}$ Set a granite stone, 16 X 10 X 8 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable. Continue asc. to 50.00 Ridge, brs. NW. and SE. Desc. 80 ft. to 64.89 Asc. 35 ft. to 68.81 Desc. 45 ft. to 77.89 Gulch, course SE. Road, brs. NW. and SE. to Walter's Ranch. Asc. E. slope, 35 ft. to 79.81 The cor. of secs. 13, 14, 23 and 24. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, greasewood, cat claw, mesquite and cacti.
2.60	N.0° 1' W., bet. secs. 13 and 14. Over mountainous land, through scattering undergrowth. Desc. 45 ft. to Gulch, course SE. Road in gulch, brs. NW. and SE. to Walter's Ranch. Asc. SW. slope, 200 ft. to

Subdivision of T. 16 N., R. 15 W.

Chains.

22.66 Ridge, brs. NW. and SE. Desc. 120 ft. to
 36.45 Gulch, course NE. Asc. SE. slope, 85 ft.
 40.00 Set a granite stone, 16 X 12 X 12 ins., 11 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and
 raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high. W. of
 cor. Pits impracticable.
 43.00 Spur, brs. NE. Desc. N. slope, 650 ft. to
 64.20 Center of wash, 75 lks. wide, course E. Asc. 40 ft. to
 65.85 Desc. slightly to
 80.00 Set a granite stone, 16 X 12 X 10 ins., 11 ins. in the
 ground, for cor. of secs. 11, 12, 13 and 14, marked
 with 4 notches on S. and 1 notch on E. edge; and raise
 a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, oak, mesquite and cat claw.
 Dec. 15, 1915.

Dec. 16, 1915: At 8 hrs. 55 m., a.m., l.m.t., I set off
 $34^{\circ} 44\frac{1}{2}'$ N. on the lat. arc; $23^{\circ} 15\frac{1}{2}'$ S. on the decl.
 arc; and determine a meridian with the solar at the
 cor. of secs. 11, 12, 13 and 14.
 Thence I run
 N. $89^{\circ} 47'$ E., on a random line, bet. secs. 12 and 13.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.92 Intersect E. bdy. of Tp., 3 lks. S. of the cor. of secs.
 7, 12, 13 and 18, which is an iron post, established
 by Carl Dyson, U. S. Transitman, as described in Book
 "A".
 Thence I run
 S. $89^{\circ} 46'$ W., on a true line, bet. secs. 12 and 13.
 Over mountainous land, through dense undergrowth.
 Desc. 20 ft. to
 5.17 Asc. 30 ft. to
 9.17 Desc. 40 ft. to
 13.05 Wash, 30 lks. wide, course NE. Asc. 135 ft.
 30.36 Road, brs. NW. to San Francisco Mine, and SE. to Signal.
 33.32 Desc. slightly to
 39.96 Point for $\frac{1}{4}$ sec. cor. falls on ledge rock, 2 X 2 X 1 ft.
 above ground, on which
 Cut a cross(X) at the cor. point, for $\frac{1}{4}$ sec. cor., marked
 $\frac{1}{4}$ on N. side of cross; and raise a mound of stone, 2
 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 Asc. 115 ft. to
 60.07 Desc. 60 ft. to
 68.84 Wash, 10 lks. wide, course NE. Asc. 70 ft. to
 69.92 Desc. 15 ft. to
 72.92 Asc. 30 ft. to
 79.92 The cor. of secs. 11, 12, 13 and 14.
 Land, mountainous.
 Soil, rocky; 3rd rate.
 No timber.
 Undergrowth, cat claw, scrub oak and mesquite.

N. $0^{\circ} 1'$ W., bet. secs. 11 and 12.
 Over rolling land, through scattering undergrowth.
 Asc. 45 ft. to
 5.00 Desc. 50 ft. to
 9.90 Asc. 170 ft. to
 30.44 Top of butte. Desc. NE. slope, 140 ft. to
 34.40 Spur, brs. NE. Desc. NW. slope.

6.

Subdivision of T. 16 N., R. 15 W.

Chains.	
40.00	Point for $\frac{1}{4}$ sec. cor. falls on rock in place, 1 X 1 X 6 ft. above ground, on which Cut a cross (X) at the cor. point, for $\frac{1}{4}$ sec. cor., with $\frac{1}{4}$ on W. side of same; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
45.00	Head of gulch, course NE. Asc. SE. slope, 40 ft. to
49.95	Spur, brs. NW. Desc. N. slope, 95 ft. to
55.70	Wash, 50 lks. wide, course E. Thence along E. slope.
60.10	Road, brs. NW. to San Francisco Mine, and SE. to Signal.
73.60	Stream of water, 1 lk. wide, in gulch, course NE. Asc. SE. slope, 40 ft. to
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor of secs. 1, 2, 11 and 12, marked on brass cap 1915 on S. rim; T16N R15W in N. half; S2 in NW., S1 in NE., S12 in SE. and S11 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, rolling and broken. Soil, rocky; 3rd rate. No timber. Undergrowth, oak, mesquite, cat claw and manzanita Dec. 16, 1915; At this cor., I set off $23^{\circ} 16\frac{1}{2}'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 45'$ N.
40.00	N. $89^{\circ} 46'$ E., on a random line, bet. secs. 1 and 12. Set temp. $\frac{1}{4}$ sec. cor.
79.94	Intersect E. bdy. of Tp., 1 lks N. of the cor. of secs. 1, 6, 7 and 12, which is an iron post, established by Carl Dyson, U. S. Transitman, as described in Book "A". Thence I run S. $89^{\circ} 46'$ W., on a true line, bet. secs. 1 and 12. Over rolling land, through scattering undergrowth.
39.97	Point for $\frac{1}{4}$ sec. cor. falls on ledge, 2 X 1 X 6 ft. above ground, on which Cut a cross (X) at the corner point, for $\frac{1}{4}$ sec. cor., with $\frac{1}{4}$ on N. side of cross; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
42.92	Stream of water, 2 lks. wide, in gulch, course SE. Asc. 75. ft. to
71.90	Desc. slightly to
75.57	Gulch, 50 lks. wide, course NE. Asc. 50 ft. to
79.94	The cor. of secs. 1, 2, 11 and 12. Land, rolling. Soil, rocky; 3rd rate. No timber. Undergrowth, scrub oak, cat claw and mesquite. Dec. 16, 1915.
	Dec. 17, 1915: At 8 hrs. 54 m., a.m., l.m.t., I set off $34^{\circ} 45'$ N. on the lat. arc; $23^{\circ} 18'$ S. on the decl. arc; and determine a meridian with the solat at the cor. of secs. 1, 2, 11 and 12. Thence I run N. $0^{\circ} 1'$ W., on a random line, bet. secs. 1 and 2. Set temp. $\frac{1}{4}$ sec. cor.
40.00	Intersect N. bdy. of Tp., 11 lks. E. of the cor of secs. 1, 2, 35 and 36, which is an iron post, established by me, as described in Book "A".
80.25	Thence I run

Subdivision of T. 16 N., R. 15 W.

7.

Chains.

- S.0° 6' E., on a true line, bet. secs. 1 and 2.
Over rolling and mountainous land, through scattering undergrowth.
Asc. N. slope, 20 ft. to
3.69 Spur, brs. SW. Desc. 360 ft. to
20.35 Wash, 25 lks. wide, course SE. Asc. 15 ft. to
23.85 Desc. 15 ft. to
25.30 Asc. NE. slope, 80 ft. to
36.95 Spur from butte, brs. E. and W. Thence along E. slope.
40.25 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S2 in W. and
S1 in E. half;
and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
43.65 Spur, brs. SE. Desc. 270 ft.
54.15 Old road, brs. E. to Signal and W. to San Francisco Mine.
66.26 Wash, 25 lks. wide, course SE. Leave mountainous, enter rolling land.
68.30 Wash, 20 lks. wide, course E. Asc. 40 ft. to
80.25 The cor. of secs. 1, 2, 11 and 12.
Land, rolling and mountainous.
Soil, rocky; 3rd rate.
No timber.
Undergrowth, mahogany, scrub oak, manzanita and cat claw.
Dec. 17, 1915.
- Dec. 7, 1915.
From the cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp., which is an iron post, established by R. D. Armstrong, U. S. Transitman, as described in Book "A", I run
N.0° 1' W., bet. secs. 34 and 35.
Over rolling and mountainous land, through scattering undergrowth.
Desc. to
2.10 Gulch, course NE. Asc. 60 ft. to
16.00 Desc. 25 ft. to
20.30 Asc. 35 ft. to
22.83 Desc. 15 ft. to
25.20 Asc. 135 ft.
40.00 Set an iron post, 3 ft. long, 1 in. diam., 30 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S34 in W. and
S35 in E. half;
and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
40.50 Ridge, brs. E. and W. Desc. N. slope, 150 ft. to
54.00 Asc. 125 ft. to
60.00 Spur, slopes E. Desc. NE. slope, 195 ft. to
75.22 Gulch, course SE. Asc. 95 ft. to
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 26, 27, 34 and 35, marked on brass cap
1915 on S. rim;
T16N R15W in N. half;
S27 in NW.,
S26 in NE.,
S35 in SE. and
S34 in SW. quadrant;
and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
Land, rolling and mountainous.
Soil, sandy and rocky; 3rd rate.
No timber.
Undergrowth, scrub oak, cedar and cacti.

8.

Subdivision of T. 16 N., R. 15 W.

Chains.

Dec. 7, 1915: At this cor., I set off $22^{\circ} 32\frac{1}{2}'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 42' N.$
Dec. 7, 1915.

Dec. 11, 1915: At 8 hrs. 0 m., a.m., l.m.t., I set off $34^{\circ} 42' N.$ on the lat. arc; $22^{\circ} 53'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26, 27, 34 and 35.

Thence I run

N. $89^{\circ} 57'$ E., on a random line, bet. secs. 26 and 35.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect N. and S. line, 14 lks. S. of the cor. of secs. 25, 26, 35 and 36.

Thence I run

S. $89^{\circ} 51'$ W., on a true line, bet. secs. 26 and 35.

Over mountainous land, through scattering undergrowth.

Desc. 65 ft. to

15.04 Wash, course S.

20.61 Center of wash, 1 ch. wide, course SE. Road in wash, brs. N. and SE. to Walter's Ranch. Asc. E. slope, 430 ft.

33.50 Asc. SE. slope.

40.05 Set a granite stone, 16 X 12 X 10 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

42.70 Asc. NE. slope to

54.60 Spur, slopes SE. Desc. 225 ft. to

70.10 Asc. 15 ft. to

80.10 The cor. of secs. 26, 27, 34 and 35.

Land, mountainous.

Soil, rocky; 3rd rate.

No timber.

Undergrowth, scrub oak, cedar, cat claw, mesquite, buck brush and cacti.

Dec. 11, 1915.

Dec. 8, 1915: At 9 hrs. 5 m., a.m., l.m.t., I set off $34^{\circ} 42' N.$ on the lat. arc; $22^{\circ} 37\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26, 27, 34 and 35.

Thence I run

N. $0^{\circ} 1'$ W., bet. secs. 26 and 27.

Over mountainous land, through scattering undergrowth.

Asc. SE. slope, 360 ft. to

30.00 Spur, brs. E. and W. Desc. NE. slope, 100 ft. to

34.20 Gulch, course W. Asc. 115 ft.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap

1915 on S. rim;

S27 in W. and

S26 in E. half;

and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

48.40 Ridge, brs. E. and W. Desc. NW. slope, 75 ft. to

64.70 Asc. 10 ft. to

66.50 Desc. 20 ft. to

69.05 Gulch, course W. Asc. 125 ft. to

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, marked on brass cap

1915 on S. rim;

T16N R15W in N. half;

S22 in NW.,

S23 in NE.,

S26 in SE. and

S27 in SW. quadrant;

Chains	<p>and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 3rd rate. No timber. Undergrowth, scrub oak, yucca and cedar. Dec. 8, 1915: At this cor., I set off 22° 39' S. on the decl. arc. and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 42½' N. Dec. 8, 1915.</p>
40.00 80.18	<p>Dec. 12, 1915. N.89° 51' E., on a random line, bet. secs. 23 and 26. Set temp. ¼ sec. cor. Intersect N. and S. line, 9 lks. S. of the cor. of secs. 23, 24, 25 and 26.</p>
8.90 9.80 19.45 24.50 40.09	<p>Thence I run S.89° 47' W., on a true line, bet. secs.23 and 26. Over mountainous land, through scattering undergrowth. Desc. 130 ft. Road, brs. N. and S. to Walter's Ranch. Center of wash, 1 ch. wide, course S. Asc. 110 ft. to Spur, brs. SE. Desc. W. slope, 45 ft. to Gulch, course SE. Asc. 295 ft. to Point for ¼ sec. cor., falls on rock in place, 15 X 12 X 10 ft. above ground, on which Cut a cross (X) at the corner point, for ¼ sec. cor., marked ¼ on N. side of cross; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.</p>
43.00 47.50 56.60 63.75 68.70 80.18	<p>Desc. 25 ft. to Gulch, course SE. Asc. 320 ft. to Desc. 35 ft. to Asc. 85 ft. to Ridge, brs. N. and S. Desc. W. slope, 220 ft. to The cor. of secs. 22, 23, 26 and 27. Land, mountainous. Soil, rocky; 3rd rate. No timber. Undergrowth, scrub oak, cedar and cacti. Dec. 12, 1915: At this cor., I set off 23° 1½' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 42½' N. Dec. 12, 1915.</p>
5.00 12.60 15.50 25.50 29.10 40.00	<p>Dec. 10, 1915: At 8 hrs. 4 m., a.m., l.m.t., I set off 34° 42½' N. on the lat. arc; 22° 48' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 22, 23, 26 and 27. Thence I run N.0° 1' W., bet. secs. 22 and 23. Over mountainous land, through scattering undergrowth. Desc. slightly to Asc. 45 ft. to</p>
41.00 49.45 56.25 73.04 80.00	<p>Desc. N. slope, 85 ft. to Gulch, course W. Asc. 250 ft. to Spur, brs. W. Desc. slightly to Asc. 125 ft. Point for ¼ sec. cor. falls on rock in place, 5 X 3 X 2 ft. above ground, on which Cut a cross (X) at the corner point, for ¼ sec. cor, marked ¼ on W. side of cross; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Ridge, brs. NW. and SE. Desc. 180 ft. to Asc. 110 ft. to Spur, brs. E. Desc. NE. slope, 175 ft. Desc. NW. slope, to Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, marked on brass cap</p>

10.

Subdivision of T. 16 N., R. 15 W.

Chains.

	<p>1915 on S. rim; T16N R15W in N. half; S15 in NW, S14 in NE., S23 in SE. and S22 in SW. quadrant; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 3rd rate. No timber. Undergrowth, scrub oak, mesquite and cacti. Dec. 10, 1915: At this cor., I set off 22° 51½' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 43½' N. Dec. 10, 1915.</p>
30.00	<p>Dec. 12, 1915. N.89° 47' E., on a random line, bet. secs. 14 and 23. Set temp. point. Dec. 12, 1915.</p>
40.00	<p>Dec. 14, 1915. From the temp. point set Dec. 12, I continue N.89° 47' E., on a random line, bet. secs. 14 and 23. Set temp. ¼ sec. cor.</p>
79.96	<p>Intersect N. and S. line, 40 lks. N. of the cor. of secs. 13, 14, 23 and 24. Thence I run N.89° 56' W., on a true line, bet. secs. 14 and 23. Over mountainous land, through scattering undergrowth. Asc. 15 ft. to Desc. 30 ft. to Gulch, comes from SW., course SE. Asc. 70 ft. to Desc. to Same gulch, 50 lks. wide, course SE. Asc. E. slope, 510 ft. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap 1915 on S. rim; ¼S14 in N. and S23 in S. half; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.</p>
46.14	Ridge, brs. N. and S. Desc. 375 ft. to
66.36	Gulch, course S. Asc. 120 ft. to
79.96	<p>The cor. of secs. 14, 15, 22 and 23. Land, mountainous. Soil, rocky; 3rd rate. No timber. Undergrowth, scrub oak, cedar and cacti. From this cor., G. A. Kelsey's cabin brs. N.58° E., 6 chs. dist. Summit tunnel, brs. N.80° W., 1.50 chs. dist. A. S. Dec. 14, 1915.</p>
	<p>T. A. H. Dec. 19, 1915: At 9 hrs. 5 m., a.m., l.m.t., I set off ' 34° 43½' N. on the lat. arc; 23° 22½' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 14, 15, 22 and 23. Thence I run N.0° 1' W., bet. secs. 14 and 15. Over mountainous land, through dense undergrowth.</p>

Subdivision of T. 16 N., R. 15 W. 11.

Chains.	
	Desc. to
1.00	Gulch, course NE. Spring brs. W. 1 ch. dist. Asc. SW. slope, 50 ft. to
7.00	Low spur, slopes S.70° E. Desc. NE. slope, to
10.00	Asc. 80 ft. to
23.05	Ridge, brs. E. and W. Desc. NE. slope, 160 ft.
28.20	Road, brs. NW. and SE. to Walter's Ranch.
35.90	Gulch, course NW. Asc. SW. slope, 40 ft.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{2}$ S15 in W. and S14 in E. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
42.45	Spur, brs. W. Desc. NW. slope, 190 ft. to
51.30	Gulch, course NE. Asc. SE. slope, 55 ft. to
56.60	Point of spur, slopes SE. Desc. NE. slope, 40 ft. to
58.90	Gulch, course SE. Asc. S. slope, 270 ft. to
67.40	Spur, slopes SW. Thence along W. slope to
72.00	Gulch, course S.50° W. Asc. S. slope, 40 ft. to
78.30	Spur, slopes SE. Desc. NE. slope, 10 ft. to
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, marked on brass cap 1915 on S. rim; T16N R15W in N. half; S10 in NW., S11 in NE., S14 in SE. and S15 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, scrub oak, mahogany and manzanita. Dec. 19, 1915: At this cor., I set off 23° 23' N. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 44 $\frac{1}{2}$ ' N.
40.00	S.89° 56' E., on a random line, bet. secs. 11 and 14. Set temp. $\frac{1}{4}$ sec. cor.
79.85	Intersect N. and S. line, 7 lks. N. of the cor. of secs. 11, 12, 13 and 14. Thence I run N.89° 53' W., on a true line, bet. secs. 11 and 14. Over mountainous land, through dense undergrowth. Asc. 40 ft. to
6.85	Desc. slightly to
7.75	Wash, 15 lks. wide, course NE. Asc. 990 ft.
39.92 $\frac{1}{2}$	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{2}$ S11 in N. and S14 in S. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
	Continue asc.
64.35	Spur, slopes SE. Desc. SW. slope, 150 ft. to
78.05	Gulch, course SE. Asc. NE. slope to
79.85	The cor. of secs. 10, 11, 14 and 15. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, scrub oak, mahogany, manzanita and cat claw. T. A. H. Dec. 19, 1915.
	A. S. Dec. 20, 1915: At 8 hrs. 4 m., a.m., l.m.t., I set off 34° 44 $\frac{1}{2}$ ' N. on the lat. arc; 23° 21 $\frac{1}{2}$ ' S. on the decl.

12.

Subdivision of T. 16 N., R. 15 W.

Chains.	arc; and determine a meridian with the solar at the cor. of secs. 10, 11, 14 and 15. Thence I run N.0° 1' W., bet. secs. 10 and 11. Over mountainous land, through scattering undergrowth. Asc. SE. slope, 115 ft.
9.90	Spur, extends 20 chs. SW. Asc. SW. slope to
16.45	Spur, extends 10 chs. W. Desc. NW. slope, 615 ft.
40.00	Set a granite stone, 14 X 10 X 6 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
44.10	Gulch, 25 lks. wide, course NE. Asc. SE. slope, 260 ft. to
60.34	Ridge, brs. E. and W. Desc. broken NE. slope, 220 ft. to
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, marked on brass cap 1915 on S. rim; T16N R15W in N. half; S3 in NW., S2 in NE., S11 in SE. and S10 in SW. quadrant; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Land, mountainous. Soil, rocky; 3rd rate. No timber. Undergrowth, scrub oak, mahogany, cat claw and mesquite. Dec. 20, 1915: At this cor., I set off 23° 24 $\frac{1}{2}$ ' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 45' N.
	Dec. 16, 1915. S.89° 53' E., on a random line, bet. secs. 2 and 11.
70.00	Set temp. $\frac{1}{4}$ sec. cor.
80.14	Intersect N. and S. line, 7 lks. S. of the cor. of secs. 1, 2, 11 and 12. Thence I run N.89° 56' W., on a true line, bet. secs. 2 and 11. Over rolling land, through scattering undergrowth. Asc. E. slope, 90 ft. to
18.60	Road, brs. NW. to San Francisco Mine, and SE. to Signal. Desc. slightly to
19.90	Asc. 40 ft. to
32.00	Desc. to
35.25	Wash, 10 lks. wide, course SE.
40.07	Point for $\frac{1}{4}$ sec. cor. falls on granite rock, 30 X 12 X 10 ins. above ground, on which Cut a cross (X) at the corner point, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ N. of cross; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
43.14	Enter bed of wash, 25 lks. wide, course NE. Comes from W.
58.24	Leave bed of wash, course E. Comes from NW. Asc. 95 ft. over mountainous land, to
80.14	The cor. of secs. 2, 3, 10 and 11. Land, rolling and mountainous. Soil, rocky; 3rd rate. No timber. Undergrowth, mahogany, scrub oak, manzanita and cat claw. Dec. 20, 1915.

Subdivision of T. 16 N., R. 15 W.

Chains.

Dec. 22, 1915.
 N.0° 1' W., on a random line, bet. secs. 2 and 3.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.03 Intersect N. bdy. of Tp., 10 lks. E. of the cor. of secs. 2, 3, 34 and 35, which is a cross (X) on a rock in place, established by me, as described in Book "A".
 Thence I run
 S.0° 5' E., on a true line, bet. secs. 2 and 3.
 Over mountainous land, through scattering undergrowth.
 Asc. 90 ft. to
 7.08 Desc. 90 ft. to
 9.50 Asc. 35 ft. to
 14.47 Desc. SW. slope, 705 ft.
 40.03 Point for $\frac{1}{4}$ sec. cor. falls on granite ledge, on which
 Cut a cross (X) at the corner point, with $\frac{1}{4}$ on W. side of cross; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 46.43 Gulch, 30 lks. wide, course SE. Asc. NE. slope, 60 ft. to
 57.43 Spur, extends 10 chs. SE. Desc. 165 ft. to
 70.00 Asc. slightly to
 72.03 Spur, extends 8 chs. SE. Desc. S slope, 55 ft.
 74.53 Telephone line, brs. NW. and SW. to San Francisco Mine.
 78.13 Road, brs. NE. to Signal and SW. to San Francisco Mine.
 79.82 Stream of water, 1 lk. wide, in gulch, course E. Asc. 30 ft. to
 80.03 The cor. of secs. 2, 3, 10 and 11.
 Land, mountainous.
 Soil, rocky; 3rd rate.
 No timber.
 Undergrowth, mahogany, scrub oak, manzanita and cat claw.
 Dec. 22, 1915: At this cor., I set off 23° 25 $\frac{1}{2}$ ' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 45' N.
 Dec. 22, 1915.

Dec. 6, 1915.
 From the cor. of secs. 3, 4, 33 and 34, on the S. bdy. of the Tp., which is an iron post, established by R. D. Armstrong, U. S. Transitman, as described in Book "A", I run
 N.0° 2' W., bet. secs. 33 and 34.
 Over mountainous land, through scattering undergrowth.
 Asc. SW. slope, 150 ft. to
 9.45 Ridge, brs. E. and W. Desc. to
 20.44 Asc. 145 ft.
 22.44 Spur, brs. SW. Thence along W. slope to
 32.25 Spur, brs. SW. Desc. 95 ft. to
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 1833 in W. and
 S34 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Asc. SW. slope, 380 ft. to
 68.00 Spur, brs. SW. Desc. 20 ft. to
 70.31 Gulch, course W. Asc. 15 ft. to
 72.30 Spur, brs. NW. Desc. 145 ft. to
 80.00 Point for cor. of secs. 27, 28, 33 and 34 falls on granite boulder in place, 6 X 5 X 3 ft. above ground, on which
 Cut a cross (X) at the corner point, for cor. of secs. 27, 28, 33 and 34, with 3 grooves E. and 1 groove S. of cross; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky and sandy; 3rd rate.
 No timber.
 Undergrowth, scrub oak, cedar and cacti.
 Dec. 6, 1915: At this cor., I set off 22° 25' S. on the

14.

Subdivision of T. 16 N., R. 15 W.

Chains.

	decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 42' N. Dec. 6, 1915.
	Dec. 7, 1915: At 9 hrs. 8 m., a.m., l.m.t., I set off 34° 42' N. on the lat. arc; 22° 30½' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27, 28, 33 and 34. Thence I run N.89° 57' E., on a random line, bet. secs. 27 and 34. Set temp. ¼ sec. cor. Intersect N. and S. line, 30 lks. N. of the cor. of secs. 26, 27, 34 and 35. Thence I run N.89° 50' W., on a true line, bet. secs. 27 and 34. Over mountainous land, through scattering undergrowth. Desc. 65 ft. to Gulch, course SE. Asc. 95 ft. to Desc. 25 ft. to Asc. 40 ft. to Desc. 30 ft. to Asc. 605 ft. Wash, course NE. Continue asc. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap 1915 on S. rim; S27 in N. and S34 in S. half; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable. Ridge, brs. N. and S. Desc. SW. slope, 125 ft. Spur, brs. SW. Desc. W. slope to The cor. of secs. 27, 28, 33 and 34. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, scrub oak, cedar and cacti. Dec. 7, 1915.
40.00	
80.20	
6.30	
13.65	
16.20	
21.15	
26.10	
31.25	
40.10	
53.40	
67.45	
80.20	
	Dec. 8, 1915. N.0° 2' W., bet. secs. 27 and 28. Over mountainous land, through scattering undergrowth. Desc. N. slope, 50 ft. to Gulch, course W. Asc. S. slope, 145 ft. to Spur, brs. W. Desc. NW. slope, 30 ft. to Asc. to Spur, brs. W. Desc. NW. slope, 80 ft. to Asc. slightly to Desc. 40 ft. to Asc. 20 ft. to Desc. 40 ft. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap 1915 on S. rim; S28 in W. and S27 in E. half; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Wash, course SW. Asc. SW. slope, 230 ft. to Spur, brs. W. Desc. NW. slope, 145 ft. to Set a granite stone, 10 X 10 X 8 ins., 8 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, marked with 3 notches on E. and 2 notches on S. edge; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky; 3rd rate.
5.00	
11.80	
14.50	
16.34	
33.75	
34.75	
38.67	
39.70	
40.00	
48.04	
60.00	
80.00	

16.

Subdivision of T. 16 N., R. 15 W.

Chains.

No timber.
Undergrowth, scrub oak, cedar and cacti.
Dec. 9, 1915: At this cor., I set off $22^{\circ} 45\frac{1}{2}'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 43\frac{1}{2}'$ N.
Dec. 9, 1915.

Dec. 10, 1915.
From the true point for cor. of secs. 15, 16, 21 and 22,
I run
S. $89^{\circ} 50'$ E., on a random line, bet. secs; 15 and 22.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
80.24 Intersect N. and S. line, 47 lks. S. of the cor. of secs.
14, 15, 22 and 23.
Thence I run
S. $89^{\circ} 50'$ W., on a true line, bet. secs. 15 and 22.
Over mountainous land, through scattering undergrowth.
Asc. E. slope, 655 ft. to
28.35 Spur, brs. NW. and SE. Desc. 70 ft. to
32.90 Asc. 120 ft.
40.12 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
S15 in N. and
S22 in S. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
N. of cor. Pits impracticable.
41.66 Spur, brs. SE. Desc. along S. slope, 60 ft. to
55.24 Ridge, brs. NNE. and SSW. Desc. 625 ft. to
80.24 The true point for cor. of secs. 15, 16, 21 and 22.
Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, scrub oak, cedar and cacti.
Dec. 10, 1915.

Dec. 9, 1915.
From the true point for cor. of secs. 15, 16, 21 and 22,
I run
N. $0^{\circ} 2'$ W., bet. secs. 15 and 16.
Over mountainous land, through scattering undergrowth.
Asc. 910 ft.
29.70 Point of spur, brs. S. Asc. on spur.
40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
S16 in W. and
S15 in E. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
W. of cor.. Pits impracticable.
A. S.
Dec. 9, 1915.

T. A. H.
Dec. 20, 1915: At 8 hrs. 10 m., a.m., l.m.t., I set off
 $34^{\circ} 44'$ N. on the lat. arc; $23^{\circ} 21\frac{1}{2}'$ S. on the decl.
arc; and determine a meridian with the solar at the
 $\frac{1}{4}$ sec. cor. bet. secs. 15 and 16.
Thence I run
N. $0^{\circ} 2'$ W., bet. secs. 15 and 16, through dense undergrowth
44.65 Ridge, brs. S. 80° E. and N. 80° W. Thence along E. slope
to
52.90 Spur, brs. E. Desc. 540 ft. to
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
ground, for cor. of secs. 9, 10, 15 and 16, marked on
brass cap
1915 on S. rim;
T16N R15W in N. half;
S9 in NW.,

Chains.

S10 in NE.,
 S15 in SE. end
 S16 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,
 W. of cor. Pits impracticable.
 Land, mountainous. Soil, rocky; 4th rate.
 No timber.
 Undergrowth, scrub oak, cedar and cacti.
 Dec. 20, 1915: At this cor., I set off 23° 24½' S. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 44½' N.
 Dec. 20, 1915.

Dec. 19, 1915.
 N.89° 50' E., on a random line, bet. secs. 10 and 15.
 40.00 Set temp. ¼ sec. cor.
 80.00 Intersect N. and S. line, 5 lks. S. of the cor. of secs.
 10, 11, 14 and 15.
 Thence I run
 S.89° 48' W., on a true line, bet. secs. 10 and 15.
 Over mountainous land, through scattering undergrowth.
 Asc. NE. slope, 45 ft. to
 3.52 Low spur, slopes SW. Desc. W. slope, 110 ft. to
 9.80 Gulch, course S. Asc. SE. slope, 130 ft. to
 36.90 Desc. to
 38.50 Gulch, course S.65° E. Asc. 100 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 22 ins. in the
 ground, on solid rock, for ¼ sec. cor., marked on brass
 cap
 1915 on S. rim;
 ¼ S10 in N. and
 S15 in S. half;
 and raise a mound of stone, 2 ft. base, 1½ ft. high.,
 N. of cor. Pits impracticable.
 54.90 Desc. to
 57.40 Gulch, course N.50° E. Asc. SE. slope, 350 ft. to
 72.67 Spur, slopes 30° E. Desc. SW. slope, 35 ft. to
 78.00 Gulch, course SE. Asc. 40 ft. to
 80.00 The cor. of secs. 9, 10, 15 and 16.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, scrub oak, mahogany, manzanita, cat claw and
 cacti.
 T. A. H.
 Dec. 19, 1915.

A. S.
 Dec. 21, 1915: At 9 hrs. 8 m., a.m., 1.m.t., I set off
 34° 44½' N. on the lat. arc; 23° 24½' S. on the decl.
 arc; and determine a meridian with the solar at the
 cor. of secs. 9, 10, 15 and 16.
 Thence I run
 N.0° 2' W., bet. secs. 9 and 10.
 Over mountainous land, through scattering undergrowth.
 Desc. to
 .37 Gulch, course SE. Asc. 30 ft. to
 1.44 Spur, extends SE. Desc. 100 ft. to
 4.24 Gulch, course SE. Asc. SW. slope, 345 ft.
 9.60 Asc. SE. slope to
 23.30 Ridge, brs. E. and W. Desc. NE. slope, 385 ft. to
 34.40 Gulch, 20 lks. wide, course NE. Asc. SE. slope, 65 ft.
 40.00 Point for ¼ sec. cor. falls on rock in place, 4 X 4 X 4
 ft. above ground, on which
 Cmt a cross (X) at the corner point, for ¼ sec. cor., with
 ¼ on W. side of cross; and raise a mound of stone, 2 ft.
 base, 1½ ft. high, W. of cor. Pits impracticable.
 43.50 Spur, brs. E. Desc. NE. slope, 280 ft. to
 53.60 Gulch, 20 lks. wide, course E. Asc. SE. slope, 105 ft. to

18.

Subdivision of T. 16 N., R. 15 W.

Chains.

60.50 Spur, brs. E. Desc. N. slope, 85 ft. to
 64.40 Gulch, 10 lks. wide, course E. Asc. SW. slope, 250 ft. to
 75.70 Ridge, brs. NW. and E. Desc. NE. slope, 40 ft. to
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
 ground, for cor. of secs. 3, 4, 9 and 10, marked on
 brass cap

1915 on S. rim;
 T16N R15W in N. half;
 S4 in NW.,
 S3 in NE.,
 S10 in SE. and
 S9 in SW. quadrant;

and raise a mound of stone, 2 ft. base, 1½ ft. high,
 W. of cor. Pits impracticable.

Land, mountainous.

Soil, granite rocks; 3rd rate.

No timber.

Undergrowth, scrub oak, mahogany, manzanita and cacti.

Dec. 21, 1915: At this cor., I set off 23° 25½' S. on the
 decl. arc; and at apparent noon, I observe the sun on
 the meridian; the resulting lat. is 34° 45' N.

Dec. 21, 1915.

Dec. 22, 1915: At 9 hrs. 3 m., a.m., l.m.t., I set off
 34° 45' N. on the lat. arc; 23° 24½' S. on the decl.
 arc; and determine a meridian with the solar at the
 cor. of secs. 3, 4, 9 and 10,

Thence I run

N. 89° 48' E., on a random line, bet. secs. 3 and 10.

40.00 Set temp. ¼ sec. cor.

80.19 Intersect N. and S. line, 21 lks. N. of the cor. of secs.
 2, 3, 10 and 11.

Thence I run

S. 89° 57' W., on a true line, bet. secs. 3 and 10.

Over mountainous land, through scattering undergrowth.

Desc.

9.08 Telephone line, brs. NE. and SW. to San Francisco Mine.

15.24 Road, brs. NE. to Owens, and SW. to San Francisco Mine.

15.84 Stream of water in gulch, course NE. Asc. SE. slope, 470
 ft.

19.88 From this point, San Francisco Power house brs. S. 49½° E.
 Assay Office brs. S. 3½° E.

House brs. S. 2½° W.

Cabin No 1 brs. S. 56½° E.

Cabin No. 2 brs. S. 44½° E.

Mill brs. S. 24½° E.

Barn brs. S. 22½° E.

Mouth of tunnel brs. S. 88° W., 1 ch. dist. Tunnel brs.
 NW.

23.65 Gulch, 10 lks. wide, course SE. Continue asc.

32.97 From this point, San Francisco Mill brs. S. 78½° E.

Power House brs. S. 88½° E.

Assay Office brs. S. 75½° E.

Cabin No. 1 brs. S. 79° E.

Cabin No. 2 brs. S. 73° E.

Barn brs. S. 68° E.

House brs. S. 65° E.

U. S. L. M. No. 1810, which is a granite stone, 18 X 10 X
 24 ins. above ground, marked and witnessed as described
 by the Surveyor-General, brs. N. 53° 36' E., 8.88 chs.
 dist.

Note: It is impossible to note intersection of section
 line with patented claims, owing to the corners of
 claims being obliterated.

38.79 Point of spur, brs. SE. Desc. 65 ft.

40.09½ Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the
 ground, on solid rock, in a mound of stone, for ¼ sec.
 cor., marked on brass cap

1915 on S. rim;

Subdivision of T. 16 N. R. 15 W. 19.

Chains.

18 3 in N. and
 S10 in S. half;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,
 N. of cor. Pits impracticable.

46.39 Asc. 290 ft. to
 58.24 Ridge, brs. NE. and SW. Desc. NW. slope, 150 ft. to
 68.39 Gulch, 10 lks. wide, course N. Asc. 20 ft. to
 80.19 The cor. of secs. 3, 4, 9 and 10.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, scrub oak, mahogany and cacti.
 Dec. 22, 1915.

Dec. 21, 1915.
 N.0° 2' W., on a random line, bet. secs. 3 and 4.
 Set temp. ¼ sec. cor.

40.00 Intersect N. bdy. of Tp., 4 lks. E. of the cor. of secs.
 80.03 3, 4, 33 and 34, which is a cross on a rock, established
 by me, as described in Book "A".
 Thence I run
 S.0° 4' E., on a true line, bet. secs. 3 and 4.
 Over mountainous land, through scattering undergrowth.

1.00 Wash, course SW. Asc. 10 ft. to
 6.83 Spur, brs. SW. Desc. 465 ft.
 12.00 Thence along W. slope to
 17.00 Desc. SW. slope to
 29.23 Gulch, 25 lks. wide, course SE. Asc. N. slope, 215 ft. to
 34.23 Spur, brs. E. Desc. SW. slope, 120 ft.
 40.03 Set a granite stone, 16 X 7 X 5 ins., 12 ins. in the ground,
 for ¼ sec. cor., marked ¼ on W. face; and raise a mound
 of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits
 impracticable.

45.73 Gulch, 15 lks. wide, course SE. Asc. 30 ft. to
 54.43 Spur, extends 10 chs. E. Desc. S. slope, 115 ft.
 56.03 Trail, brs. E. to San Francisco Mine, and W. to Yucca.
 61.78 Gulch, 25 lks. wide, course E. Asc. N. slope, 360 ft. to
 73.00 Spur, brs. E. Desc. to
 80.03 The cor. of secs. 3, 4, 9 and 10.
 Land, mountainous.
 Soil, granite boulders; 3rd rate.
 No timber.
 Undergrowth, mahogany, scrub oak, manzanita and cacti.
 Dec. 21, 1915.

Dec. 5, 1915: At 2 hrs. 5 m., p.m., 1.m.t., I set off
 34° 41' N. on the lat. arc; 22° 18' S. on the decl. arc;
 and determine a meridian with the solar at the cor. of
 secs. 4, 5, 32 and 33, on the S. bdy. of the Tp., which
 is an iron post, established by R. D. Armstrong, U. S.
 Transitman, as described in Book "A".
 Thence I run
 N.0° 2' W., bet. secs. 32 and 33.
 Over mountainous land, through scattering undergrowth.
 Asc. 180 ft. to

13.10 Ridge, brs. E. and W. Desc. NE. slope, 225 ft. to
 36.20 Wash, course W. Thence over rolling land.
 40.00 Point for ¼ sec. cor. falls on edge of wash, course W.
 I descend off of bank to
 40.11 Set an iron post, 3 ft. long, 1 in. diam., 10 ins. in the
 ground, on solid rock, in a mound of stone, for witness
 cor. to ¼ sec. cor., marked on brass cap
 1915 on S. rim;
 WC ¼ S32 in W. and
 S33 in E. half;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,

20.

Subdivision of T. 16 N., R. 15 W.

Chains.

W. of cor. Pits impracticable.
 41.90 Center of wash, 1 ch. wide, course W.
 74.40 Center of wash, 1 ch. wide, course SW.
 75.00 Ruin of house, brs. W. about 2 chs. dist.
 75.72 Windmill and Well, br. E. 2 chs. dist.
 80.00 Point for cor. of secs. 28, 29, 32 and 33 falls in wash,
 course SE. I return to
 78.30 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
 ground, for witness cor. to cor. of secs. 28, 29, 32
 and 33, marked on brass cap
 1915 on S. rim;
 T16N R15W WC in N. half;
 S29 in NW.,
 S28 in NE.,
 S33 in SE. and
 S32 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,
 W. of cor. Pits impracticable.
 Land, rolling and mountainous.
 Soil, sandy; 3rd rate.
 No timber.
 Undergrowth, cedar, yucca, cat claw and cacti.
 Dec. 5, 1915.

Dec. 6, 1915: At 8 hrs. 0 m., a.m., l.m.t., I set off
 348 42' N. on the lat. arc; 22° 21' S. on the decl.
 arc; and determine a meridian with the solar at the
 true point for cor. of secs. 28, 29, 32 and 33.
 Thence I run
 40.00 N. 89° 57' E., on a random line, bet. secs. 28 and 33.
 80.23 Set temp. ¼ sec. cor.
 Intersect N. and S. line, 14 lks. S. of the cor. of secs.
 27, 28, 33 and 34.
 Thence I run
 S. 89° 51' W., on a true line, bet. secs. 28 and 33.
 Over broken and mountainous land, through scattering
 undergrowth.
 Desc. 105 ft. to
 5.00 Thence along N. slope to
 12.11 Spur, brs. NW. Desc. 165 ft. to
 17.23 Gulch, course SW. Asc. to
 36.25 Desc. 110 ft.
 40.11½ Set an iron post, 3 ft. long, 1 in. diam., 18 ins. in the
 ground, on solid rock, in a mound of stone, for ¼ sec.
 cor., marked on brass cap
 1915 on S. rim;
 ½ S28 in N. and
 S33 in S. half;
 and raise a mound of stone, 2 ft. base, 1 ft. high,
 N. of cor. Pits impracticable.
 45.48 Wash, course SE. Asc. E. slope, 195 ft.
 54.05 Fence, brs. NW. and SE.
 63.14 Ridge, brs. N. and S. Desc. W. slope, 295 ft.
 76.78 Fence, brs. NE. and SW.
 78.25 Enter wash, course SE.
 80.23 The true point for cor. of secs. 28, 29, 32 and 33.
 Land, broken and mountainous.
 Soil, sandy and rocky; 3rd rate.
 No timber.
 Undergrowth, cedar, yucca, mesquite and cacti.
 A. S.
 Dec. 6, 1915.

T. A. H.

Dec. 7, 1915: At 9 hrs. 4 m., a.m., l.m.t., I set off

Subdivision of T. 16 N. R. 15 W. 21

Chains.

34° 42' N. on the lat. arc; 22° 31' S. on the decl. arc;
and determine a meridian with the solar at the true point
for cor. of secs. 28, 29, 32 and 33.

Thence I run
N.0° 2' W., bet. secs. 28 and 29.
Over mountainous land, through dense undergrowth.
Across wash.
3.00 Leave wash, comes from NE., course SE. Asc. SE. slope,
135 ft. to
19.85 Top of asc; thence along broken E. slope.
40.00 Set an iron post, 3 ft. long, 1 in. diam., 17 ins. in the
ground, on solid rock, in a mound of stone, for $\frac{1}{4}$ sec.
cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S29 in W. and
S28 in E. half; from which
A cedar, 22 ins. diam., brs. S.55° E., 16 lks. dist.
marked $\frac{1}{4}$ S28 BT.
A cedar, 12 ins. diam., brs. N.75° W., 65 lks. dist.,
marked $\frac{1}{4}$ S29 BT.
49.50 Wash, 15 lks. wide, course SE. Asc. gradually, 135 ft. to
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
ground, for cor. of secs. 20, 21, 28 and 29, marked on
brass cap
1915 on S. rim;
T16N R15W in N. half;
S20 in NW;
S21 in NE.;
S28 in SE. and
S29 in SW. quadrant; from which
A cedar, 12 ins. diam., brs. N.28° 40' E., 150 lks.
dist., marked T16N R15W S21 BT.
A cedar, 36 ins. diam., brs. S.69° E., 34 lks. dist.,
marked T16N R15W S28 BT.
A crucifixion thorn, 10 ins. diam., brs. S.78° 40' W.,
72 lks. dist., marked T16N R15W S29 BT.
A cedar, 8 ins. diam., brs. N.71 $\frac{1}{2}$ ° W., 33 lks. dist.;
marked T16N R15W S20 BT.
Land, rolling and mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, yucca, cedar and cacti.

T. A. H.
Dec. 7, 1915.

40.00 Dec. 8, 1915. A. S.
80.10 N.89° 51' E., on a random line, bet. secs. 21 and 28.
Set temp. $\frac{1}{4}$ sec. cor.
Intersect N. and S. line, 16 lks. N. of the cor. of secs.
21, 22, 27 and 28.
Thence I run
S.89° 53' W., on a true line, bet. secs. 21 and 28.
Over mountainous land, through scattering undergrowth.
Desc. to
.50 Gulch, course S. Asc. NE. slope, 305 ft. to
18.40 Top of butte, brs. N. and S. Desc. NE. slope, 395 ft.
40.05 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S21 in N. and
S28 in S. half;
and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high,
N. of cor. Pits impracticable.
40.20 Wash, course SW. Thence over rolling land.
80.10 The cor. of secs. 20, 21, 28 and 29.
Land, rolling and mountainous.
Soil, rocky; 3rd rate.
No timber.
Undergrowth, cedar and cacti.

A. S.

22.

Subdivision of T. 16 N., R. 15 W.

Chains.

	<p>T. A. H. At the cor. of secs. 20, 21, 28 and 29, I set off $34^{\circ} 42\frac{1}{2}'$ N. on the lat. arc; $22^{\circ} 37'$ S. on the decl. arc; and at 8 hrs. 30 m., a.m., l.m.t., I determine a meridian with the solar. Thence I run N. $0^{\circ} 2'$ W., bet. secs. 20 and 21. Over rolling land, through dense undergrowth. Wash., course SW.</p>
9.40	
15.00	Leave rolling land, enter mountainous land, brs. NW. and SE. Asc. SW. slope, 260 ft. to
31.60	Top of asc., brs. W. Thence along W. slope.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; S20 in W. and S21 in E. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Desc. NW. slope, 45 ft. to
44.95	Gulch, 20 lks. wide, course W. Asc. SW. slope, 545 ft.
59.20	Gulch, course S. 10° W. Continue asc.
68.80	Head of gulch, course S. 10° E. Asc. S. slope to
75.20	Rocky spur, brs. SW. Thence along W. slope to.
77.61	Desc. NW. slope, 50 ft. to
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, marked on brass cap 1915 on S. rim; T16N R15W in N. half; S17 in NW., S16 in NE., S21 in SE. and S20 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous and rolling. Soil, rocky; 4th rate. No timber. Undergrowth, mahogany, scrub oak and cedar. Dec. 8, 1915: At this cor., I set off $22^{\circ} 39'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 43\frac{1}{2}'$ N. T. A. H. Dec. 8, 1915.
	A. S. Dec. 9, 1915.
40.00	N. $89^{\circ} 58'$ E., on a random line, bet. secs. 16 and 21. Set temp. $\frac{1}{4}$ sec. cor.
79.90	Intersect N. and S. line, 11 lks. N. of the true point for cor. of secs. 15, 16, 21 and 22. Thence I run N. $89^{\circ} 57'$ W., on a true line, bet. secs. 16 and 21. Over mountainous land, through scattering undergrowth. Asc. 40 ft. to
7.00	Spur, brs. SW. Thence along broken S. slope. Desc. 40 ft. to
9.85	Asc. 30 ft. to
14.24	Desc. 30 ft. to
19.82	Asc. 60 ft. to
23.50	Desc. 360 ft. to
36.70	Gulch, course SW. Spring branch, extends 2 chs. N. and 3 chs. S. Asc. E. slope, 135 ft.
39.95	Set an iron post, 3 ft. long, 1 in. diam., on solid rock, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim;

<p>Chains.</p> <p>40.00</p> <p>49.00</p> <p>63.70</p> <p>79.90</p>	<p>1/4 S16 in N. and S21 in S. half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.</p> <p>Spur, brs. N. and S. Desc. W. slope, 125 ft. to Gulch, course SW. Asc. E. slope, 250 ft. to Ridge, brs. N. and S. Desc. to The cor. of secs. 16, 17, 20 and 21. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, mesquite, cat claw, cedar and cacti. A. S. Dec. 9, 1915.</p>
<p>1.00</p> <p>5.78</p> <p>6.50</p> <p>8.00</p> <p>40.00</p> <p>44.00</p> <p>78.10</p> <p>80.00</p>	<p>T. A. H. Dec. 11, 1915: At 8 hrs. 45 m., a.m., 1.m.t., I set off 34° 43 1/2' N. on the lat. arc; 22° 55' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21. Thence I run N.0° 2' W., bet. secs. 16 and 17. Over mountainous land, through dense undergrowth. Desc. N. slope to Gulch, course W. Asc. S. slope to Spur, brs. SW. from main ridge. Thence along W. slope to Desc. NW. slope to Gulch, course SW. Asc. Set a granite stone, 20 X 14 X 8 ins., 15 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face; and raise a mound of stone, 3 1/2 ft. base, 2 ft. high, W. of cor. Gulch, course SW. Asc. broken slope. Top of asc.; thence along W. slope to Set a granite stone, 30 X 24 X 12 ins., 18 ins. in the ground, in a mound of stone, for cor. of secs. 8, 9, 16 and 17, marked with 4 notches on E. and S. edges; and raise a mound of stone, 4 ft. base, 3 ft. high, W. of cor. Pits impracticable. Land, mountainous Soil, rocky; 4th rate. No timber. Undergrowth, scrub oak, and cacti. Dec. 11, 1915.</p>
<p>40.00</p> <p>79.94</p> <p>39.97</p> <p>44.90</p> <p>79.94</p>	<p>Dec. 20, 1915. S.89° 57' E., on a random line, bet. secs. 9 and 16. Set temp. 1/4 sec. cor. Intersect N. and S. line, at the cor. of secs. 9, 10, 15 and 16. Thence I run N.89° 57' W., on a true line, bet. secs. 9 and 16. Over mountainous land, through dense undergrowth. and timber. Asc. 750 ft. Set an iron post, 3 ft. long, 1 in. diam., on solid rock, in a mound of stone, for 1/4 sec. cor., marked on brass cap 1915 on S. rim; 1/4 S9 in N. and S16 in S. half; and raise a mound of stone, 4 ft. base, 3 ft. high, N. of cor. Pits impracticable. Ridge, brs. NW. and SE. Desc. SW. slope, over huge granite boulders, 285 ft. to The cor. of secs. 8, 9, 16 and 17.</p>

24.

Subdivision of T. 16 N., R. 15 W.

Chains.

Land, mountainous.
Soil, rocky; 4th rate.
Timber, scattering pinion.
Undergrowth, scrub oak, manzanita, mahogany, cat claw and
cacti.

Dec. 20, 1915.

Dec. 21, 1915: At 9 hrs. 4 m., a.m., l.m.t., I set off
34° 44½' N. on the lat. arc; 23° 24½' S. on the decl.
arc; and determine a meridian with the solar at the
cor. of secs. 8, 9, 16 and 17.

Thence I run

N.0° 2' W., bet. secs. 8 and 9.

Over mountainous land, through dense undergrowth.

Desc. NW. slope to

7.00 Head of gulch, course SW. Asc. S. slope, 285 ft., over
granite boulders, to

20.65 Main ridge, brs. S.60° W. and N.60° E. Desc. 800 ft.

40.00 Point for ¼ sec. cor. falls on granite boulder, 5 X 4 X
2 ft. above ground, on whichCut a cross (X) at the corner point, for ¼ sec. cor., with
¼ on W. side of cross; and raise a mound of stone, 4
ft. base, 3 ft. high, W. of cor. Pits impracticable.Dec. 21, 1915: At this cor., I set off 23° 25½' S. on the
decl. arc; and at apparent noon, I observe the sun on
the meridian; the resulting lat. is 34° 45' N.

66.25 Gulch, course NW. Asc. SW. slope, 50 ft. to

71.90 Spur, slopes NW. Desc. N. slope, 65 ft. to

76.00 Gulch, course NW. Asc. S. slope, 20 ft. to

78.50 Low spur, slopes NW. Desc. 20 ft. to

80.00 Set a granite stone, 24 X 24 X 10 ins., 16 ins. in the
ground, marked with 5 notches on W. and 4 notches on E.
edge; and raise a mound of stone, 4 ft. base, 3 ft. high,
W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, scrub oak, manzanita, mahogany, cat claw and
cacti.

Dec. 21, 1915.

T. A. H.

Dec. 22, 1915: A. S. and T. A. H.

S.89° 57' E., on a random line, bet. secs. 4 and 9.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line, at the cor. of secs. 3, 4, 9 and
10.

Thence I run

N.89° 57' W., on a true line, bet. secs. 4 and 9.

Over mountainous land, through dense undergrowth.

Asc. 80 ft. to

3.06 Spur, brs. N. Desc. W. slope, 195 ft. to

9.07 Head of gulch, course N. Asc. NE. slope, 40 ft. to

11.30 Desc. 15 ft. to

13.96 Asc. 65 ft. to

17.80 Desc. 15 ft. to

18.80 Gulch, 20 lks. wide, course NE. Asc. SE. slope, 130 ft.
to

23.45 Desc. to

29.40 Head of gulch, 10 lks. wide, course SE. Asc. E. slope,
400 ft. to

39.80 Ridge, brs. NE. and SW. Desc. 345 ft.

40.00 Set a granite stone, 26 X 12 X 10 ins., 18 ins. in the
ground, for ¼ sec. cor., marked ¼ on N. face; and raise
a mound of stone, 4 ft. base, 3 ft. high, N. of cor.
Pits impracticable.

Subdivision of T. 16 N., R. 15 W.

Chains.	<p>53.35 Gulch, course NW. Thence along N. slope to</p> <p>56.65 Desc. NW. slope, 60 ft. to</p> <p>60.70 Gulch, course N. Asc. NE. slope, 80 ft. to</p> <p>70.60 Rocky point, on spur, which slopes NW. Desc. NW. slope, 220 ft. to</p> <p>80.00 The cor. of secs. 4, 5, 8 and 9. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, scrub cedar and cacti. A. S. and T. A. H.</p>
40.00 79.73	<p>T. A. H.</p> <p>N.0° 2' W., on a random line, bet. secs. 4 and 5.</p> <p>Set temp. $\frac{1}{4}$ sec. cor.</p> <p>Intersect N. bdy. of Tp., at the cor. of secs. 4, 5, 32 and 33, which is a stone, established by A. S., as described in Book "A".</p> <p>Thence I run</p> <p>S.0° 2' E., on a true line, bet. secs. 4 and 5.</p> <p>Over mountainous land, through dense undergrowth.</p> <p>Desc. 175 ft. to</p>
15.50 16.90 20.43 25.25 39.73	<p>Gulch, course S.15° E.</p> <p>Gulch, course S.50° E. Thence along E. slope to</p> <p>Spur, slopes SE. Desc. SE. slope, 70 ft.</p> <p>Mine shaft and tunnel, brs. E., 1.50 chs. dist.</p> <p>Set a granite stone, 22 X 20 X 12 ins., 17 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; and raise a mound of stone, 4 ft. base, 3 ft. high, W. of cor. Pits impracticable.</p> <p>Dec. 22, 1915: At this cor., I set off 23° 25$\frac{1}{2}$' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 45$\frac{1}{2}$' N.</p>
41.13 50.23 52.73 67.08 68.60 75.35	<p>Asc. to</p> <p>Spur, slopes SE. Desc. S. slope, 180 ft. to</p> <p>Head of gulch, course SE. Asc. N. slope, 30 ft. to</p> <p>Spur, slopes S.30° E. Desc. 155 ft. to</p> <p>Gulch, course S.30° E. Asc. to</p> <p>Spur, brs. SE. and NW. Desc. 185 ft. to</p> <p>Main canyon, course SW. Trail in canyon, brs. NE. to San Francisco Mine, and SW. to Yucca. Asc. NW. slope, 60 ft. to</p>
79.73	<p>The cor. of secs. 4, 5, 8 and 9. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, mahogany, manzanita and cacti. Dec. 22, 1915.</p>
7.77 25.02 40.00	<p>Dec. 5, 1915.</p> <p>From the cor. of secs. 5, 6, 31 and 32, which is an iron post, established by R. D. Armstrong, U. S. Transitman, as described in Book "A", I run</p> <p>N.0° 3' W., bet. secs. 31 and 32.</p> <p>Over rolling land, through dense undergrowth.</p> <p>Wash, 15 lks. wide, course SW.</p> <p>Wash, 20 lks. wide, course SW.</p> <p>Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap</p> <p style="padding-left: 40px;">1915 on S. rim; $\frac{1}{4}$S31 in W. and S32 in E. half;</p> <p style="padding-left: 40px;">and raise a mound of stone, 2 ft. base, 1$\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.</p>
51.12	<p>Dim wagon road, brs. NE. and SW.</p>

26.

Subdivision of T. 16 N., R. 15 W.

Chains.

67.12 Leave rolling, enter mountainous land, brs. NE. and SW.
Asc. SE. slope, 210 ft. to
75.02 Spur, slopes SE. Desc. NE. slope, 45 ft. to
80.00 Set an iron post, 3 ft. long, 2 ins. diam., 14 ins. in the
ground, on bed rock, in a mound of stone, for cor. of
secs. 29, 30, 31 and 32, marked on brass cap
1915 on S. rim;
T16N R15W in N. half;
S30 in NW.,
S29 in NE.,
S32 in SE. and
S31 in SW. quadrant;
and raise a mound of stone, 2 ft. base, 1½ ft. high,
W. of cor. Pits impracticable.
Land, rolling and mountainous.
Soil, 4th rate, rocky;
No timber.
Undergrowth, cedar, ocotilla and cacti.
Dec. 5, 1915.

Dec. 6, 1915: At 8 hrs. 30 m., a.m., l.m.t., I set off
34° 42' N. on the lat. arc; 22° 23' S. on the decl.
arc; and determine a meridian with the solar at the
cor. of secs. 29, 30, 31 and 32.
Thence I run
N.89° 57' E., on a random line, bet. secs. 29 and 32.
40.00 Set temp. ¼ sec. cor.
80.05 Intersect N. and S. line, 14 lks. S. of the true point for
cor. of secs. 28, 29, 32 and 33.
Thence I run
S.89° 51' W., on a true line, bet. secs. 29 and 32.
Over mountainous land, through dense undergrowth.
Asc. E. slope, 55 ft. to
7.40 Point of rocky spur, slopes S. Desc. gradual SW. slope,
20 ft. to
19.05 Wash, course S. Asc. SE. slope, 305 ft. to
35.45 Rocky spur, slopes S. Desc. SW. slope, 320 ft.
40.02½ Set an iron post, 3 ft. long, 1 in. diam., 6 ins. in the
ground, on solid rock, in a mound of stone, for ¼ sec.
cor., marked on brass cap
1915 on S. rim;
½S29 in N. and
S32 in S. half;
and raise a mound of stone, 2 ft. base, 1½ ft. high,
N. of cor. Pits impracticable.
57.15 Foot of desc., brs. NE. and SW. Thence over level land.
59.65 Wash, 30 lks. wide, course SW.
73.65 Wash, 15 lks. wide, course S.
74.65 Leave level land, brs. N. and S. Asc. NE. slope, 120 ft.
to
80.05 The cor. of secs. 29, 30, 31 and 32.
Land, level and mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, cedar, yucca, cat claw and cacti.
Dec. 6, 1915.

Dec. 5, 1915.
S.89° 57' W., on a random line, bet. secs. 30 and 31.
40.00 Set temp. ¼ sec. cor.
77.97 Intersect W. bdy. of Tp., 2 lks. S. of the cor. of secs.
25, 30, 31 and 36, which is an iron post, established
by Irving W. Stoddard, U. S. Surveyor, as described
in Book "A".
Thence I run
N.89° 58' E., on a true line, bet. secs. 30 and 31.

28. Subdivision of T. 16 N., R. 15 W.

Chains.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect N. and S. line, at the cor. of secs. 20, 21, 28 and 29.

Thence I run
S. $89^{\circ} 51'$ W., on a true line, bet. secs. 20 and 29.
Over rolling land, through dense undergrowth.

7.50 Wash, 20 lks. wide, course S.

12.20 Wash, 40 lks. wide, course SE. Joins other wash 3 chs. SE.
Leave rolling land, brs. N W. and SE. Thence over mountainous land. Asc. NE. slope, 265 ft.

40.01 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S20 in N. and
S29 in S. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

Dec. 7, 1915: At this cor., I set off $22^{\circ} 32\frac{1}{2}'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 42\frac{1}{2}'$ N.

43.67 Top of asc.; brs. N. Desc. NW. slope, 230 ft. to

58.70 Wash, 50 lks. wide, course S. Leave mountainous, enter rolling land, brs. N. and S.

74.40 Leave rolling, enter mountainous land, brs. N. and S.
Asc. 140 ft. to

80.02 The cor. of secs. 19, 20, 29 and 30.
Land, rolling and mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, yucca, cedar and cacti.

Dec. 7, 1915.

Dec. 6, 1915.

40.00 S. $89^{\circ} 58'$ W., on a random line, bet. secs. 19 and 30.
Set temp. $\frac{1}{4}$ sec. cor.

77.84 Intersect W. bdy. of Tp., 2 lks. N. of the cor. of secs. 19, 24, 25 and 30, which is an iron post, established by Irving W. Stoddard, U. S. Surveyor, as described in Book "A".

Thence I run
N. $89^{\circ} 57'$ E., on a true line, bet. secs. 19 and 30.
Over mountainous land, through dense undergrowth.
Desc. NE. slope, 80 ft. to

4.29 Leave mountainous, enter level land, brs. NW. and SE.

7.00 Wash, 25 lks. wide, course SE.

14.29 Leave level land, brs. N. and S. Enter mountainous land.
Asc. 740 ft.

37.84 Set an iron post, 3 ft. long, 1 in. diam., 28 ins. in a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S19 in N. and
S30 in S. half;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

48.94 Top of asc.; ridge, brs. N. and S. Desc. SE. slope, 440 ft. to

77.84 The cor. of secs. 19, 20, 29 and 30.
Land, level and mountainous
Soil, rocky; 4th rate.
No timber.
Undergrowth, cedar, yucca and cacti.

Dec. 6, 1915.

Dec. 7, 1915.
N. $0^{\circ} 3'$ W., bet. secs. 19 and 20.

Subdivision of T. 16 N., R. 15 W.

BOOK 2921
29.

chains.

Over mountainous land, through dense undergrowth.
 Asc. SE. slope, 170 ft. to
 16.50 Top of asc.; brs. E. Desc. NE. slope, 140 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 $\frac{1}{4}$ S19 in W. and
 S20 in E. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor. Pits impracticable.
 43.70 Foot of desc., brs. NW. and SE. Thence over rolling land.
 57.20 Wash, 20 lks. wide, course E.
 80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the
 ground, for cor. of secs. 17, 18, 19 and 20, marked on
 brass cap
 1915 on S. rim;
 T16N R15W in N. half;
 S18 in NW.,
 S17 in NE.,
 S20 in SE. and
 S19 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 W. of cor. Pits impracticable.
 Land, rolling and mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, cedar, yucca and cacti.
 Dec. 7, 1915.

Dec. 8, 1915.
 N.89° 51' E., on a random line, bet. secs. 17 and 20.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.17 Intersect N. and S. line, 9 lks. N. of the cor. of secs.
 16, 17, 20 and 21.
 Thence I run
 S.89° 55' W., on a true line, bet. secs. 17 and 20.
 Over mountainous land, through dense undergrowth.
 Desc. NW. slope, 100 ft. to
 4.20 Gulch, course SW. Asc. SE. slope, 165 ft. to
 14.50 Spur, slopes S. Desc. SW. slope, 390 ft. to
 32.50 Gulch, course SW. Asc. SE. slope, 25 ft.
 40.08 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
 1915 on S. rim;
 $\frac{1}{4}$ S17 in N. and
 S20 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high,
 N. of cor. Pits impracticable.
 40.50 Spur, slopes SW. Desc. NW. slope, 210 ft., over granite
 boulders, to
 54.50 Wash, 15 lks. wide, course SW. Enter rocky valley, brs. NE.
 and SW.
 63.50 Wash, 10 lks. wide course SE. Leave valley, brs. NE. and
 SW. Asc. SE. slope, 45 ft. to
 66.35 Rocky point on spur, slopes S. Desc. SW. slope, 85 ft. to
 80.17 The cor. of secs. 17, 18, 19 and 20.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, mahogany, scrub oak, cat claw, yucca and
 cedar.

S.89° 57' W., on a random line, bet. secs. 18 and 19.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 77.70 Intersect W. bdy. of Tp., 2 lks. N. of the cor. of secs.

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Chains.

13, 18, 19 and 24, which is an iron post, established by Irving W. Stoddard, U. S. Surveyor, as described in Book "A".

Thence I run
N. 89° 56' E., on a true line, bet. secs. 18 and 19.
Over rolling land, through dense undergrowth.

37.70 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S18 in N. and
S19 in S. half;
and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

62.80 Leave rolling, enter mountainous land, brs. NE. and SW.
Asc. NW. slope, 125 ft. to

68.20 Low spur, slopes N. Desc. NE. slope, 30 ft. to

77.70 The cor. of secs. 17, 18, 19 and 20.
Land, rolling and mountainous.
Soil, gravelly; 3rd rate.
No timber.
Undergrowth, yucca, cat claw, cedar, scrub oak and cacti.
Dec. 8, 1915.

Dec. 9, 1915: At 9 hrs. 0 m., a.m., l.m.t., I set off 34° 43 $\frac{1}{2}$ ' N. on the lat. arc; 22° 44' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20.

Thence I run
N. 0° 3' W., bet. secs. 17 and 18.
Over mountainous land, through dense undergrowth.
Asc. SW. slope, 170 ft. to

9.25 Spur, slopes NW. Desc. N. slope, 145 ft. to

19.45 Wash, 20 lks. wide, course W. Asc. broken SW. slope, over granite boulders.

40.00 Set an iron post, 3 ft. long, 1 in. diam., in a mound of stone, in a niche, 25 ft. long, between two granite boulders, for $\frac{1}{4}$ sec. cor., marked on brass cap
1915 on S. rim;
 $\frac{1}{4}$ S18 in W. and
S17 in E. half; from which
A cross (X) on a granite boulder, 25 ft. high, 20 ft. in diam., marked BO underneath cross, brs. East, 14 lks. dist.
Raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

53.80 Spur, slopes W. Desc. N. slope, 75 ft. to

64.25 Gulch, course NW. Asc. SW. slope, 130 ft. to

69.85 Spur, slopes W. Desc. broken NW. slope, 145 ft. to

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, marked on brass cap
1915 on S. rim;
T16N R15W in N. half;
S7 in NW.,
S8 in NE.,
S17 in SE. and
S18 in SW. quadrant;
and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
A cross (X) on a granite boulder, 25 ft. high, 20 ft. in diam., marked BO beside cross, brs. East 28 lks. dist.
Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Undergrowth, mahogany, scrub oak, cedar and cacti.
Dec. 9, 1915: At this cor., I set off 22° 45 $\frac{1}{2}$ ' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 34° 44 $\frac{1}{2}$ ' N.
Dec. 9, 1915.

Chains.	<p>Dec. 13, 1915: At 9 hrs. a.m., l.m.t., I set off $34^{\circ} 44\frac{1}{2}'$ N. on the lat. arc; $23^{\circ} 4\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 8, 17 and 18.</p> <p>Thence I run N. $89^{\circ} 55'$ E., on a random line, bet. secs. 8 and 17.</p> <p>40.00 Set temp. $\frac{1}{4}$ sec. cor.</p> <p>80.01 Intersect N. and S. line, 2 lks. N. of the cor. of secs. 8, 9, 16 and 17.</p> <p>Thence I run S. $89^{\circ} 56'$ W., on a true line, bet. secs. 8 and 17. Over mountainous land, through dense undergrowth. Desc. on spur, brs. W.</p> <p>6.00 Gulch, course SW. Asc. W. slope, over huge granite boulders. to</p> <p>15.00 Top of asc; thence along S. slope to</p> <p>23.30 Desc. W. slope</p> <p>40.00 $\frac{1}{4}$ Point for $\frac{1}{4}$ sec. cor. falls on granite boulder, 8 X 6 X 6 ft. above ground, on which Cut a cross (X) at the corner point, for $\frac{1}{4}$ sec. cor., with $\frac{1}{4}$ N. of cross; and raise a mound of stone, 4 ft. base, 3 ft. high, N. of cor. Pits impracticable.</p> <p>Dec. 13, 1915: At this cor., I set off $23^{\circ} 6'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 44\frac{1}{2}'$ N.</p> <p>74.00 Gulch, course NW. Asc. NE. slope, to</p> <p>80.01 The cor. of secs. 7, 8, 17 and 18. Land, mountainous. Soil, rocky; 4th rate. No timber. Undergrowth, scrub oak, mahogany, manzanita, cat claw and cacti.</p> <p style="text-align: right;">Dec. 13, 1915.</p>
40.00	<p>Dec. 9, 1915. S. $89^{\circ} 56'$ W., on a random line, bet. secs. 7 and 18.</p> <p>Set temp. $\frac{1}{4}$ sec. cor.</p> <p>77.92 Intersect W. bdy. of Tp., at the cor. of secs. 7, 12, 13 and 18, which is an iron post, established by Irving W. Stoddard, U. S. Surveyor, as described in Book "A".</p> <p>Thence I run N. $89^{\circ} 56'$ E., on a true line, bet. secs. 7 and 18. Over rolling land, through dense undergrowth.</p> <p>7.32 Center of wash, 1 cu. wide, course S. 70° W. Trail in wash, brs. N. 70° E. to San Francisco Mine, and S. 70° W. to Yucca.</p> <p>13.62 Wash, 15 lks. wide, course SW.</p> <p>37.92 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., marked on brass cap 1915 on S. rim; $\frac{1}{8}$ 187 in N. and S18 in S. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.</p> <p>40.00 Leave rolling, enter mountainous land, brs. N. and S. Asc. broken SW. slope, 300 ft. to</p> <p>57.55 Thence along N. slope to</p> <p>60.32 Gulch, course NW. Asc. 400 ft. to</p> <p>77.92 The cor. of secs. 7, 8, 17 and 18. Land, rolling and mountainous. Soil, gravelly and rocky; 3rd and 4th rate. No timber. Undergrowth, mahogany, scrub oak, manzanita, cedar, yucca and cacti.</p> <p style="text-align: right;">Dec. 9, 1915.</p>

32.

Subdivision of T. 16 N., R. 15 W.

Chains.

- Dec. 14, 1915: Cloudy. I run back and foresight line from line previously established.
 N.0° 3' W., bet. secs. 7 and 8.
 Over mountainous land, through dense undergrowth.
 Desc. N. slope, 150 ft. to
 8.00 Gulch, course NW. Asc. S. slope, over granite boulders.
 22.75 Rocky peak, on spur, sloping SW. from main ridge. Desc. broken, rocky NW. slope, 235 ft. to
 33.00 Gulch, course SW. Asc. 45 ft. to
 37.00 Spur, slopes SW. Desc. 130 ft.
 40.00 Point for $\frac{1}{4}$ sec. cor. falls on granite ledge, running E. and W., 12 ft. high, and 25 ft. long, on which
 Cut a cross (X) at the corner point, for $\frac{1}{4}$ sec. cor., with $\frac{1}{4}$ beside cross; and raise a mound of stone, 4 ft. base, 3 ft. high, 10 lks. W. of cor. Pits impracticable.
 41.50 Center of rocky canyon, 40 lks. wide, course W. Trail in canyon, brs. E. to San Francisco Mine, and W. to Yucca. Asc. S. slope, 595 ft. to
 55.60 Spur, slopes SE. Asc. broken SE. slope to
 74.40 Spur, slopes SW. Comes from NNW. Thence along E. slope to
 80.00 Set a granite stone, 14 X 16 X 36 ins., 12 ins. in the ground, on solid rock, in a mound of stone, for cor. of secs. 5, 6, 7 and 8, marked with 5 notches on S. and E. edges; and raise a mound of stone, 4 ft. base, 3 ft. high, W. of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No timber.
 Undergrowth, scrub oak, mahogany, cat claw and cacti.
 Dec. 14, 1915. The sky was overcast all day, making an observation for lat. impossible.
 Dec. 14, 1915.
-
- Dec. 22, 1915: Too early for solar observation; proceed by deflection from line previously established.
 N.89° 56' E., on a random line, bet. secs. 5 and 8.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.18 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 4, 5, 8 and 9.
 Thence I run
 S.89° 59' W., on a true line, bet. secs. 5 and 8.
 Over mountainous land, through dense undergrowth.
 Desc. NW. slope, 105 ft. to
 6.85 Main canyon, course S.50° W. Trail in canyon, brs. N.50° E., to San Francisco Mine, and S.50° W. to Yucca. Asc. 25 ft. to
 9.75 Low point, slopes SW. Desc. 30 ft. to
 12.30 Gulch, course S.10° W. Asc. SE. slope, 75 ft. to
 19.65 Spur, slopes S. Desc. SW. slope, 160 ft. to
 26.40 Gulch, course S. Asc. SE. slope, 180 ft., over granite boulders.
 40.09 Set a granite stone, 26 X 12 X 10 ins., 16 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 4 ft. base, 3 ft. high, N. of cor. Pits impracticable.
 At 9 hrs. 0 m., a.m., l.m.t., I set off 34° 45' N. on the lat. arc; 23° 24 $\frac{1}{2}$ ' S. on the decl. arc; and determine a meridian with the solar. The bearing of the line run by back and foresights checks with the bearing obtained from this solar observation.
 44.50 Spur, slopes S. Thence along broken S. slope, over huge granite boulders.
 55.00 Desc. broken SW. slope, 200 ft. to
 73.15 Gulch, course S. Asc. SE. slope, 150 ft. to
 80.18 The cor. of secs. 5, 6, 7 and 8.
 Land, mountainous.
 Soil, rocky; 4th rate.

Chains.

No timber.
 Undergrowth, scrub oak, mahogany, manzanita, cat claw and cacti.
 Dec. 22, 1915: At this cor., I set off $23^{\circ} 25\frac{1}{2}'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 45' N.$
 Dec. 22, 1915.

Dec. 15, 1915: At 10 hrs. 0 m., a.m., l.m.t., I set off $34^{\circ} 45' N.$ on the lat. arc; $23^{\circ} 13' S.$ on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 7 and 8.

Thence I run
 S. $89^{\circ} 56' W.$, on a random line, bet. secs. 6 and 7.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 77.90

Intersect W. bdy. of Tp., 7 lks. S. of the cor. of secs. 1, 6, 7 and 12, which is an iron post, established by Irving W. Stoddard, U. S. Surveyor, as described in Book "A".

Thence I run
 N. $89^{\circ} 59' E.$, on a true line, bet. secs. 6 and 7.
 Over mountainous land, through dense undergrowth.

Asc. rocky. SW. slope, 300 ft. to
 14.45 Top of granite rock, 60 ft. base, 100 ft. high, on spur, slopes S. Desc. SE. slope, 580 ft. to

37.40 Gulch, course S. Asc. 145 ft.

37.90 Set a granite stone, 24 X 14 X 11 ins., 14 ins. in the ground, in a mound of stone, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone, 4 ft. base, 3 ft. high, N. of cor. Pits impracticable.

Dec. 15, 1915: At this cor., I set off $23^{\circ} 13\frac{1}{2}' S.$ on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $34^{\circ} 45' N.$

45.15 Spur, slopes S. $7^{\circ} W.$, from main ridge. Desc. SE. slope, 380 ft. to

62.40 Gulch, course SW. Asc. abrupt W. slope, 480 ft. to

77.10 Spur, slopes S. $6^{\circ} E.$ Desc. E. slope, 15 ft. to

77.90 The cor. of secs. 5, 6, 7 and 8.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, mahogany, scrub oak, manzanita, cedar, crucifixion thorn and cacti.

Dec. 15, 1915.

Dec. 25, 1915: Cloudy. Proceed by fore and backsights from line previously established.

40.00 N. $0^{\circ} 3' W.$, on a random line, bet. secs. 5 and 6.
 79.77 Set temp. $\frac{1}{4}$ sec. cor.

Intersect N. bdy. of Tp., 7 lks. W. of the cor. of secs. 5, 6, 31 and 32, which is a stone, established by me, as described in Book "A".

Thence I run

13.75 South, on a true line, bet. secs. 5 and 6.
 30.10 Over mountainous land, through dense undergrowth.

Desc. SW. slope, 390 ft. to

39.77 Gulch, course SW. Asc. NW. slope, 95 ft. to

Top of asc., brs. E. and W. Desc. 80 ft. to

Point for $\frac{1}{4}$ sec. cor. falls on granite boulder, 7 X 8 X 5 ft. above ground, on which

Cut a cross (X) at the corner point, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. side of cross; and raise a mound of stone, 4 ft. base, 3 ft. high, W. of cor. Pits impracticable.

Asc. NW. slope to

70.00 Spur, slopes SW. Desc. SE. slope, to

34.

Subdivision of T. 16 N., R. 15 W.

Chains.

79.77

The cor. of secs. 5, 6, 7 and 8.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Undergrowth, mahogany, scrub oak, cat claw and manzanita.

Dec. 25, 1915: Cloudy all day; observations for lat. impossible.

T. A. H.

Dec. 25, 1915.

GENERAL DESCRIPTION.

This township is in the SW. part of the Hualpai Mountains, the main ridge of which extend N. and S. The SW. portion consists of comparatively smooth, alluvial deposits, eroded from the mountains and from isolated buttes and spurs rising abruptly at various points; the flats, extending with an almost imperceptible fall westerly to the Colorado River. Approximately the W. half of the Tp. drains westerly toward the River; the NE. portion E., and the SE. part, which is rolling mountainous land, SE., to Big Sandy Wash.

The mountains are exceptionally rugged and steep, with slopes covered for large areas, with immense, almost impassable heaps of cyclopean boulders.

Elevations vary from approximately 3300 ft. in the SW. cor., to about 6500 ft. in secs. 5, 6, 8 and 9.

The soil in bottom lands, in the SE. and SW. portions, would probably be indifferently productive, if it could be irrigated. The balance of the Tp. consists of archaean granite mountains, with a thin coating of soil, mostly in pockets and on the flatter slopes.

Vegetation consists of desert growth of various species and varieties. There are found scrub cedar and juniper, cat claw, mesquite, greasewood, crucifixion thorn, yucca, Spanish dagger and numerous other varieties of the Century plant, manzanita, oak brush, mountain laurel, mountain mahogany and numerous varieties of cactus. Yucca and giant cactus grow only on the lower levels. On north slopes at higher elevations and in canyons, the undergrowth is high and exceedingly dense. An occasional pinion tree is found on the highest points.

Water exists in springs, hoes in the bottom of canyons, and may be had in a few places by sinking wells in the gravel filled beds of certain washes, where they emerge from the mountains.

Evidence of considerable prospecting is found throughout the mountains, and the only development in the way of roads and trails has been made to facilitate mining operations. The San Francisco Mine, in Sec. 10, and a prospect in sec. 15, are the principal of these.

With the exception of prospectors and miners temporarily living there, the Tp. contains no settlers.

The ruins of a house, with a well and windmill, are located near the corner of secs. 28, 29, 32 and 33; which with the dilapidated cabin of G. A. Kelsey in sec. 14, and the San Francisco Mine buildings, are the only houses in the Tp.

BOOK 2931

35

For FINAL OATH OF UNITED STATES SURVEYOR.
See Book "B" of this Group.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 _____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191 _____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, February 15, 1917.

The foregoing field notes of the survey of the _____

Subdivision Lines of

Township 16 North, Range 15 West,

of the Gila and Salt River Base and Meridian, in the State of Arizona, executed by Albert Smith, Jr., U. S. Surveyor, and Thomas A. Hayden, U. S. Transitman, under special instructions dated December 28, 1914, for Group 41, _____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank P. Trott,
Surveyor General
of Arizona.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____ Book "T" of Group 41, has been correctly copied from the original notes on file in this office.

Surveyor General
of Arizona.