

BOOK "D"

BOOK 2654

FIELD NOTES

DEC 23 1913

OF THE SURVEY OF THE
COMPLETION OF THE

Subdivision Lines of Tp. 22 S. Rg. 16 E.,

Resurvey of Portion of West Boundary of Tp. 22 S. Rg. 16 E., and

Resurvey of West Boundary of Tp. 22 S., Rg. 17 E.

Of the Gila and Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

John F. Hesse

In the capacity of U. S. Surveyor, under instructions dated *September 19th*, 1912, issued by the United States Surveyor General to govern surveys included in Group No. *18*, which were approved by the Commissioner of the General Land Office, *September 27th*, 1912, pursuant to authority contained in the Act of Congress dated *August 23rd*, 1912

Survey and Resurvey commenced *October 16*, 1912.

Survey and Resurvey completed *November 16*, 1912.

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Completion of the Subdivision of Tp. 22 S. Rg. 16 E.

Chains.

Survey commenced October 16, 1912, and executed with a W. & L. E. Gurley transit, with solar attachment, not numbered. The horizontal limb is provided with one double vernier, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved by the Supervising Surveyor August 28, 1912.

October 16: At 1h. 00m. a.m., l.m.t., I set off 31° 32' N. on the lat. arc; 8° 58' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2, 3, 10 and 11, which is a ^{GRANITE} stone ^{8x6x6 ins. above ground} marked and witnessed as described by the surveyor general.

Thence I run

East, on sectional correction line, bet. secs. 2 and 11 Descend east slope of mountain, thru dense undergrowth

27.50 Drain 10 links wide, course S.E.

35.50 Wash, 30 links wide, course N.

40.00 Set an iron post 3 ft. long, 1 in., diam., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap ^{1 1/2} S2 in N. and S11 in S. half; and raise a mound of stone 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable.

49.90 Road, bears N.W. and S.E.

50.00 Enter scattering timber, bears N.W. and S.E.

51.90 Wash 75 lks. wide, stream of running water 15 lks. wide 6 ins. deep, course N.W. Bot. of desc. Asc. along S.W. slope of mt.

52.00 An adobe shack bears S. 2 chs.

71.00 Wash 15 lks. wide course S.W.

80.00 Set an iron post 3 ft. long 2 ins. diam., 24 ins. in the ground for cor. of secs. I, 2, II, and I2, marked on brass cap, 1912;

T22SRI6E in N. half

S2 in N.W.

SI in N.E.

SI2 in S.E., and

SII in S.W. quadrant; from which

An oak, 9 ins. diam., bears N. 74 1/2° E. 128 lks. dist. marked T22SRI6E S1 B.T.

A mesquite 6 ins. diam., bears S. 7 1/4° E. 74 lks. dist. marked T22SRI6E SI2 B.T.

An oak 8 ins. diam., bears S. 49° W. 68 lks. dist. marked T22SRI6E SII B.T.

AA mesquite 7 ins. diam., bears N. 29 1/4° W. 205 lks. dist. marked T22SRI6E S2 B.T.

Land, rough and mountainous.

Soil, rocky 4th rate.

Timber, scattering oak and juniper.

Undergrowth, dense mesquite and oak brush

At my camp which is situated near the ^{above described} cor. of secs. 1, 2, 11, and 12, Tp. 22 S. R. 16 E. latitude 31° 32 1/4' N. longitude 110° 40 1/2' W. I set off 31° 32 1/4' N.

on the lat. arc: 9° 00' S. on the decl. arc and at 4h. 00m. 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 my station.

At 5h 53m. p.m. by my watch which has correct l.m.t.

I observe Polaris at eastern elongation, in accordance with the Manual of Instructions, and mark a point on the line thus determined, on a peg driven in the ground 5 chs N. of my station

October 16, 1912.

October 17, 1912 At 6h. 30m. a.m., l.m.t. I lay off the azimuth of Polaris, 1° 21 1/2' to the W. and mark the meridian thus determined, by cutting a small groove in the stone set October 16, on which the meridian falls. 0.3 ins. E. of the mark determined by the solar.

At 7h. 30m. a.m., l.m.t. I set off 31° 32 1/4' N on the lat. arc, 9° 13 1/2' S. on the decl. arc and mark a point in the meridian determined with the solar by a cross on the

Completion of the Subdivision of Tp. 22 S. R. 16 E.

Chains stone already set 5 chs. N. of my station; this mark falls 0.4 ins. E. of the meridian established by the Polaris observation

The solar apparatus by p.m., and a.m., observations defines positions for meridians, respectively about 0'16''W and 0'21''E of the meridian established by the Polaris observation; therefore I conclude that the adjustments of the instruments are satisfactory

The magnetic bearing, of the true meridian, at 8h.00m.am. is N. 13° 45' W the angle thus determined gives the magnetic decl. 13° 45' E.

I commence at the cor. of secs. 2, 3, 11, and 12, hereinbefore described

Thence I run,
East on sectional correction line, bet. secs. 1 and 12
Ascending thru dense undergrowth

13.20 Wash 15 lks. wide course S
21.50 Old road N. and S. Top of asc., desc. S.E. slope of mt.
24.50 Drain 7 lks. wide, course S.
31.35 Wash 30 lks. wide course S. Bot. of desc., ascend.
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 ¹⁹¹² S1 in N. and S12 in S. half, from which

An oak 14 ins. diam., bears N. 10° E. 86 lks. dist. marked $\frac{1}{4}$ S1BT

No other tree available so raise mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

50.10 Intersect E. bdy. of Tp. at a point from which the old cor. of secs. 1, 6, 7, and 12, which is a sandstone 20x8x6 ^{ins above ground} well set in the ground and properly marked, bears S 34° W. 392 lks. dist. At point of intersection

Set an iron post 3 ft. long 2 ins. diam., 24 ins. in the ground for closing cor. secs. 11 and 12, marked on brass cap, 1912;
CC E. of center
T22S in N. and
S6, S7, R17E in E. half
S1 in N.W. and
S12, R16E in S.W. quadrant; from which

An oak 30 ins. diam., bears S. 56 $\frac{1}{2}$ ° W. 92 lks. dist. marked CCT22SRI6ESI2BT

An oak 12 ins. diam., bears N. 77 $\frac{1}{4}$ ° W. 153 lks. dist., marked CCT22SRI6ESI2BT

Land, rough and mountainous.
Soil, rocky, 4th state.
No Timber.
Undergrowth, oak and mesquite brush

FROM COR. OF SECS. 1, 2, 11 AND 12, HEREINBEFORE DESCRIBED, I RUN
North, on sectional guide meridian, bet. secs. 1 and 2,
Ascending S.W. slope of mt. thru dense undergrowth

19.80 Drain, 10 lks. wide course S.W.
24.00 Drain, 10 lks. wide course S.W.
39.80 Top of ridge, E. and W. descend along N.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 ¹⁹¹² S2 in W. and S1 in E. half; from which

An oak 12 ins. diam., bears S. 69 $\frac{1}{4}$ ° W. 158 lks. dist. marked $\frac{1}{4}$ S2BT

No other tree available therefore raise mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Pits impracticable.

63.20 Wash 40 lks. wide course S. 70° W.
79.00 Wash 60 lks. wide course S. 60° W.
80.10 Intersect N. bdy. of Tp. at a point from which the old cor. of secs. 1, 2, 35, and 36 bears W. 158 lks. dist. This old cor. is a granite stone 18x10x6 ^{ins above ground} properly marked, with bearing trees. I destroy the markings on the the two trees on the S., and at the point where I intersect the N. bdy.

Set an Iron post 3 ft. long 2 ins. diam., 24 ins. in the ground for closing cor. of secs. 1 and 2, marked on brass cap, 1912;
CC S. of center
T21S, S35, S36 in N.
T22S, 12 S. and
R16E. in W. half
S1 in S.E. and
S2 in S.W. quadrant. from which

Completion of the Suddivision of Tn. 22 S. R. 16 E

Chains An oak 12 ins. in diam., bears S.55½° W. 105 lks.
 Dist., marked CCT22SR16ES2BT
 No other tree available therefore raise a mound of stone
 2 ft. base 1½ ft. high S. of cor. Pits impracticable.
 Land, rough and mountainous.
 Soil, rocky, 4th rate.
 No timber.
 Undergrowth, dense mesquite and oak brush.

October 17, 1912.

October 18¹⁹¹² At 7h.30m. a.m. l.m.t., I set off 31° 32½' N. on the lat. arc, 9° 35½' S. on the decl. arc and determine a meridian with the solar at the cor of sec s, 1, 2, 11 and 12 hereinafore described

Thence I run

South on sectional guide meridian, bet. secs. 11 and 12.
 Descending thru dense undergrowth

17.80 Wash, 100 lks. wide, course N.W., ascend
 20.00 Julius Kunde's house bears N.79°06'E
 33.30 Drain 10 lks. wide, course N.E. enter scattering timber.
 38.70 Julius Kunde's house bears N.31°10'E.
 40.00 Set an iron post 3 ft. long 1 in. diam., 26 ins. in the ground for ¼ sec. cor. marked on brass cap S11 on W. and S12 in E. half; from which

An oak 12 ins. diam., bears N.78¼°E. 76 lks. dist., marked S12BT

An oak 10 ins. diam., bears S.82°W. 64 lks. dist., marked S11BT

68.60 Top of ridge, course N.W. and S.E., descend
 78.90 Gulch 15 lks. wide, course N.60°W. bot. of desc., asc.
 80.00 Set an iron post 3 ft. long 2 ins. diam., 24 ins. in the ground for cor. of secs. 11, 12, 13, and 14 marked on brass cap, 1912;

T22SR16E in N. half

S11 in N.W.

S12 in N.E.

S13 in S.E. and

S14 in S.W. quadrant, from which

An oak 10 ins. diam., bears N.58½°E. 56 lks. dist., marked T22SR16ES12BT.

An oak 12 ins. diam., bears S.20¼°E. 125 lks dist., marked T22SR16ES13BT.

An oak 10 ins. diam., bears S.1¼°W. 92 lks. dist marked T22SR16ES14BT

An oak 8 ins. diam., bears N.70¾°W. 68 lks. dist., marked T22SR16ES11BT

Land, rough mountainous

Soil, rocky, 4th rate.

Timber, scattering scrub oak and pinon

Undergrowth, dense oak and mesquite brush.

NOTE: At this cor. I set off 9°41'S. on the decl. arc and observe the sun on the meridian at noon the resulting lat. is 31°31½'N.

South on sectional guide meridian, bet. secs. 13 and 14
 Ascending steep rocky ridge thru dense undergrowth

15.70 Top of high rocky ridge course N.W. and S.E. descend
 23.70 Gulch 25 lks. wide, course N.W. bottom of desc. ascend
 40.00 Set an iron post 3 ft. long 1 in. diam., 26 ins. in the ground for ¼ sec. cor. marked on brass cap S14 on W and S13 in E. half, from which

An oak 6 ins. diam., bears S.55°E. 47 lks. dist marked S13BT

An oak 7 ins. diam., bears N.67½°W. 22 lks. dist., marked S14BT.

October 18, 1912.

October 19¹⁹¹² At 7h.30m. a.m. l.m.t. I set off 31°31'N. on the lat. arc. 9°57'S. on the decl. arc and determine a meridian with the solar at the ¼ sec. cor bet. secs. 13 and 14, above described

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Chains	Thence I run
	Southon sectional guide meridian, bet. sec. 13 and 14, $5\frac{1}{2}$ mile, Ascending
42.50	Top of rocky bluff, begins precipitous descent
43.55	Bottom of precipitous descent, descend steep slope.
80.00	Set an iron post 3 ft. long, 2 ins. diam. 24 ins. in the ground for cor. of secs. 13, 14, 23 and 24, marked on brass cap, 1912; T22SR16E in N. half S13 in N.E. S24 in S.E. S23 in S.W. and S14 in N.W. quadrant, from which An oak 14 ins. diam., bears $N20^{\circ}E$. 110 lks. dist. marked T22SR16ES13BT An oak 8 ins. diam., bears $S42\frac{1}{2}^{\circ}E$. 68 lks. dist., marked T22SR16ES24BT An oak 14 ins. diam., bears $S52\frac{1}{2}^{\circ}W$. 47 lks. dist. marked T22SR16ES23BT An oak 10 ins. diam., bears $N49\frac{3}{4}^{\circ}W$. 132 lks. dist. marked T22SR16ES14BT----- Land, rough mountains. (From this cor. Peter Berger's house bears $S15^{\circ}08'W$.) Soil, rocky, 4th rate. (house bears $S15^{\circ}08'W$.) Timber, scattering oak, pinon and juniper. Undergrowth, dense oak and manzanita brush.
NOTE:	At this cor. I set off $10^{\circ}03'55''$ on the decl. arc and observe the sun on the meridian at noon the resulting lat. is $31^{\circ}30\frac{1}{2}'N$.
	----- Southon sectional guide meridian, bet. secs. 23 and 24 Descending thru dense undergrowth
17.35	Drain 10 lks, wide course S.W., thence along W. slope of mt.
34.35	Drain 10 lks. wide, course S.W.
34.70	Drain 15 lks. wide, course W., bottom of desc. asc. along N.W. slope of mt.
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, 1912 S23 in W. and S24 in E. half, from which An oak 8 ins. diam., bears $S89^{\circ}E$. 29 lks. dist., marked $\frac{1}{4}$ S24BT An oak 6 ins. diam., bears $N75\frac{1}{4}^{\circ}W$. 35 lks. dist., marked $\frac{1}{4}$ S23BT.
45.00	Top of ridge course E. and W. Peter Berger's house bears $S34\frac{1}{2}^{\circ}W$.
55.50	Road in wash 40 lks. wide course E. and W. bottom of desc asc. N.W. slope of mt.
59.15	Fence course E. and W.
70.15	Fence course N.E. and S.W.
76.00	Drain 10 lks. wide course N.W.
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, 1912; T22SR16E in N. half. S23 in N.W, S24 in N.E. S25 in S.E. and S26 in S.W. quadrant, from which An oak 9 ins. diam., bears $N89\frac{1}{2}^{\circ}E$. 52 lks. dist., marked T22SR16ES24BT An oak 12 ins. diam., bears $S4\frac{1}{2}^{\circ}E$ 105 lks. dist., marked T22SR16ES25BT An oak 6 ins. diam., bears $S61\frac{1}{4}^{\circ}W$. 86 lks. dist., marked T22SR16ES26BT An oak 8 ins. diam., bears $N72\frac{1}{2}^{\circ}W$. 51 lks. dist., Marked T22SR16ES23BT Land, rough mountainous Soil, rocky 4th rate. Timber, scattering oak and pinon. Undergrowth, dense oak and manzanita brush.

October 19. 1912.

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Completion of the Subdivision of Tp. 22 S. R. 16 E.

Chains. October 21st At 7h.30m a.m. l.m.t., I set off 31°29½'N. on the lat. arc, 10°40'S. on the decl. arc and determine a meridian with the solar at the cor. of secs., 23, 24, 25 and 26, above described.

Thence I run,
 South, on sectional guide meridian, bet. secs, 25 and 26. Over rough mountainous land, ascending through fairly heavy timber and dense brush.

9.90 Top of ridge, bears N.W. and S.E., descend.
 23.15 Wash, 20 lks. wide, course N.E., ascend steep rocky N.E. slope of mt.
 25.40 Wash, 20 lks. wide, course N.E.
 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 ¹⁹²¹ S26 in W. and S25 in E. half, from which

An oak 6 ins. diam., bears S85°E. 49 lks. dist., marked $\frac{1}{4}$ S25BT
 A pinon 6 ins. diam., bears N76½°W. 32 lks. dist., marked $\frac{1}{4}$ S26BT

43.95 Ridge, bears N.W. and S.E., descend.
 45.00 Drain, 7 lks. wide, course N.E.
 52.00 Descend through low saddle in mts.
 80.00 Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs, 25, 26, 35 and 36, marked on brass cap, 1912;

T22SR16E in N. half;
 S26 in N.W.
 S25 in N.E.
 S36 in S.E. and
 S35 in S.W. quadrant, from which

An oak 8 ins. diam., bears N9½°E. 91 lks. dist., marked T22SR16ES25BT
 An oak 6 ins. diam., bears S64½°E. 82 lks. dist., marked T22SR16ES36BT
 A mesquite 10 ins. diam., bears S8½°W. 276 lks. dist., marked T22SR16ES35BT
 An oak 6 ins. diam., bears N25½°W. 84 lks. dist., marked T22SR16ES26BT

Land, rough mountainous.
 Soil, rocky, 4th rate.
 Timber, Fairly heavy oak and pinon.
 Undergrowth, dense oak and manzanita brush.

(NOTE: ~~See page 22~~ At this cor. I set off 10°46'S. on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°29'N.

South, on sectional guide meridian, bet, secs., 35 and 36. Over rough mountainous land, descending through fairly heavy timber and dense brush.

5.10 Drain 10 lks. wide, course S.W.
 12.00 Drain 10 lks. wide, course N60°W.
 17.60 Drain 15 lks. wide, course N70°W.
 20.00 Drain 20 lks. wide, course N.W., small spring bears S.E. ~~to~~ 1 50 lks. in this drain.
 34.30 Wash 50 lks. wide, course N70°W., ascend steep rocky ridge N.W. and S.E.
 34.77 Road, bears N.W. and S.E.
 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 ¹⁹²¹ S35 in W. and S36 in E; half, from which

An oak 7 ins. diam., bears N88½°E. 30 lks. dist., marked $\frac{1}{4}$ S36BT
 An oak 8 ins. diam., bears S73½°W. 41 lks. dist., marked $\frac{1}{4}$ S35BT

48.50 Ridge, bears E. and W., descend.
 62.50 Drain, 20 lks. wide, course N.E.
 80.00 Set an iron post 3ft. long, 3 ins. diam., 24 ins. in the ground for cor. of secs., 35 and 36, marked on brass cap, 1912;
 T22S in N.
 T23S in S. and
 R16E in W. half;
 S35 in N.W. and
 S36 in N.E. quadrant, from which

Completion of the Subdivision of Tn. 22 S. R. 16 E.

Chains. An oak 14 ins. diam., bears N38°E. 158 lks. dist., marked T22SR16ES36BT
 An oak 16 ins. diam., bears N2°W. 151 lks. dist., marked T22SR16ES35BT

Land, rough mountainous.
 Soil, rocky, 4th rate.
 Timber, fairly heavy oak.
 Undergrowth, dense oak brush.

October 21, 1912.

October 30¹⁹¹² At 7h.30m. a.m. l.m.t., I set off 31°31.4'N. on the lat. arc, 13°45'S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 11, 12, 13 and 14, ~~hereinbefore~~ described,

Thence I run, West, on random line, bet. secs. 11 and 14.

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

80.12 Intersect N. and S. line 2 lks. N. of ^{old} cor. of secs. 10, 11, 14 and 15, which is a porphyry stone 12x8x6 ins. above ground, marked and witnessed as described by the Surveyor General.

Thence I run N89°59'E. on true line bet. secs. 11 and 14. Over mountainous land, ascending through scattering timber and dense brush.

0.94 Ridge, bears N.E. and S.W., descend.

5.57 Drain 10 lks. wide, course N.E., ascend.

21.30 Ridge, bears N. and S., descend.

40.06 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 ¹⁹¹² S11 in N. and S14 in S. half, no trees available, therefore raise mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.

42.60 Wash, 20 lks. wide, course N., ascend,

46.20 Wash 15 lks. wide, course N.

80.12 The cor. of secs. 11, 12, 13 and 14, ~~hereinbefore~~ described

Land, rough mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering oak.
 Undergrowth, dense oak brush.

NOTE: ~~Set off 31°31.4'N. on the lat. arc~~ At this cor. I set off 13°50 $\frac{1}{2}$ 'S. on the decl. arc and observe the sub. on the meridian at noon; the resulting latitude is 31°31 $\frac{1}{2}$ 'N.

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Chains East, on true line, bet. secs. 12 and 13
Ascending through dense undergrowth and scattering timber

24.50 Top of high rocky point, descend

33.50 Drain, 7 lks. wide, course N. Enter moderately heavy timber bears N. and S. Bottom of desc. asc. along N. slope of mt.

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 ¹⁹¹² S12 in N. and S13 in S half, from which
An oak 10 ins. diam., bears S69 $\frac{1}{2}$ °E 26 lks. dist., marked $\frac{1}{4}$ S13BT
An oak 12 ins. diam., bears N54°W 11 lks. dist., marked $\frac{1}{4}$ S12BT

49.75 Intersect E. bdy. of Tp. at a point from which the cor. of secs. 7 and 18 ^{22 S. R. 16 E.} bears S0°11'W 454 lks. dist. At pt. of intersection Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for the closing cor. of secs. 12 and 13, marked on brass cap, 1912;
CC east of center
T22S in N. and S⁷, S18. R17E in E half
S12 in N.W. and S13, R16E in S.W. quadrant, from which
An oak 6 ins. diam., bears S57 $\frac{1}{4}$ °W 35 lks. dist., marked CCT22SR16ES13BT
An oak 14 ins. diam., bears N58°W 19 lks. dist., marked CCT22SR16ES13BT
Land, rough mountainous.
Soil, rocky, 4th rate.
Timber, scattering 24.50 chs. moderately heavy 25.25 chs. oak and pinon.
Undergrowth, dense oak and manzanita brush.
October 30, 1913.

October 31¹⁹¹² At 7h.30m. a.m., l.m.t., I set off 31°30 $\frac{1}{2}$ 'N on the lat. arc, 14°04'S¹ on the decl. arc and determine a meridian with the solar at the cor. of secs. 13, 14, 23 and 24, ~~hereinbefore described~~.

Thence I run
S89°59'W., on a random line, bet. secs. 14 and 23.

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

30.20 Fall 12 lks. S. of ¹⁹¹² cor. of secs. 14, 15, 22 and 23, which is a granite stone 6x6x6 ins. above ground marked and witnessed as described by the Surveyor General.
Thence I run
S89°56'E on a true line bet. secs. 14 and 23
Ascending gentle slope through scattering timber

8.77 Fence bears N.W. and S.E.

10.12 Fence, bears N.W. and S.E. Enter dense undergrowth and heavy timber N. and S.

22.90 Top of ridge, bears N. and S. From this point Ed. Farlin's house bears N. 3 chs. Descend

30.88 Road, bears N. and S.

32.10 Wash 30 lks. wide, contains stream of running water 5 ins, wide, 2 ins. deep, course N.W. Bottom of desc. ascend

32.22 Ditch, 5 lks. wide, course N.W.

40.10 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 ¹⁹¹² S14 in N. and S23 in S. half; from which
An oak 14 ins. diam., bears N72°E 365 lks. dist marked $\frac{1}{4}$ S14BT
An oak 12 ins. diam., bears S61 $\frac{1}{4}$ °W. 150 lks. dist., marked $\frac{1}{4}$ S23BT

40.57 Fence, bears N.E. and S.W.

49.90 Drain, 10 lks. wide, course S.W.

66.20 Drain, 7 lks. wide, course S.W.

80.20 The cor. of secs. 13, 14, 23 and 24, hereinbefore described
Land, rough mountainous
Soil, rocky, 4th rate.
Timber, scattering, 10.00 chs. heavy, 70.00 chs. oak
Undergrowth, dense oak, mesquite and manzanita brush.

NOTE:

At this cor. I set off 14°10'S¹ on the decl. arc and observe the sun on the meridian at noon the resulting lat. is 31°30 $\frac{1}{2}$ 'N.

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Chains East on true line, bet. secs. 13 and 24
Ascending through dense undergrowth and heavy timber.
18.50 Top of high rocky ridge, bears N.W. and S.E. desc.
38.40 Wash, 15 lks. wide, course S. Bottom of desc. Asc.
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 ¹⁹¹² S13 in N.
and S24 in S. half, from which
An oak 6 ins. diam., bears N76 $\frac{3}{4}$ °E 41 lks. dist.,
marked $\frac{1}{4}$ S13BT
An oak 8 ins. diam., bears S0°10'W 205 lks. dist.,
marked $\frac{1}{4}$ S24BT.
49.60 Intersect E bdy. of Tp. at a point from which the cor. of
secs. 18 and 19 ^{225-247E} bears S0°01'W 513 lks. dist. *At pt. of intersection*
Set an iron post 3 ft. long 2 ins. diam., 24 ins. in the
ground for closing cor. of secs. 13 and 24 marked on
brass cap, 1912;
CC E. of center
T22S in N. and
S18, S19, R17E in E. half
S13 in N.W. and
S24, R16E in S.W. quadrant, from which
A juniper 7 ins. diam., bears S21 $\frac{1}{4}$ °W 54 lks. dist.,
marked CCT22SR16ES24BT
A pinon 6 ins. diam., bears N.60°W 40 lks. dist.,
marked CCT22SR16ES13BT
Land, rough mountainous
Soil, rocky, 4th rate.
Timber, oak, juniper and pinon.
Undergrowth, dense oak and manzanita brush.

October 31, 1912.

November 1¹⁹¹² At 7h.30m. a.m. l.m.t. I set off 31°29 $\frac{1}{2}$ 'N.
on the lat. arc, 14°23' S. on the decl. arc and determine
a meridian with the solar at the cor. of secs. 23, 24, 25
and 26 **hereinbefore described**

Thence I run
East on a true line, bet. secs. 24 and 25
Ascending through dense undergrowth and heavy timber.
8.00 Drain 7 lks. wide, course N.W.
20.00 Drain 7 lks. wide, course S.W.
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 ¹⁹¹² S24 in N.
and S25 in S. half, from which
An oak 10 ins. diam., bears S29 $\frac{1}{4}$ °W 12 lks. dist.
marked $\frac{1}{4}$ S25BT
An oak 8 ins. diam., bears N15 $\frac{1}{2}$ °W 29 lks. dist.,
marked $\frac{1}{4}$ S24BT.
49.72 Intersect E bdy. of Tp. at a point from which the cor.
of secs. 19 and 30 ^{225-R17E} bears S0°05'E 599 lks. dist. *At pt. of intersection*
Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the
ground for the closing cor. of secs. 24 and 25 marked on
brass cap, 1912;
CC E. of center
T22S in N and
S19, S20, R17E in E. half;
S24 in N.W. and
S25, R16E in S.W. quadrant, from which
An oak 7 ins. diam., bears S48 $\frac{3}{4}$ °W 39 lks. dist.,
marked CCT22SR16ES25BT
An oak 10 ins. diam., bears N26 $\frac{1}{2}$ °W 28 lks. dist.,
marked CCT22SR16ES24BT
Land, rough mountainous
Soil, rocky, 4th rate.
Timber, heavy oak, pinon and juniper.

NOTE: At the cor. of secs. 23, 24, 25 and 26 I set
off 14°29' S. on the decl. arc and observe the sun on the
meridian at noon, the resulting latitude is 31°29 $\frac{1}{2}$ 'N.
N89°56'W, on random line, bet. secs. 23 and 26

40.00 Set temp. $\frac{1}{4}$ sec/ cor.
30.26 Fall 11 lks. S. of the cor. of secs. 22, 23, 26 and 27,
which is a granite stone 8x8x6 ins. above ground, marked

BOOK 2654

Completion of Subdivision of Tp. 22 S. R. 16 E.

Chains	and witnessed as described by the Surveyor General. Thence I run
15.56	S89°51'E on a true line bet. secs. 23 and 26 Ascending through dense brush and heavy timber
25.76	Drain 10 lks. wide, course S.E.
37.90	Drain 10 lks wide, course S.E.
40.13	Top of ridge, bears N. and S. descend. 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 $\frac{1921}{1}$ S23 in N. and S26 in S. half, from which An oak 12 ins. diam., bears S11 $\frac{1}{4}$ °E 117 lks. dist., marked $\frac{1}{4}$ S26BT An oak 14 ins. diam., bears N3 $\frac{1}{4}$ °W 88 lks. dist., marked $\frac{1}{4}$ S23BT
47.06	Road, bears N.E. and S.W.
47.86	Wash 100 lks. wide, course N.E. Bottom of desc. ascend.
60.00	Wash, 30 lks. wide, course N.W.
62.42	Fence, bears N.W. and S.E.
78.84	Fence, bears N.E. and S.W.
80.26	The cor. of secs. 23, 24, 25 and 26. hereinbefore described Land, rough mountainous. Soil, rocky, 4th rate. Timber, heavy oak Undergrowth, oak, and manzanita brush. November 1, 1912.
	----- November 2 ¹⁹¹² At 7h30m a.m. l.m.t., I set off 31°29' N. on the lat. arc, 14°42'S on the decl. arc and determine a meridian with the star at the cor. of secs. 25, 26, 35 and 36, hereinbefore described. Thence I run East on true line, bet. secs 25 and 36. Ascending through dense undergrowth and heavy timber.
21.10	Top of spur, thence along S. slope of mt.
23.25	Drain, 16 lks. wide, course S.W. Leave heavy timber N.&S.
28.80	Drain 7 lks, wide, course S.W.
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 $\frac{1921}{1}$ S25 in N and S36 in S. half, and raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high N. of cor. Pits, impracticable. No trees available.
49.71	Intersect E bdy. of Tp. at a point from which the cor. of secs 30 and 31 bears S0°09'E 665 lks. dist., <small>At pt. of intersection</small> Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for the closing cor. of secs. 25 and 36 marked on brass cap, $\frac{1912}{1}$ CC, E. of center T22S in N. and S30, S31, R17E in E half; S25 in N.W. S36, R16E in S.W. quadrant, No trees available, therefore raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of cor. Land, rough mountainous Soil, rocky, 4th rate. Timber, oak,; heavy 23.00 chs., scattering 26.00 chs. Undergrowth, dense oak and manzanita brush.
	----- NOTE: At the ^{old} cor. of secs. 22, 23, 26 and 27, herebefore ^{previously} described, I set off 14°48 $\frac{1}{2}$ ' S. on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°29 $\frac{1}{2}$ ' N. S0°1'E, bet. secs. 26 and 27. Ascending through dense undergrowth and heavy timber.
5.40	Ridge, bears E. and W. desc.
21.90	Drain 7 lks. wide, course S.W.
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 $\frac{1921}{1}$ S27 in W. and S28 in E. half, from which An oak 10 ins. diam., bears N2 $\frac{1}{4}$ °E 236 lks. dist., marked $\frac{1}{4}$ S26BT An oak 14 ins. diam., bears N10 $\frac{1}{2}$ °W 188 lks. dist., marked $\frac{1}{4}$ S27BT.

Completion of the ~~Claim~~ Subdivision of Tn. 22 S. R. 16 E.

63.31 Descend steep rocky bluff 150 ft. high wash.
 66.70 Road, bears E. and W. Leave heavy timber E and W.
 69.00 Wash, 50 lks. wide, course N.E., ascend.
 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, 1912;
 T22SR16E in N. half;
 S27 in N.W.
 S26 in N.E.
 S35 in S.E. and
 S34 in S.W. quadrant, from which
 An oak 5 ins. diam., bears N15½°E 161 lks. dist., marked T22SR16ES26BT
 An oak 9 ins. diam., bears S9¼°E 117 lks. dist., marked T22SR16ES35BT
 An oak 12 ins. diam., bears S25½°W 71 lks. dist., marked T22SR16ES34BT
 An oak 5 ins. diam., bears N12¼°W 162 lks. dist., marked T22SR16ES27BT.
 Land, rough mountainous.
 Soil, rocky, 4th rate.
 Timber, heavy oak, 66.00 chs. scattering, 14.00 chs.
 Undergrowth, oak and manzanita brush.

S89°51'E on random line bet. secs. 26 and 35.
 40.00 Set temp. ¼ sec. cor. (hereinbefore described)
 80.16 Fall 7 lks. S of cor. of secs. 25, 26, 35 and 36;
 Thence I run
 N89°54'W on a true line bet. secs. 26 and 35.
 Descending, through dense undergrowth and moderately heavy timber
 38.40 Drain, 20 lks. wide, course S.W., Timber becomes scattering.
 37.86 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for witness ^{corner to} ¼ sec. cor., marked on brass cap ¹⁹¹² ^{WC} in E half; S26 in NW, and S35 in SW quadrant.
 No trees available, therefore raise mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
 40.08 Point for ¼ sec. cor. falls in Wash 100 lks. wide, course N.W. Bottom of desc., ascend.
 44.41 Road, bears N.W. and S.E.
 49.06 Top of ridge, bears N. and S., descend steep rocky bluff
 57.76 Wash, 15 lks. wide, course N.E. Bottom of desc., Asc.
 62.00 Ridge, bears N.W. and S.E., desc.
 71.86 Wash, 10 lks. wide, course N.E., bottom of desc., asc.
 80.16 The cor. of secs. 26, 27, 34 and 35. (hereinbefore described)
 Land, rough mountainous.
 Soil, rocky, 4th rate.
 Timber, moderately heavy oak 30.00 chs. scattering, 50.00 chs.
 Undergrowth, dense oak and manzanita brush.
 November 2, 1912.

November 4, 1912
 At 7h.30m a.m. l.m.t., I set off 31°29'N on the lat. arc, 15°19½'S on the decl. arc and determine a meridian with the solar at the cor. of secs. 26, 27, 34 and 35, (hereinbefore described)
 Thence I run
 South, on random line bet. secs. 34 and 35
 40.00 Set temp. ¼ sec. cor. on S. bdy. of Tp. recently estab.
 79.86 Fall 2 lks. W. of cor. of secs. 34 and 35, by me as described in Book 'C'
 Thence I run
 N0°1'W. bet. secs. 34 and 35, on true line,
 Ascending through dense undergrowth and scattering timber
 2.06 Ridge, bears N.E. and S.W., desc.
 27.86 Wash, 20 lks. wide, course N.E., bottom of desc., asc.
 39.86 Set an iron post 3 ft. long, 2 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¹⁹¹² S34 in W. and S35 in E. half, from which
 An oak 8 ins. diam., bears N36°E 94 lks. dist., marked ¼ S35BT
 An oak 7 ins. diam., bears S58½°W 92 lks. dist., marked ¼ S34BT

Completion of Subdivision of Tp. 22 S. R. 16 E.

Chains From this $\frac{1}{4}$ sec. cor. U.S. Mineral Monument No 2 bears
 N61°30'W 9.24 chs. dist.
 47.36 Ridge, bears N.E. and S.W., desc.
 66.26 Drain, 7 lks. wide, course N.E.
 79.86 The cor. of secs. 26, 27, 34 and 35. ~~hereinafore~~ described
 Land, rough mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering oak.
 Undergrowth, dense oak and mahzanita brush.

NOTE: ~~At the~~ At the ^{old} cor. of secs. 21, 22, 27 and 28, which
 is a granite ~~10x6x6~~ 10x6x6 ins. above ground, marked and
 witnessed as described by the Surveyor General, I set
 off 15°26' on the decl. arc and observe the sun on
 the meridian at noon; the resulting latitude is 31°29' $\frac{1}{2}$ N
 S0°01'E, on a true line, bet. secs. 27 and 28
 Descending through dense undergrowth and heavy timber.

6.70 Wash, 15 lks. wide, course N.E. bottom of desc., asc.
 13.75 Ridge, bears E. and W., top of asc., desc.
 30.00 Wash, 30 lks. wide, course N.E.
 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 ¹⁹²¹ S28 in W
 and S27 in E. half., from which
 An oak 10 ins. diam., bears N11 $\frac{1}{2}$ °E 20 $\frac{1}{2}$ lks. dist
 marked $\frac{1}{4}$ S27BT
 A mesquite 5 ins. diam., bears S62 $\frac{1}{2}$ °W 62 lks.
 dist., marked $\frac{1}{4}$ S28BT

44.00 Wooden shack bears W. 50 lks. dist.
 44.95 Road, bears N.E. and S.W.
 47.55 Wash, 45 lks. wide, course N.E.
 53.95 Same wash, 45 lks. wide, from S.E., course N.W.
 60.00 Same wash, 40 lks. wide, from S.W., course N.E.
 77.80 Same wash, 45 lks. wide, from S.E., course N.W.
 79.80 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in
 the ground for witness cor. ¹⁹¹² of secs. 27, 28, 33 and 34
 marked on brass cap, 1912;
 WC, S, of center 1/4;
 T22SR16E. in N. half;
 S28 in N.E.
 S27 in N.E. and
 S34 in S.E. and
 S33 in S.W. quadrant, from which
 An oak 28 ins. diam., bears N89 $\frac{1}{2}$ °E 50 lks. dist
 marked WCT22SR16ES27BT
 An oak 9 ins. diam., bears S31 $\frac{1}{4}$ °E 133 lks. dist.,
 marked WCT22SR16ES24BT
 An oak 12 ins. diam., bears S34°W 197 lks. dist.,
 marked WCT22SR16ES33BT
 An oak 24 ins. diam., bears N66 $\frac{1}{4}$ °W 104 lks. dist.,
 marked WCT22SR16ES28BT

80.00 The point for cor. of secs. 27, 28, 33, and 34 falls in
 same wash noted above, 50 lks. wide, from the S.W.
 course N.E.
 Land, rough mountainous
 Soil, rocky, 4th rate.
 Timber, heavy oak, pine, pinon and juniper.
 Undergrowth, oak and manzanita brush.

East, on random line bet. secs. 27 and 34 from true pt. for cor.
 40.00 Set temp. $\frac{1}{4}$ sec. cor. ~~hereinafore~~ described
 80.12 Fall 2 lks. N. of cor. of secs. 26, 27, 34 and 35.
 Thence I run

N89°59'W on a true line bet. secs. 27 and 34
 Ascending through dense brush and heavy timber
 11.02 Ridge, bears N. and S., desc.
 21.75 Intersect East bdy. of Alta millsite at a point from
 which cor. No1 bears S19°30'W 416 lks. dist. desc., asc.
 21.78 Road, bears N.E. and S.W.
 25.64 Wash, 25 lks. wide, course N.E., bottom of desc., asc.
 25.92 Fence, bears N.E. and S.W.
 27.05 Intersect West bdy. of Alta Millsite at a point from
 which COR. No4 bears S19°30'W 239 lks. dist.
 27.26 Fence, bears N.E. and S.W.
 29.56 Drain, 10 lks. wide, course N.E.

Completion of the Subdivision of Tn. 22 S. R. 16 E.

- 35.12 Same drain, 10 lks, wide, from N.W. course S.E.
40.06 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 ¹⁹¹² S27 in N. and S34 in S half, from which
An oak 10 ins. diam., bears S16 $\frac{1}{2}$ °W 87 lks. dist., marked $\frac{1}{4}$ S34BT
A mesquite 6 ins. diam., bears N43°W 91 lks. dist., marked $\frac{1}{4}$ S27BT
- 56.82 Ridge, bears N. and S., desc.
68.62 Drain, 10 lks. wide, course N.W.
71.12 Fence, bears N.W. and S.E.
79.62 Enter wash 50 lks. wide, course N.E.
80.12 The point for cor. of secs. 27, 28, 33 and 34, in wash.
Land, rough mountainous
Soil, rocky, 4th rate
Timber, heavy oak, juniper and pinon.
Undergrowth, dense oak, manzanita and mesquite brush
November 4, 1912.
- November 6, ¹⁹¹² At 7h.30m a.m. l.m.t., I set off 31°29' N. on the lat. arc, 16°31 $\frac{1}{2}$ ' S. on the decl. arc and determine a meridian with the solar at the ^{point for} cor. of secs. 27, 28, 33 and 34.
Thence I run
South, on random line bet. secs. 33 and 34
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.94 Fall 7 lks. E. of cor. of secs 33 and 34, ^{on S. bdy. of Tp. recently estab.} by me as described in Book "C"
Thence I run
N.0°03'E, on true line, bet. secs. 33 and 34
Ascending through dense undergrowth and heavy timber
28.74 Ridge, bears N.W. and S.E., From this ridge Mill bears S12°10'E., desc.
39.94 Point for $\frac{1}{4}$ sec. cor. falls in wash 15 lks. wide, course N.W., bottom of desc., asc.
40.14 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for witness ^{for} $\frac{1}{4}$ sec. cor., marked on brass cap ¹⁹¹² S27 in N. half; S34 in S. half and S33 in S.W. quadrant, from which
An oak 12 ins. diam., bears S23 $\frac{1}{2}$ °E. 132 lks. dist. marked $\frac{1}{4}$ S34BT
An oak 14 ins. diam., bears S85 $\frac{1}{2}$ °W 9 lks. dist., marked $\frac{1}{4}$ S33BT.
79.94 The point for cor. of secs. 27, 28, 33 and 34, in wash.
Land, rough mountainous.
Soil, rocky, 4th rate.
Timber, heavy oak.
Undergrowth, dense oak and manzanita brush.
November 8, 1912.
- November 5, ¹⁹¹² At 7h.30m a.m. l.m.t., I set off 31°31 $\frac{1}{2}$ ' N. on the lat. arc, 15°38' S. on the decl. arc and determine a meridian with the solar at the ^{old} cor. of secs. 8, 9 16 and 17 which is ^{major points} 16x10x6 ins. above ground marked and witnessed as described by the Surveyor General
Thence I run
S0°2'E. bet. secs. 16 and 17
Ascending steep rocky ridge through dense undergrowth and heavy timber.
19.30 Top of high round rocky butte, asc. along N.E. slope of rocky ridge.
33.50 Drain 10 lks. wide, course N.E.
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 ¹⁹¹² S17 in W and S16 in E. half; from which
A pinon 7 ins. diam., bears N5 $\frac{1}{2}$ °E 19 lks. dist., marked $\frac{1}{4}$ S16BT
A juniper 9 ins. diam., bears S64 $\frac{1}{2}$ °W 35 lks. dist., marked $\frac{1}{4}$ S17BT.
41.60 Ridge, bears N.E. and S.W. descend S.E. slope.
47.30 Drain, 7 lks. wide, course E. ascend rocky N. slope of Red Mt. Timber becomes scattering W.
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

Completion of the subdivision of Tp. 22 S. R. 16 E.

Chains brass cap, 1912;
T22SR16E in N. half;
S17 in N.W.
S16 in N.E.
S21 in S.E. and
S20 in S.W. quadrant
No tree available therefore raise a mound of stone 2 ft. base $\frac{1}{2}$ ft. high W. of cor.
Land, rough mountainous
Soil, rocky, 4th rate.
Timber, heavy oak, juniper and pinon 48.00 chs. scattering 32.00 chs.
Undergrowth, dense oak and manzanita brush.

NOTE: At this cor. I set off 15°44.3'S on the decl. arc and observe the sun on the meridian at noon the resulting latitude is 31°30½'N.

East on random line bet. secs. 16 and 21
40.00 Set temp. $\frac{1}{4}$ sec. cor.
79.92 Fall 7 lks. S. of cor. of secs. 15, 16, 21 and 22 which is a tufa stone 10x8x6 ins. above ground, marked and witnessed as described by the Surveyor General
Thence I run
S89°57'W, on true line, bet. secs. 16 and 21
Descending through dense undergrowth and scattering timber
3.30 Wash, 15 lks. wide, course N.W. ascend.
39.80 Drain, 10 lks. wide, course N.E.
39.96 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 $\frac{1912}{1}$ S16 in N. and S21 in S half, from which
An oak 6 ins. diam., bears N77°E 26 lks. dist.,
A-marked $\frac{1}{4}$ S16BT
A pine 7 ins. diam., bears S2°W 22 lks. dist.,
Marked $\frac{1}{4}$ S21BT

48.00 Ridge, bears N.W. and S.E. desc.
61.50 Drain, 10 lks. wide, course N.E. ascend.
79.92 The cor. of secs. 16, 17, 20 and 21. hereinbefore described
Land, rough mountainous.
Soil, rocky, 4th rate.
Timber, scattering oak and pinon.
Undergrowth, dense oak and manzanita brush.
November 5, 1912.

November 6, 1912 at 7h.30m a.m. l.m.t., I set off 31°30½'N on the lat. arc, 15°56'S on the decl. arc and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21, hereinbefore described
Thence I run
S0°02'E, bet. secs. 20 and 21
Ascending North slope of Red Mt. through dense undergrowth and scattering timber.
28.90 Drain, 10 lks. wide, course N.E.
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 $\frac{1912}{1}$ S20 on W. and S21 on E half
No trees available, therefore raise a mound of stone 2 ft. base $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable
42.50 Top of ascent, summit of Red Mt., bears about 5.00 chs. West., descend S.E. slope of Mt. Enter heavy timber. E&W
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, 1912;
T22SR16E in N. half;
S20 in N.W.
S21 in N.E.
S28 in S.E. and
S29 in S.W. quadrant, from which
An oak 8 ins. diam., bears N21½°E 70 lks. dist., marked T22SR16ES21BT
An oak 6 ins. diam., bears S4½°E. 45 lks. dist., marked T22SR16ES28BT
A pinon 10 ins. diam., bears S41½°W 109 lks. dist., marked T22SR16ES29BT
An oak 3 ins. diam., bears N12½°W 51 lks. dist., marked T22SR16ES20BT

Completion of Subdivision of Tr. 22 S. R. 16 E.

Chains Land, rough mountainous.
 Soil, rocky, 4th rate
 Timber, scattering oak and pinon 42.50 chs., heavy 37,50chs.
 Undergrowth, dense oak and manzanita.
 Note: At this cor. I set off 16°02' S on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°29½' N.

 N89°57'E on random line bet. secs. 21 and 28
 40.00 Set temp. at sec. cor.
 79.86 ~~Intersect N+S line~~ ^{2 lks. old} of cor. of secs. 21, 22, 27 and 28, which is a granite stone, marked and witnessed as described by S89°58'W ^{Thence I run} on a true line bet. secs. 21 and 28.
 Ascending along S.E. slope of Red MT. through dense undergrowth and heavy timber,
 21.00 Drain, 10 lks. wide, course S.E.,
 39.93 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for ¼ sec. cor., marked on brass cap ¹⁹¹² S21 in N. and S28 in S half, from which
 An oak 18 ins. diam., bears N24°E 88 lks. dist., marked S21BT
 An oak 8 ins. diam., bears S23½°W 83 lks. dist., marked S28BT
 58.00 Ridge, bears N. and S. descend.
 67.75 Drain 10 lks. wide, course S.W.
 79.60 Drain 10 lks. wide, course S.E.
 79.86 The cor. of secs. 20, 21, 28 and 29. hereinbefore described
 Land, rough mountainous.
 Soil, rocky, 4th rate.
 Timber, heavy oak, pinon and juniper
 Undergrowth, dense oak and manzanita brush.

Surveyor General

November 6, 1912.

1912,

November 7: At 7h.30m. a.m. l.m.t., I set off 31°29½' N. on the lat. arc, 16°14' S on the decl. arc and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29, hereinbefore described

Thence I run

S0°02'E bet. secs. 28 and 29.
 Descending through dense undergrowth and heavy timber.

18.80 Drain, 10 lks. wide, course S.E.,
 17.20 Drain, 10 lks. wide, course S.E.,
 39.80 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the ground for witness ^{cor. to} ¼ sec. cor., marked on brass cap ¹⁹¹² WC1 in N. half; S28 in S.E. and S29 in S.W. quadrant, from which

An oak 12 ins. diam., bears S22½°E 68 lks. dist., marked WC1S28BT

An oak 10 ins. diam., bears S39°W 109 lks. dist., marked WC1S29BT

40.00 Point for ¼ sec. cor. falls in wash 20 lks. wide, course S.E., bottom of desc., asc.

76.50 Ridge, bears N.W. and S.E., (Timber becomes scattering, descend.

80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 28, 29, 32 and 33, marked on brass cap, 1912;

T22SR16E in N. half;

S29 in N.W.

S28 in N.E.

S33 in S.E. and

S32 in S.W. quadrant, from which

An oak 10 ins. diam., bears N32°E 45 lks. dist., marked T22SR16ES28BT

An juniper 10 ins. diam., bears S66½°E. 42 lks. dist., marked T22SR16ES33BT

No other trees available therefore I raise a mound of stone 3 ft. base 1½ ft. high, W. of cor.

Land, rough mountainous

Soil, rocky, 4th rate

Timber, heavy oak, pinon and juniper, 76.50 chs., scattering 3.50 chs.

Note: At this cor. I set off 16°20'S on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°29' N.

BOOK 2654

Completion of the subdivision of Tp. 23 S. R. 16 E.

Chains
 40.00 N89°58'E on random line bet. secs. 28 and 33
 Set temp. $\frac{1}{4}$ sec. cor.
 79.96 Intersect N. and S. lines. 40 lks. N. of ^{true point for} cor. of sec. 27, 28
 23 and 34, in wash
 Thence I run
 West, on true line, bet. secs 28 and 33
 Ascending through dense undergrowth and heavy timber.
 3.25 Leave wash, 50 lks. wide, course S70°E.
 34.22 Top of ascent: Adobe house brs. N.74°23'W. Adobe house with tin roof brs. N.70°24'W.
 35.00 Road brs. NE and SW. ^{descend.}
 39.40 Set an iron post 3 ft. long, 1 in. diam., 26 ins. in the
 ground for witness ^{cor. to} $\frac{1}{4}$ sec. cor., marked on brass cap ¹⁹¹² WC¹
 in E. half; S28 in N.W. and S33 in S.W. quadrant, from
 which
 An oak 13 ins. diam., bears N32 $\frac{1}{2}$ °E 58 lks. dist.,
 marked WC¹S28BT
 An oak 10 ins. diam., bears S81 $\frac{1}{2}$ °E 71 lks. dist.,
 marked WC¹S33BT
 From this cor.
 Adobe house bears N57°10'W
 House with tin roof, bears N37°24'W.
 39.98 Point for cor. falls in wash 30 lks. wide, course S.E.
 ascend., Timber becomes scattering
 41.00 Road, bears N.W. and S.E.
 52.20 Drain, 7 lks. wide, course S.E.
 79.96 The cor. of secs. 28, 29, 32 and 33, heretofore described
 Land, rough mountainous.
 Soil, rocky, 4th rate
 Timber, heavy oak, pinon and juniper 40.00 chs. scatter-
 ing 40.00 chs.
 Undergrowth, dense oak and manzanita brush.
 November 7, 1912.

 November 8¹⁹¹² At the cor. of secs. 28, 29, 32 and 33, I set
 off 16°37 $\frac{1}{2}$ 'S on the decl. arc and observe the sun on
 the meridian at noon; the resulting latitude is 31°29'N.
 South, on random line, bet. secs. 32 and 33

40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.80 Intersect S. bdy. of Tp. 7 lks. W. of cor. of secs. 32
 and 33, recently estab. by me as described in Book "C";
 Thence I run
 N0°03'W, on true line, bet. secs. 32 and 33
 Ascending through dense undergrowth and scattering timber
 37.30 Ridge, bears N.W. and S.E., descend.
 39.80 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 ¹⁹¹² S32 in W.
 and S33 in E. half; from which
 An oak 8 ins. diam., bears S31 $\frac{1}{2}$ °E 42 lks.
 dist., marked $\frac{1}{4}$ S33BT
 An oak 14 ins. diam., bears S63°W 69 lks.
 dist., marked $\frac{1}{4}$ S32BT
 51.06 Drain, 16 lks. wide, course N.E.
 67.30 Same drain 15 lks. wide, from S.E. course N.W., bottom
 of desc., ascend.
 79.80 The cor. of secs. 28, 29, 32 and 33 heretofore described
 Land, rough mountainous.
 Soil, rocky, 4th rate
 Timber, scattering oak, pinon and juniper.
 Undergrowth, dense oak and manzanita brush.
 November 8, 1912.

 November 9¹⁹¹² At 7h.30m a.m. l.m.t. I set off 31°31 $\frac{1}{2}$ 'N.
 on the lat. arc, 10°49'S on the decl. arc and determine
 a meridian with the solar at the ^{old} cor. of secs. 7, 8, 17 and
 18, which is a granite stone 10x8x6 ins. above ground
 marked and witnessed as described by the Surveyor
 General.

Thence I run
 S0°02'E bet. secs. 17 and 18
 Ascending through dense undergrowth and heavy timber.
 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 ¹⁹¹² S18 in W
 and S17 in E. half, from which
 An oak 13 ins. diam., bears N64 $\frac{1}{4}$ °E 32 lks.

Completion of the Subdivision of Tn. 22 S. R. 16 E

Chains	marked $\frac{1}{4}$ S17BT An oak 7 ins. diam., bears N55 $\frac{1}{2}$ °W 38 lks. dist., marked $\frac{1}{4}$ S18BT.
44.60	Ridge, bears N.W. and S.E. desc.
80.00	Set an iron post 3 ft. long, 3 ins. diam., 34 ins. in the ground for cor. of secs. 17, 18, 19 and 20, marked on brass cap, 1912; T32SR16E in N. half; S18 in N.W. S17 in N.E. S20 in S.E. and S19 in S.W. quadrant, from which An oak 10 ins. diam., bears N10 $\frac{1}{2}$ °E 39 lks. dist., marked T32SR16ES17BT An oak 10 ins. diam., bears S46 $\frac{1}{2}$ °E 102 lks. dist., marked T32SR16ES20BT An oak 6 ins. diam., bears S58 $\frac{1}{2}$ °W 55 lks. dist., marked T32SR16ES19BT An oak 6 ins. diam., bears N37 $\frac{1}{2}$ °W 60 lks. dist., marked T32SR16ES18BT
	Land, rough mountainous. Soil, rocky, 4th rate Timber, heavy oak. Undergrowth, dense oak and manzanita brush. Note: At this cor. I set off 16°55'S on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°30 $\frac{1}{2}$ 'N.
	----- East, on random line, bet. secs. 17 and 20
40.00	Set temp $\frac{1}{4}$ sec. cor.
80.10	Intersect N. and S. line 7 lks. S. of cor. of secs. 16, 17, 20 and 21 hereinbefore described Thence I run S29°57'W on true line bet. secs. 17 and 20
11.60	Ascending through dense undergrowth and scattering timber Ridge, bears N.W. and S.E., enter heavy timber bears N. and and S.
30.10	Drain, 10 lks. wide, course N30°W.
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 ¹⁹²¹ $\frac{1}{4}$ S17 in N. and S20 in S. half, from which A pine 7 ins. diam., bears S30 $\frac{1}{2}$ °W 32 lks. dist., marked $\frac{1}{4}$ S20BT A pine 7 ins. diam., bears N70°W 34 lks. dist., marked $\frac{1}{4}$ S17BT
52.60	Canyon 15 lks. wide, course N. bottom of desc., ascend.
65.70	Ridge, bears N.W. and S.E., descend.
80.10	The cor. of secs. 17, 18, 19 and 20. hereinbefore described Land, rough mountainous. Soil, rocky, 4th rate. Timber, scattering oak, pine, pinon and juniper, 12.00 chs., heavy 68.00 chs. Undergrowth, dense oak and manzanita brush. November 9, 1913.
	----- November 11 ¹⁹¹² At 7h.30m a.m. l.m.t., I set off 31°30 $\frac{1}{2}$ 'N on the lat. arc, 17°22'18" on the decl. arc and determine a meridian at the cor. of secs. 17, 18, 19 and 20. hereinbefore described Thence I run West, on random line, bet. secs. 18 and 19
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.30	Intersect W. bdy. of Tp. 5 lks. N0°3'W of cor. of secs. 18, 18, 19 and 24, which is a sandstone 14x8x7 ins. above ground, marked & witnessed as described by the Surveyor General, Thence I run, N29°58'E, on true line bet. secs. 18 and 19.
3.00	Descending through dense undergrowth and scattering timber Drain, 10 lks. wide, course N.W.
13.22	Same drain, 10 lks. wide, from N.E. course S.W., ascend.
25.30	Ridge, bears N.E. and S.W., descend.
30.10	Drain, 7 lks. wide, course S.W., ascend.
39.30	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 ¹⁹²¹ $\frac{1}{4}$ S18 in N. and S19 in S. half, from which An oak 14 ins. diam., bears N24 $\frac{1}{2}$ °E 93 lks. dist. marked $\frac{1}{4}$ S18BT.

Completion of the subdivision of T₂₂ S. R. 16 E.

Chains

An oak 7 ins. diam., bears S61°W 36 lks. dist., marked $\frac{1}{4}$ S19BT

51.30 Ridge, bears N.W. and S.E., Enter heavy timber N. and S. Descend.

77.55 Wash, 10 lks. wide, course N.W., ascend.

79.30 The cor. of secs. 17, 18, 19 and 20. heretofore described Land, rough mountainous. Soil, rocky, 4th rate. Timber, scattering oak, 51.00 chs., heavy 29.00 chs. Undergrowth, dense manzanita and oak brush. Note: At this cor. I set off 17°28' S. on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°30' N.

S0°03'E bet. secs. 19 and 20 Descending through dense undergrowth and heavy timber. Drain 10 lks. wide, course N.W., ascend, along W. slope of mt.

13.37 Spur of mt., bears N.W. and S.E., desc.

24.20 Canyon, 20 lks. wide, course N.W., ascend.

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 $\frac{192}{1}$ S19 in W. and S20 in E. half, from which
A pinon 6 ins. diam., bears S75½°E 43 lks. dist., marked $\frac{1}{4}$ S20BT
A pinon 8 ins. diam., bears S61°W 58 lks. dist., marked $\frac{1}{4}$ S19BT.

48.95 Spur of mt. bears N.W. and S.E., Timber becomes scattering. Descend.

68.00 Drain, 10 lks. wide, course N.W., ascend.

72.50 Ridge, bears N.W. and S.E., descend.

80.00 Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 19, 20, 29 and 30, marked on brass cap, 1912;
T22SR16E in N. half;
S19 in N.W.
S20 in N.E.
S29 in S.E. and
S30 in S.W. quadrant;
No trees available, therefore raise mound of stone 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
Land, rough, mountainous
Soil, rocky, 4th rate.
Timber, heavy oak, pinon, pine and juniper 49.00 chs. scattering 31.00 chs.
Undergrowth, dense oak and manzanita brush.
November 11, 1912.

November 12¹⁹¹² At 7h.30m. a.m. l.m.t., I set off 31°29½' N. on the lat. arc, 17°38½' S. on the decl. arc and determine a meridian at the cor. of secs. 19, 20, 29 and 30, above described. Thence I run

40.00 S89°58'W, on random line, bet. secs. 19 and 30 Set temp. $\frac{1}{4}$ sec. cor.

79.18 Intersect W. bdy. of Tp., 12 lks. S. of cor. of secs. 19, 24, 25 and 30, which is a granite stone 8x8x6 ins. above ground, marked & witnessed as described by the Surveyor General, Thence I run, S89°57'E, on true line, bet. secs. 19 and 30

15.18 Ascending through dense undergrowth and scattering timber. Ridge, bears N.W. and S.E., descend.

31.00 Alum canyon, 50 lks. wide, course N.W., ascend.

39.18 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 $\frac{192}{1}$ S19 in N. and S30 in S. half; no trees available, therefore, raise mound of stone 2 ft. base 1½ ft. high, N. of cor. Pits impracticable.

79.18 The cor. of secs. 19, 20, 29 and 30, heretofore described. Land, rough mountainous. Soil, rocky, 4th rate. Timber, scattering oak and pinon. Undergrowth, dense manzanita and oak brush. Note: At this cor. I set off 17°45' S on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°29½' N.

Completion of the subdivision of Tp. 22 S. R. 16 E.

Chains	N89°57'E on random line bet. secs. 20 and 29
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.98	Intersect N. and S. line 12 lks. N. of cor. of secs. 20, 21, 28 and 29, <u>hereinbefore described</u>
	Thence I run
	N89°58'W, on true line bet. secs. 20 and 29
	Ascending through dense undergrowth and heavy timber.
25.00	Drain, 7 lks. wide, course S.E.
39.00	Ridge, bears N. and S., descend steep rocky S.W. slope of mt.
39.99	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 ¹⁹²¹ S20 in N. and S29 in S half, from which
	An oak 7 ins. diam., bears N50 $\frac{1}{2}$ °E 90 lks. dist., marked $\frac{1}{4}$ S20BT
	An oak 8 ins. diam., bears S70°E 133 lks. dist., marked $\frac{1}{4}$ S29BT
45.00	Timber becomes scattering.
52.50	Drain, 10 lks. wide, course S.W., ascend.
61.00	Ridge, bears N. and S., descend.
79.98	The cor. of secs. 19, 20, 29 and 30, <u>hereinbefore described</u>
	Land, rough mountainous.
	Soil, rocky, 4th rate.
	Timber, heavy oak and pinon 45.00 chs., scattering 35.00 chs.
	Undergrowth, dense oak and manzanita brush.
	November 12, 1912.
	1912 -----
	November 14: At 7h.30m a.m. l.m.t., I set off 31°29 $\frac{1}{2}$ 'N. on the lat. arc, 18°10 $\frac{1}{2}$ 'S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30, <u>hereinbefore described</u> ,
	Thence I run
	S0°02'E bet. secs. 29 and 30.
	Descending through dense undergrowth and scattering timber
32.40	Drain, 10 lks. wide, course S.W.
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 ¹⁹²¹ S30 in W. and S29 in E. half, from which
	An oak 8 ind. diam., bears N15 $\frac{1}{2}$ °E 41 lks. dist., marked $\frac{1}{4}$ S29BT
	An oak 6 ins. diam., bears W72 $\frac{1}{4}$ °W 55 lks. dist., marked $\frac{1}{4}$ S30BT
41.80	Drain, 10 lks. wide, course S.W.
55.60	Drain, 10 lks. wide, course S.W.
66.00	Alum Canyon, 50 lks. wide, course N.W., bottom of long descent, ascend.
80.00	Set an iron post 3 ft. long, 2 ins. diam., 24 ins. in the ground for cor. of secs. 29, 30, 31 and 32, marked on brass cap, 1912;
	T22SR16E in N. half;
	S30 in N.W.
	S20 in N.E.
	S32 in S.E. and
	S31 in S.W. quadrant, from which
	An oak 22 ins. diam., bears S40 $\frac{1}{2}$ °W 32 lks. dist., marked T22SR16ES31BT
	No other trees available, therefore raise mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Note: At this cor. I set off 18°16 $\frac{1}{2}$ 'S on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°29'N.
	November 14, 1912.
	1912 -----
	November 15: At 7h.30m a.m. l.m.t., I set off 31°29'N. on the lat. arc, 18°26' S on the decl. arc and determine a meridian with the solar at the cor. of secs. 29, 30, 31 and 32, <u>above described</u> ,
	Thence I run
	N89°57'W, on random line, bet. secs. 30 and 31
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.28	Intersect W. bdy. of Tp. 9 lks. N. of cor. of secs. 25, 30, 31 and 36, <u>recently estab. by me as described in Book "C"</u> ,
	Thence I run

BOOK 2654

Completion of the
Subdivision of Tp. 22 S. R. 16 E.

CHAINS	N89°59'E on true line bet. secs. 30 and 31 Descending through dense undergrowth and scattering timber Drain, 7 lks. wide, course N.W.
7.44	
21.40	Wash 35 lks. wide, course N.W., ascend.
39.28	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 ¹⁹¹² S30 in N. and S31 in S. half; from which An oak 12 ins. diam., bears N86°E 132 lks. dist., marked $\frac{1}{4}$ S30BT An oak 10 ins. diam., bears S4 $\frac{1}{2}$ °W 75 lks. dist., marked $\frac{1}{4}$ S31BT
Note	At this cor. I set off 18°32'S on the decl. arc and observe the sun on the meridian at noon; the re- sulting latitude is 31°29'N.
44.78	Ridge, bears N.W. and S.E., descend.
60.58	Drain, 15 lks. wide, course N.W., ascend.
67.00	Ridge, bears N. and S., descend.
79.28	The cor. of secs. 29,30,31 and 32. hereinbefore described Land, rough mountainous. Soil, rocky, 4th rate. Timber, scattering oak and pinon. Undergrowth, dense oak and manzanita brush. November 15, 1912.
	----- November 16, ¹⁹¹² At 7h.30m. a.m. l.m.t., I set off 31°29'N. on the lat. arc, 18°37'S. on the decl. arc and determine a meridian at the cor. of secs. 29,30,31 and 32. Thence I run hereinbefore described S89°58'E, on random line, bet. secs. 29 and 32.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.92	Intersect N. and S. line 14 lks. S. of cor. of secs. 28, 29,32 and 33 hereinbefore described Thence I run S89°56'W on true line bet. secs. 29 and 32 Descending, through scattering timber and dense undergrowth Wash, 20 lks. wide, course N.W., ascend.
26.00	
39.50	Ridge, bears N. and S., descend.
39.96	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 ¹⁹¹² S29 in N. and S32 in S. half, from which An oak 10 ins. diam., bears N12 $\frac{1}{2}$ °E 51 lks. dist., marked $\frac{1}{4}$ S29BT An oak 20 ins. diam., bears S11°W 15 lks. dist., marked $\frac{1}{4}$ S32BT.
61.50	Alum Canyon, 50 lks. wide, course N.W., ascend,
75.80	Drain 10 lks. wide, course N.E.
79.92	The cor. of secs. 29,30,31 and 32 hereinbefore described Land, rough mountainous. Soil, rocky, 4th rate. Timber, scattering oak pinon and juniper. Undergrowth, dense oak and manzanita brush. Notable: At this cor. I set off 18°47'S. on the decl. arc and observe the sun on the meridian at noon; the re- sulting latitude is 31°29'N.
	----- South, on random line, bet. secs. 31 and 32
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.92	Intersect S. bdy. of Tp. 10 lks. W. of cor. of secs. 31 and 32, recently estab. by me as described in Book "C", Thence I run N0°04'W on true line bet. secs. 31 and 32. Ascending through dense undergrowth and scattering timber Ridge, bears N.W. and S.E., descend.
5.92	
17.82	Drain, 10 lks. wide, course N.E., ascend.
25.50	Ridge, bears E. and W., descend.
39.92	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 ¹⁹¹² S31 in W. and S32 in E. half, from which An oak 8 ins. diam., bears N52 $\frac{1}{2}$ °E 48 lks. dist., marked $\frac{1}{4}$ S32BT A pinon 7 ins. diam., bears N73 $\frac{1}{2}$ °W 61 lks. dist., marked $\frac{1}{4}$ S31 BT

Completion of the

Chains Subdivision of Tn. 22 S. R. 16 E.

67.08 Drain 10 lks. wide, course N.E.
 79.92 The cor. of secs. 29,30,31 and 32 hereinbefore described
 Land, rough mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering oak and pinon.
 Undergrowth, manzanita and oak brush.
 November 16, 1912.

 General Description

This township is all mountainous and very rough and broken and the soil is generally rocky and worthless. Along Harshaw and Red Rock creeks there are small patches of rich loam, which is very productive. The township is covered with a good growth of oak and pinon timber and sycamore is found along the creeks. The township is watered by small springs and brooks. There is one settler each in secs. 12, 14 and 23.

John A. Hesse
 U. S. Surveyor

Resurvey of West Bdy. of Tp. 22 S. R. 17 E.

Chains October 22nd From the cor. of Tps. 22 and 23 S. R. 17 E. formerly cor. of Tps. 22 & 23 S. Rs. 16 & 17 E. which I recently changed as described in Book C, I run, North along W. bdy. of sec. 31 on random line. Ascending through dense undergrowth and heavy timber.

14.05 Top of ridge, bears N.W. and S.E., desc.

23.80 Gulch, 15 lks. wide, course N.W. leave heavy timber N and S

39.40 Wash, 30 lks. wide, course S.W. Bottom of desc., asc.

40.10 Fall 12 lks. E. of old $\frac{1}{4}$ sec. cor., which is a malpais stone 15x10x6 ins. above ground marked and witnessed as described by the Surveyor General.

True course and dist. of this $\frac{1}{2}$ mile is N.0°10'W., 40.10 chs. Thence from $\frac{1}{4}$ sec. cor.

North, on random line.

40.14 Fall 12 lks. E. of ^{old} cor. of secs. 25, 30, 31 and 36, which is a sandstone 10x10x6 ins. above ground, marked and witnessed as described by the Surveyor General. I cut out bearing tree on W. and change mound of stone from W. to E. of cor.

True course and dist. of this $\frac{1}{2}$ mile is N.0°10'W., 40.14 chs. Land, rough, mountainous
Soil, rocky, 4th rate.
Timber, oak, heavy 23.00 chs. scattering 57.00 chs.
Undergrowth, dense oak and manzanita brush
October 22, 1912.

1912

October 23rd At 7h.30m a.m. l.m.t. I set off 31°29'N on the lat. arc, 11°22'S on the decl. arc and determine a meridian with the solar at the cor. of secs. 30 and 31 Tr. 22 S. R. 17 E. above described.

Thence I run North along W. bdy. of sec. 30 on random line. Ascending through dense undergrowth and scattering timber

14.65 Top of Saddle Mt., desc. Enter heavy timber, bears E and W

39.00 Drain, 15 lks. wide, course N.W.

40.82 Fall 11 lks. E. of old $\frac{1}{4}$ sec. cor., which is a quartzite stone 8x10x6 ins. above ground marked and witnessed as described by the Surveyor General. Change mound of stone from W. to E. of cor.

True course and dist. of this $\frac{1}{2}$ mile is N.0°09'W., 40.82 chs. Thence from $\frac{1}{4}$ sec. cor.

North, on random line.

20.18 Wash, 30 lks. wide, course N.W. Bottom of desc., asc.

39.89 Fall 2 lks. E. of ^{old} cor. of secs. 19, 24, 25 and 30, which is a cross cut on a porphyry boulder 8x6x3 ft. above ground marked and witnessed as described by the Surveyor General. I cut out bearing trees in W. secs. and change mound of stone from W. to E. of cor.

True course and dist. of this $\frac{1}{2}$ mile is N.0°02'W., 39.89 chs. Land, rough, mountainous.
Soil, rocky, 4th rate.
Timber, oak and pinon, scattering 15.00 chs., Heavy 65.00 chs.
Undergrowth, dense oak and manzanita brush.

Note: At this cor. I set off 11°28'N on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°29 $\frac{1}{2}$ 'N.

North along W. bdy. of sec. 19 on random line. Ascending through dense undergrowth and heavy timber.

1.20 Top of ridge, bears E and W., begin steep desc.

9.00 Drain, 10 lks. wide, course N.W.

39.00 Wash, 20 lks. wide, course N.W. Bottom of desc., ascend.

39.66 Road, bears N.W. and S.E.

41.16 Fall 6 lks. E. of old $\frac{1}{4}$ sec. cor., which is a granite stone 12x10x6 ins. above ground, marked and witnessed as described by the Surveyor General. Change mound of stone from W. to E. of cor.

True course and dist. of this $\frac{1}{2}$ mile is N.0°05'W., 41.16 chs. Thence from the old $\frac{1}{4}$ sec. cor.

North on random line.

0.09 Wash, 15 lks. wide, course S.W.

20.00 Leave heavy timber, bears N.W. and S.E. and ... which

39.64 Fall 6 lks. E. of ^{old} cor. of secs. 13, 18, 19 and 24, which is a quartzite stone 10x8x5 ins. above ground, marked and witnessed as described by the Surveyor General. I change mound of stone from W. to E. of cor.

True course & dist. of this $\frac{1}{2}$ mile is N.0°05'W. 39.64 chs. Land, rough, mountainous. Soil, rocky, 4th rate.

Resurvey of West Edy. of Br. 22 S. R. 17 E.

Chains Timber, heavy oak 60.00 chs., scattering 20.00 chs.
Undergrowth, dense oak and manzanita brush

October 23, 1912.

1912-----

October 24: At 7h.30m. a.m. l.m.t., I set off $31^{\circ}30\frac{1}{2}'N$ on the latitude arc, $11^{\circ}43'S$ on the decl. arc and determine a meridian with the solar at the cor. of secs., 18 and 19 T. 22. S., R. 17 E.

Thence I run

North along W. bdy. of sec. 18 on random line.

Over mountainous land, ascending through dense brush and scattering timber.

7.25 Ridge, bears N.W. and S.E. descend.

18.50 Gulch, 20 lks. wide, course E. ascend.

40.78 Fall 2 lks. W. of old $\frac{1}{4}$ sec. cor., which is a quartzite stone 8x6x4 ins. above ground, marked and witnessed as described by the Surveyor General. Change md. of stone from W. to E. of cor. True course and dist. of this $\frac{1}{2}$ mile is $N.0^{\circ}01'E.40.78$ chs.

Thence from old $\frac{1}{4}$ sec. cor.

North, on random line.

16.25 Ridge, bears E. and W. descend.

21.00 Gulch, 20 lks. wide, course S.E., ascend.

30.00 Ridge, bears E. and W., enter heavy timber, descend.

39.86 Fall 5 lks. W. of old cor. of secs. 7, 12, 13 and 18, which is a malpais stone marked and witnessed as described by the Surveyor General. I cut out the bearing trees in W. secs.

True course and dist. of this half mile is $N.0^{\circ}04'E.39.86$ chs.

Land, rough mountainous.

Soil, rocky, 4th rate.

Timber, scattering oak and pinon and cedar, 71.00 chs. heavy 9.00 chs.

Undergrowth, dense oak and manzanita brush.

Note: At this cor. I set off $11^{\circ}49'S$ on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is $31^{\circ}31\frac{1}{2}'N$.

North, along W. bdy. of sec. 7

Over mountainous land, descending through dense brush and heavy timber.

440.84 Fall 15 lks. W. of old $\frac{1}{4}$ sec. cor., which is a malpais stone 8x8x6 ins. above ground, marked and witnessed as described by the Surveyor General. Change md. of stone from W. to E. of cor.

True course & dist. of this $\frac{1}{2}$ mile is $N.0^{\circ}11'E.40.84$ chs

Thence from $\frac{1}{4}$ sec. cor.

North, on random line.

19.00 Canyon, 200 lks. wide, course W. ascend.

29.00 Ridge bears E. and W., descend

36.20 Gulch, 20 lks. wide, course S.W., ascend.

39.90 Fall 15 lks. W. of old cor. of secs. 1, 6, 7 and 12. which is a sandstone 10x6x6 ins. above ground, marked and witnessed as described by the Surveyor General. I cut out bearing tree in W. sec. and move mound of stone to the E. of cor.

True course & dist. of this $\frac{1}{2}$ mile is $N.0^{\circ}13'E.39.90$ chs.

Land, rough mountainous.

Soil, rocky, 4th rate.

Timber, heavy oak.

Undergrowth, oak and manzanita brush.

October 26, 1912.

October 17: From cor. of secs. 6 and 7, T. 22 S. R. 17 E. above described I run

North along W. bdy. of Sec. 6 on random line.

Over rough mountainous land, ascending through dense brush and heavy timber.

9.65 Drain, 7 lks. wide, course S.W.

34.30 Drain 10 lks. wide, course S.W.

40.04 Fall 40 lks. W. of old $\frac{1}{4}$ sec. cor., which is a malpais stone 8x8x6 ins. above ground, marked and witnessed as described by the Surveyor General.

True course & dist. of this $\frac{1}{2}$ mile is $N.0^{\circ}34'E.40.04$ chs.

Thence from $\frac{1}{4}$ sec. cor.

BOOK 2654

Resurvey of West Bdy. of Tp. 22 S. R. 17 E.

Chains
3.30
10.00
30.75
43.90

North, on random line.
Ridge, E. and W. descend.
Wash, 20 lks. wide, course W. ascend.
Ridge, bears N.W. and S.E., descend.
Intersect S, bdy. of Tp. 21 S R 16 E. 174 lks. W. of the
old closing cor. of Trs. 22 S R 16 E and 17 E., which
is a malpais stone 10x10x10 ins. above ground, marked
and witnessed as described by the Surveyor General.
True course of this half mile is N3°16'E. 43.93 chs.
Land, rough mountainous.
Soil, rocky 4th rate.
Timber, heavy oak
Undergrowth, dense oak and mesquite brush.
Note: At this cor. I set off 9919'S on the decl.
arc and observe the sun on the meridian at noon; the re-
sulting latitude is 31°33'N.

October, 17, 1913.

John G. Hesse
U. S. Surveyor

BOOK 2654

Resurvey of Portion of the

West Bdy. of Tp. 22 S. R. 16 E.

Chains. October 28¹⁹¹² At 7h.30m. a.m. l.m.t., I set off 31°30½'N. on the lat. arc, 13°05'S. on the decl. arc and determine a meridian with the solar at the cor. of secs, 13,18,19 and 24, which is a sandstone 14x8x7 ins. above ground, marked and witnessed as described by the Surveyor General.

Thence I run
 South bet. secs. 19 and 24 on random line
 Over mountainous land, ascending through scattering timber and dense brush,
 8.70 Ridge, bears E. and W. descend.
 21.50 Alum Canyon, 30 lks. wide, course N.W., ascend.
 39.25 Fall 11 lks. W. of old ¼ sec. cor., which is an old cedar stake, badly decayed and loosely set in mound of stone. I destroy all trace of this old cor. and reestablish it in same place as follows:
 Set a granite stone 18x8x6 ins. 12 ins. in the ground for ¼ sec. cor., marked ¼ on W. face; No trees available therefore raise mound of stone 2 ft. base, 1½ ft. high, W. of cor. Therefore the true course and distance
~~True course & dist.~~ of this half mile is S0°10'E 39.25 chs.
 Thence from ¼ sec. cor., I run
 South, on random line
 8.70 Gulch, 15 lks. wide, course N.W., ascend.
 11.57 Intersect N. bdy. of IRON CAP MINING CLAIM at a point from which COR. No5 bears N74°23'E. 30 lks. dist.
 20.56 Intersect S. bdy. of IRON CAP MINING CLAIM at a point from which COR. No3 bears N74°23'E. 2.84 chs. dist.
 27.03 Intersect N. bdy. of GARFIELD MINING CLAIM at a point from which COR. No6 bears S63°23'W. 62 lks. dist.
 27.47 Ridge, bears E. and W., descend.
 37.76 Intersect S. bdy. of ALLIS MINING CLAIM at a point from which COR. No2 bears N57°08'E. 5.19 chs. dist.
 40.78 Fall 7 lks. E. of old cor. of secs. 19,24,25 and 30, which is a granite stone 8x8x6 ins. above ground, marked and witnessed as described by the Surveyor General.
 From this cor. COR. No1 of GARFIELD MINING CLAIM bears N11°43'E. 9.35 chs. dist. True course & dist. of
~~True course & dist.~~ of this half mile is S0°06'W. 40.78 chs.
 Land, rough mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering oak.
 Undergrowth, dense oak and manzanita brush.

Note: ~~-----~~ At this cor. I set off 13°11'S. on the decl. arc and observe the sun on the meridian at noon; the resulting latitude is 31°29½'N.

October 28, 1912.

John F. Hesse
U.S. Surveyor

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability,

John F. Hesse, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of the subdivision lines of Tp. 22 S. Rg. 16 E., and Resurveying the West Boundary of Tp. 22 S., Rg. 17 E., and Portion of the West Boundary of Tp. 22 S., Rg. 16 E.,

of the Gila and Salt River ^{Base and} Meridian, in the State of Arizona which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey ^{and resurvey} has been, in all respects, to the best of our knowledge and belief, well and faithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	
<i>S. E. Lang</i>	<i>October 16, 1912</i>	<i>November 18, 1912</i>	<i>Chairman</i>
<i>D. C. Nicoll</i>	<i>October 16, 1912</i>	<i>November 18, 1912</i>	<i>Chairman</i>
<i>F. G. Ayers</i>	<i>October 16, 1912</i>	<i>November 18, 1912</i>	<i>Flagman</i>
<i>W. L. Ray</i>	<i>October 16, 1912</i>	<i>November 8, 1912</i>	<i>Coverman</i>
<i>Juan Serrano</i>	<i>October 18, 1912</i>	<i>November 18, 1912</i>	<i>axman Coverman</i>
<i>Jose Hartinez</i>	<i>November 9, 1912</i>	<i>November 18, 1912</i>	<i>axman</i>

Subscribed and certified to before me on the dates of the final service as shown above.

John F. Hesse
U. S. Surveyor.

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BOOK 2654

FINAL OATH OF UNITED STATES SURVEYOR.

I, John F. Hesse, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Arizona, far Group 18 bearing date of the 19th day of September, 1912, 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 the subdivision lines of Tp. 22 S. Rg. 16 E., and resurveyed the West boundary of Tp. 22 S. Rg. 17 E., and Portion of the West Boundary of Tp. 22 S., Rg. 16 E.

of the Gila and Salt
River Base and Meridian, in the State of Arizona, 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 ^{and resurvey} have been established ^{or reestablished} and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey. and resurvey.

John F. Hesse
U. S. Surveyor.

Subscribed by said John F. Hesse, and sworn to before me }
this 23rd day of December, 1913 }



Frank S. Ingalls
Surveyor General of Arizona

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, July 21, 1914

The foregoing field notes of the survey of the Completion of the Subdivision lines of Township No. 22 South, Range No. 16 East, and Resurvey of the West Boundary of Township No. 22 South, Range No. 17 East, and Portion of the West Boundary of Township No. 22 South, Range No. 16 East of the Gila and Salt River Base and Meridian, Arizona.

executed by John F. Hesse, U.S. Surveyor
under his special instructions dated September 19th, 1912, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys ^{and resurveys} they describe, are hereby approved.

Frank S. Ingalls
U. S. Surveyor General of
Arizona.

~~I certify that the foregoing transcript of the field notes of the above-described surveys in~~
~~has been correctly copied from the original notes on file in this office.~~