

Book "I"
Subdivisions
FIELD NOTES

BOOK 2774

OF THE SURVEY OF

PART OF THE

SUBDIVISION LINES

AND RETRACEMENT OF PART OF THE

SOUTH BOUNDARY OF

TOWNSHIP 3 SOUTH RANGE 30 EAST

Of the Gila and Salt River Base and Meridian,

In the State of ARIZONA

EXECUTED BY

WILLIAM B. KIMMEL

In the capacity of U. S. Surveyor, under instructions dated February 18, 1913, issued by the United States Surveyor General to govern surveys included in Group No. 26, which were approved by the Commissioner of the General Land Office, February 28, 1913, pursuant to authority contained in the Act of Congress dated June 23, 1913.

Survey commenced February 4, 1914

Survey completed March 11, 1914

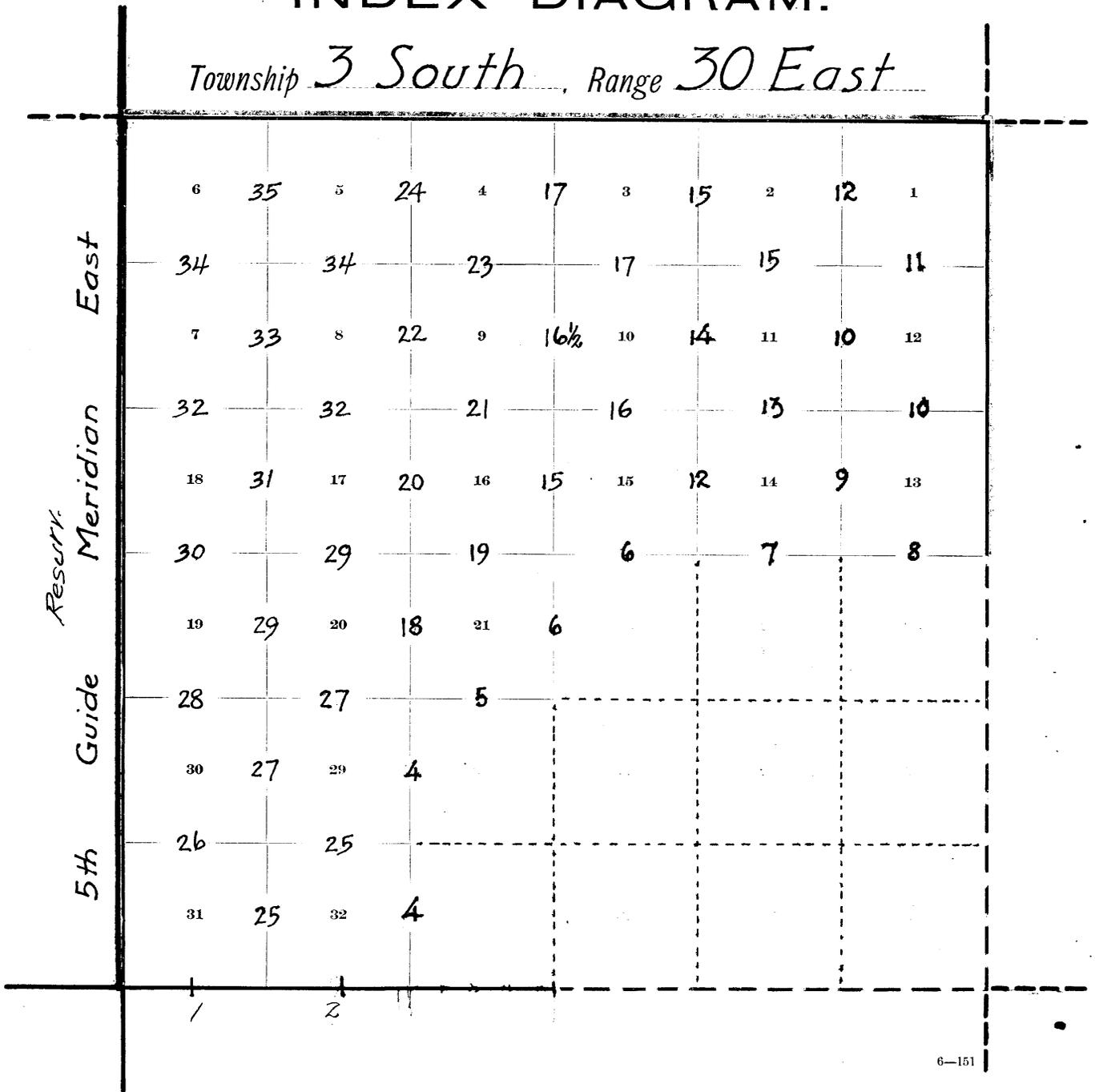
(1A)

Book "I"

BOOK 2774

INDEX DIAGRAM.

Township 3 South, Range 30 East



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Retracement of part of S. bdy. of Township 3 South, Range 30 E. 16

Chains.

Retracement commenced Feb. 4, 1914, and executed with a Young and Sons' Light Mountain Transit, with Smith Solar Attachment, No. 8541. For description of instrument, and certificate of approval, see Book "A." Knowing from recent and repeated tests of my instrument on a meridian established by observations on Polaris at elongation, that it is in correct adjustment, I proceeded to the original corner of secs. 5, 6, 31 and 32, on the south bdy. of the Tp., which is a stone 16x13x5 ins., set in a mound of stone, marked 5 notches on the E. and 1 notch on the W. edges; from which

A cedar stump marked B T, brs. N. 49 1/2° W., 177 lks. dist.

Feb. 4, 1914: At 10h. 30m. a.m., l.m.t., I set off 33° 07' N. on the lat. arc; 16° 18' S. on the decl. arc; and determine a meridian with the solar at the above described corner.

Thence I run, West, on a random line, bet. secs. 6 and 31. Along steep broken north slope, through dense undergrowth over rocky land.

27.00 Enter bottom of gulch, course N. 80° E.; ascend along bottom of gulch.

31.00 Leave bottom of gulch; ascend NE slope, 350 ft.

40.00 Fall 12 lks. south of the original 1/4 sec. cor., which is a stone 6x6x8 ins. above ground, marked 1/4 on the N. face; with a mound of stone, north of corner.

62.00 Top of ascent; descend NW. slope, 15 ft. to

65.00 Gulch, course NE.; ascend E. slope, 275 ft.

71.90 Wagon road, brs. N. and S.

Note: At this point, Feb. 4, 1914, I set off 16° 17' S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is 33° 07' N.

79.00 Top of spur ridge, brs. NW. and S.; continue along S. slope, leave undergrowth, brs. NW. and S.

79.89 Fall 26 lks. S. of the original cor. of Ts. 3 and 4 S., Rs. 29 and 30 E., which is a mound of stone 4 ft. high, 3 ft. base, near the center of which was a piece of rotten post, marks very faint. I reestablish this cor. at the same point as follows:

Set an iron post 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of Ts. 3 and 4 S., Rs. 29 and 30 E., marked on brass cap,

- 1913 on S. rim,
- T 3 S in N.,
- R 30 E in E.,
- T 4 S in S., and R 29 E in W. half;
- S 31 in NE.,
- S 6 in SE.
- S 1 in SW., and
- S 36 in NW. quadrant;

raise a mound of stone 4 ft. base, 3 ft. high, S of cor.

Pits impracticable.

The true course and dist. of this mile is therefore N. 89° 49' W., 79.89 chs.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, scattering cedar.

Undergrowth, scrub oak, catclaw and cacti.

Feb. 4, 1914.

Feb. 9, 1914: At 8h. a. m., l. m. t., I set off 33° 07' N. on the lat. arc; and 14° 46' S. on the declination on the lat. arc; and determine a meridian with the solar at the original cor. of secs. 5, 6, 31 and 32, hereinbefore described.

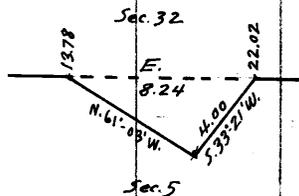
Thence I run, East, on a random line, bet. secs. 5 and 32. Descend NE. slope, through scattering undergrowth, over rocky land.

12.90 Old wagon road, brs. NW. and SE. Descend E. slope.

2. Retracement of part of the S. bdy. of Township 3 S., R. 30 E.

Chains

- 13.78 Top of a perpendicular bluff, 200 ft. high, brs. N. and S., at the foot of which runs the San Francisco River, 120 lks. wide, 2 ft. deep, muddy water, rocky bottom, flows S. As I cannot chain east from this point, I set a flag here, and proceed east to a point on line in river bottom in center of wagon road, bearing NE. and SW., where I lay off a base line S. $33^{\circ} 21' W.$, 4.00 chs. to a point from which the flag bears N. $61^{\circ} 03' W.$; therefore, sine $94^{\circ} 24'$ = .99705 x base 4.00 chs. plus by sine $28^{\circ} 57'$ = .48405 = 8.24 chs., the distance across, which added to 13.78 chs., makes 22.02 chs.
- 22.02 Wagon road brs. NE. and SW., 365 ft. below sec. cor.
- 22.94 Wire fence brs. NE. and SW.
- 24.35 Trail to pump house, brs. N. and S.
Harper's house brs. S. $10^{\circ} E.$ about 10 chs. dist.
Pump house brs. N. $15^{\circ} W.$, about 125 lks. dist.
- 25.30 West end of small dry reservoir, about 60 ft. long N. and S., and 30 ft. wide.
- 25.80 Wire fence, brs. NW. and SE.; ascend NW. slope.
- 36.25 Top of ascent, 250 ft. above wagon road; continue along steep broken N. slope.
- 39.64 Fall 23 lks. N. of the original $\frac{1}{4}$ sec. cor., which is a stone 6x12x10 ins. above ground, marked $\frac{1}{4}$ on the N. face; I reset same stone with marks to the south for $\frac{1}{4}$ sec. cor. to sec. 5 of T. 4 S., R. 30 E., and raised a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, south of corner. Pits impracticable. True course and dist. of W. half of north bdy. of sec. 5 of T. 4 S., R. 30 E. is therefore S. $89^{\circ} 40' E.$, 39.64 chs.
From this corner I run,
East, 36 lks. to
- 40.00 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for reestablished $\frac{1}{4}$ sec. cor., to sec. 32, of T. 3 S., R. 30 E., marked on brass cap,
1913 on S. rim,
S 32, $\frac{1}{4}$ in N. half;
raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, north of corner. Pits impracticable.
True courses and dists. of west half of S. bdy. of sec. 32 of T. 3 S., R. 30 E. are S. $89^{\circ} 40' E.$, 39.64, and east 0.36 chs.
Impossible to chain further; therefore, I return west 106 lks. to
- 38.94 From which point I stadia over broken N. slope; rod reading 2.300 ft., ratio 1 ft. = 2.00 chs., focal constant 1.025 ft., vertical angle plus 6° the distance is therefore $.9891 \times 2 \times 2.300$ plus $.016 = 4.56$ chs., which added to 38.94 chs. = 43.50 chs.
- 43.50 Rod point; ascend NW. slope, continuing measurement east, on random line
- 46.25 Top of ascent, 75 ft. above $\frac{1}{4}$ sec. cor.; descend NE. slope, 50 ft. to
- 52.25 Bottom of canyon, course NW.; ascend SW. slope, 230 ft. to
- 62.00 Top of ascent; descend SE. slope, 60 ft. to
- 75.00 Bottom of gulch, course SW.; ascend NW. slope, 90 ft. to
- 80.00 No trace of original cor. of secs. 4, 5, 32 and 33 can be found at this point, and as the line east of here is subject to rectification, my random line on east half mile of south bdy. of sec. 32, becomes a true line when at this point, I
Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for reestablished cor. of secs. 32 and 33, T. 3 S., R. 30 E., marked on brass cap,
1913 on S. rim,
T 3 S in N.,
T 4 S in S., and
R 30 E in W. half;
S 33 in NE.,
S 4 in SE.,



Retracement of part of S.bdy. of Township 3 S. R. 30 East. 3.

Chains.

S 5 in SW., and
 S 32 in NW. quadrant; from which,
 A cedar, 6 ins. in diam., brs. N. 58° E., 45 lks.
 dist., marked T 3 S R 30 E S 33 B T.

Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, west of
 corner. Pits impracticable.

Note: Feb. 9, 1914: At this corner I lay off $14^{\circ}44'S$. on
 the decl. arc; and at apparent noon, I observe the sun
 on the meridian; the resulting lat is $33^{\circ}07' N$.

Soil, rocky, 4th rate, with the exception of a narrow
 strip along the river, which is sandy loam, 1st rate.

Timber, cottonwood and sycamore along the river; scatter-
 ing pine and cedar east of the river.

Undergrowth, dense patches of crucifixion plant, catclaw,
 scrub oak, mesquite and cacti.

Feb. 9, 1914.

4. Partial Subdivision of Township 3 South, Range 30 East.

Chains.

Survey commenced Feb. 9, 1914, and executed with a Young and Sons' Light Mountain Transit, with Smith Solar Attachment, No. 8541. For description of instrument, and certificate of approval, see Book "A."

Knowing from recent and repeated tests of my instrument on a meridian established by observations on Polaris at elongation, that it is in correct adjustment, I proceed to the subdivision of part of Tp. 3 S., R. 30 E.

I begin at the reestablished cor. of secs. 32 and 33, on the south bdy. of the Tp., hereinbefore described.

Thence I run,

N. 0° 2' W., bet. secs. 32 and 33.

Through scattering timber and dense undergrowth. Descend north slope, 60 ft. to

2.65 Gulch, course W. Ascend steep SE slope, 390 ft. to
 14.50 Ridge, brs. E. and W. Descend N. slope, 100 ft. to
 19.50 Gulch, course NW. Ascend SW. slope, 30 ft. to
 24.00 Spur ridge, brs. W. Descend NW. slope, 95 ft. to
 32.00 Gulch, course SW. Ascend SE. slope, 200 ft. to
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim, $\frac{1}{4}$ S 32 in W.,
 S 33 in E. half; from which,
 A cedar, 5 ins. in diam., brs. N. 16° E., 90 lks. dist., marked $\frac{1}{4}$ S 33 B T.
 A cedar, 5 ins. in diam., brs. N. 26° W., 54 lks. dist., marked $\frac{1}{4}$ S 32 B T.
 40.50 Spur ridge, brs. E. Descend N. slope, 530 ft. to
 57.70 Gulch, course NW.; ascend.
 58.90 Low spur ridge, brs. W.; descend.
 59.40 Gulch, course SW. Ascend SE. slope, 470 ft. to
 77.00 Ridge, brs. NE and SW.; ascend along same.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, marked on brass cap,
 1913 on S. rim,
 T 3 S R 30 E in N. half;
 S 29 in NW.,
 S 28 in NE.,
 S 33 in SE., and
 S 32 in SW. quadrant; from which,
 A cedar limb, 7 ins. in diam., brs. N. 24° W., 84 lks. dist., marked T 3 S R 30 E S 29 B T.
 No other trees within limits; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, west of cor. Pits impracticable.
 Land, mountainous and hilly.
 Soil, rocky, 4th rat.
 Timber, scattering cedar.
 Undergrowth, dense scrub oak, catclaw, mesquite and cacti.
 Mountainous land, 66 chs.

Feb. 9, 1914.

Feb. 10, 1914: At 8h. 4m. a.m., l.m.t., I set off 33° 07' $\frac{1}{2}$ ' N. on the lat. arc; 14° 27' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 28, 29, 32 and 33,

Thence I run,

N. 0° 2' W., bet. secs. 28 and 29.

Through scattering timber and dense undergrowth. Ascend SW. slope, 40 ft. to

4.00 Thence along west slope.
 12.00 Descend NW. slope, 60 ft. to
 18.00 Gulch, course W. Ascend SW. slope, 75 ft. to
 24.00 Spur ridge, brs. W. Descend NW. slope, 130 ft. to
 39.65 Rock ledge brs. NW. and SE. Descend N. slope.
 40.00 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,

Partial Subdivision of Township 3 South, Range 30 East. 5.

Chains,

$\frac{1}{4}$ S 29 in W., and
 S 28 in E. half; - from which,
 A cedar, 6 ins. in diam., brs. N. $61\frac{1}{2}^{\circ}$ E., 13 lks.
 dist., marked $\frac{1}{4}$ S 28 B T.
 A cedar, 7 ins. in diam., brs. N. 85° W., 9 lks.
 dist., marked $\frac{1}{4}$ S 29 B T.
 43.25 Canyon, course W. Ascend SW. slope, 115 ft. to
 52.00 Spur ridge, brs. W. Descend NW. slope, 300 ft to
 74.00 Descend N. slope, to
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground, for cor. of secs. 20, 21, 28 and 29, marked on
 brass cap,

1913 on S. rim,
 T 3 S R 30 E in N. half;
 S 20 in NW.,
 S 21 in NE.,
 S 28 in SE., and
 S 29 in SW. quadrant; from which,
 A cedar, 5 ins. in diam., brs. N. $42\frac{1}{4}^{\circ}$ E., 29 lks.
 dist., marked T 3 S R 30 E S 21 B T.
 A cedar, 8 ins. in diam., brs. N. $40\frac{3}{4}^{\circ}$ W., 110
 lks. dist., marked T 3 S R 30 E S 20 B T.
 No other trees within limits. Raise a mound of stone, 2 ft.
 base, $1\frac{1}{2}$ ft. high, west of corner. Pits impracticable.
 Note: At this cor. I set off $14^{\circ}25'$ S. on the decl. arc; and
 at apparent noon, I observe the sun on the meridian;
 the resulting lat. is $33^{\circ}8\frac{1}{2}'$ N.
 Land, rolling, hilly and mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar.
 Undergrowth, dense scrub oak, mesquite, catclaw and cact.
 Mountainous land, 26 chs.

 East, on true line, bet. secs. 21 and 28.
 Through scattering timber and dense undergrowth. Ascend
 slight NW. slope, 40 ft. to
 6.00 Spur ridge, brs. N. Descend NE. slope, 110 ft. to
 13.50 Canyon, course NW. Ascend steep SW. slope, 305 ft. to
 22.55 Spur ridge, brs. NW. Thence along rim rock, brs. E. and W.
 24.00 Descend NE. slope, 185 ft. to
 33.90 Canyon, course NW. Ascend steep broken SW. slope, 170 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S 21 in N., and
 S 28 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N.
 of corner. Pits impracticable.
 40.20 Draw, course SW. Ascend W. slope, 335 ft.
 46.00 Ascend SW. slope.
 47.00 Head of gulch, course SW. Ascend W. slope.
 52.00 Spur ridge, brs. S. Descend SE. slope, 30 ft. to
 55.00 Head of gulch, course S. Ascend SW. slope, 360 ft. to
 61.20 Spur ridge, brs. SW. Descend SE. slope, 65 ft. to
 67.00 Canyon, course SW. Ascend W. slope, 360 ft. to
 80.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground, for cor. of secs. 21, 22, 27 and 28, marked
 on brass cap,

1913 on S. rim,
 T 3 S R 30 E in N. half;
 S 21 in NW.,
 S 22 in NE.,
 S 27 in SE., and
 S 28 in SW. quadrant; from which,
 A cedar limb 6 ins. in diam., brs. S. $67\frac{1}{4}^{\circ}$ E., 63
 lks. dist., marked T 3 S R 30 E S 27 B T.
 A cedar limb, 5 ins. in diam., brs. S. $37\frac{1}{2}^{\circ}$ W.,
 108 lks. dist., marked T 3 S R 30 E S 28 B T.

6. Partial Subdivision of Township 3 South, Range 30 East.

Chains.

A cedar limb, 5 ins. in diam., brs. N. $73\frac{1}{2}^{\circ}$ W., 58 lks. dist., marked T 3 S R 30 E S 21 B T.
 No other trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, west of corner. Pits impracticable.
 Land, mountainous and hilly.
 Soil, rocky, 4th rate.
 Timber, scattering cedar.
 Undergrowth, dense scrub oak, catclaw, mesquite and cacti.
 Mountainous land, 62 chs.

Feb. 10, 1914.

Feb. 21, 1914: At 9h. 8m., a.m., l.m.t., I set off $33^{\circ}8\frac{1}{2}'$ N. on the lat. arc; $10^{\circ}40\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21, 22, 27 and 28.
 Thence I run, N. $0^{\circ}2'$ W., bet. secs. 21 and 22.
 Along west slope, through scattering timber, and dense undergrowth.
 27.00 Rim rock, brs. SE. and NW. Descend NE. slope, 700 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S. 21 in W., and
 S 22 in E. half; from which,
 A cedar, 6 ins. in diam., brs. N. $5\frac{1}{2}^{\circ}$ E., 115 lks. dist., marked $\frac{1}{4}$ S 22 B T.
 A cedar, 5 ins. in diam., brs. N. 6° W., 34 lks. dist., marked $\frac{1}{4}$ S 21 B T.
 49.00 Canyon, course NW. Ascend SW. slope, 80 ft. to
 55.00 Thence along broken west slope.
 60.00 Ascend SW. slope, 60 ft. to
 66.30 Rocky spur ridge, brs. NW. Descend N. slope, 90 ft. to
 69.00 Gulch, course W. Ascend SW. slope, 35 ft. to
 70.00 Spur ridge, brs. NW. Descend N. slope, 200 ft. to
 77.80 Wash, course NW.; ascend.
 78.50 Spur ridge, brs. NW.; descend.
 78.80 Top of bluff, brs. E. and W.; descend 110 ft. to
 80.00 Foot of bluff. Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, marked on brass cap,
 1913 in S. rim,
 T 3 S R 30 E in N. half;
 S 16 in NW.,
 S 15 in NE.,
 S 22 in SE., and
 S 21 in SW. quadrant; from which,
 A cottonwood, 30 ins. in diam., brs. N. 58° E., 54 lks. dist., marked T 3 S R 30 E S 15 B T.
 No other trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, west of corner. Pits impracticable.
 Land, rolling, hilly and mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering pine and cedar.
 Undergrowth, dense scrub oak, mesquite, catclaw and cacti.
 Mountainous land, 46 chs.

Feb. 21, 1914.

Feb. 22, 1914: At 8h. 10m. a.m., l.m.t., I set off $33^{\circ}9\frac{1}{2}'$ N. on the lat. arc; $10^{\circ}19'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 15, 16, 21 and 22.
 From this cor. the west end of line bet. secs. 15 and 22, passes over a steep broken N. slope, over which I cannot chain; therefore, I obtain measurement as follows:

Partial Subdivision of Township 3 South, Range 30 East. 7.

Chains.

From the cor. of secs. 15, 16, 21 and 22, I measure a base line north 16.72 chs., and E. of said sec. cor., I set a flag on line; from the north end of base line flag brs. S. 23° 44' E. Distance is therefore $\tan 23^\circ 44' \times 16.72 \text{ chs.} = 7.35 \text{ chs.}$

7.35 Thence I continue east on true line, along broken north slope.

11.50 Gulch, course N. Ascend NW. slope, 70 ft. to

15.75 Spur ridge, brs. N. Descend NE. slope, 45 ft. to

18.00 Gulch, course N. 2 chs. wide. Ascend NW. slope, 560 ft. to

28.25 Spur ridge, brs. N. Thence along N. slope.

32.00 Gulch, course NW. Ascend SW. slope.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S. rim, $\frac{1}{4}$ S 15 in N., and S 22 in S. half; from which,
 A cedar, 8 ins. in diam., brs. N. 74 $\frac{1}{2}$ ° E., 18 lks. dist., marked $\frac{1}{4}$ S 15 B T.
 A cedar, 6 ins. in diam., brs. S 21° W., 45 lks. dist., marked $\frac{1}{4}$ S 22 B T.

45.28 Instrument point on spur ridge, brs. NW. Stadia across deep broken box canyon, course NW. Mean of three rod readings, 11.173 ft. Ratio, 1 ft. = 2.00 chs. Focal constant, 1.025 ft. Vertical angle, plus 16° 50'; the distance is therefore $.9161 \times 2 \times 11.173 \text{ plus } .016 = 20.49 \text{ chs.}$, which added to 45.28 chs. = 65.77 chs.

65.77 Rod point on steep west slope. Ascend W. slope, 40 ft. to

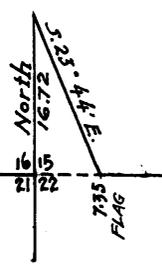
66.00 Spur ridge, brs. NW. Ascend slight NW. slope, 70 ft. to

76.25 Spur ridge, brs. NW. Thence along N. slope, to

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, marked on brass cap, 1913 on S. rim, T 3 S R 30 E in N. half; S 15 in NW., S 14 in NE., S 23 in SE., and S 22 in SW. quadrant; from which,
 A cedar, 6 ins. in diam., brs. S. 51° E., 117 lks. dist., marked T 3 S R 30 E S 23 B T.
 A cedar, 8 ins. in diam., brs. N. 14 $\frac{1}{2}$ ° W., 93 lks. dist., marked T 3 S R 30 E S 15 B T.

No other trees within limits; raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, west of corner. Pits impracticable.

Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar and pine.
 Undergrowth, scattering scrub oak and cacti.
 Mountainous land, 80 chs.



Feb. 22, 1914.

Feb. 23, 1914: At 9h. 5m. a.m., l.m.t, I set off 33° 9 $\frac{1}{2}$ ' N. on the lat. arc; 9° 57' 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, East, on a true line, bet. secs. 14 and 23. Through scattering timber and dense undergrowth. Ascend NW. slope, 35 ft. to

4.00 Spur ridge brs. N. Descend NE. slope, 70 ft. to

11.75 Gulch, course NW. Ascend NW. slope, 390 ft.

28.00 Ascend slight NW. slope.

34.25 Rocky ridge, brs. NE. and SW. Descend steep SE. slope, 580 ft.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in

8. Partial S. bdivision of Township 3 South, Range 30 East.

Chains.

the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S 14 in N., and
 S 23 in S. half; from which,
 A cedar, 5 ins. in diam., brs. N. $71\frac{1}{2}^{\circ}$ W., 112
 lks. dist., marked $\frac{1}{4}$ S 14 B T.
 A cedar limb, 5 ins. in diam., brs. S 38° W., 78
 lks. dist., marked $\frac{1}{4}$ S 23 B T.

56.00 Hickey Canyon, course NE. Trail in bottom, brs. NE and
 SW. Ascend W. slope, 110 ft. to

59.00 Spur ridge, brs. NW. Descend NE slope, 20 ft.

59.50 Wire fence brs. NW. and SE.

60.75 Gulch, course NW. Ascend west slope, 365 ft. to

69.00 Ascend NW. slope, to

74.00 Spur ridge, brs. N. Descend NE slope, 185 ft. to

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground, for cor. of secs. 13, 14, 23 and 24, marked
 on brass cap, 1913 in S. rim,
 T 3 S R 30 E in N. half;
 S 14 in NW.,
 S 13 in NE.,
 S 24 in SE.; and
 S 23 in SW quadrant; from which,
 A juniper, 14 ins. in diam., brs. S $69\frac{3}{4}^{\circ}$ E., 105
 lks. dist., marked T 3 S R 30 E S 24 B T.
 An oak, 10 ins. in diam., brs. N. $47\frac{1}{2}^{\circ}$ W., 16
 lks. dist., marked T 3 S R 30 E S 14 B T.

No other tree within limits; raise a mound of stone 2
 ft. base, $1\frac{1}{2}$ ft. high, west of corner. Pits impractica-
 ble.

Land, mountainous and hilly.
 Soil, rocky, 4th rate.
 Timber, scattering juniper, pine, cedar and oak.
 Undergrowth, dense scrub oak, catclaw and cacti.
 Mountainous land, 70 chs.

Feb. 23, 1914.

Feb. 26, 1914: At 8h. 59m., a.m., l.m.t., I set off 33°
 $9\frac{1}{2}'$ N. on the lat. arc; $8^{\circ}50\frac{1}{2}'$ S. on the decl. arc; and
 determine a meridian with the solar at the cor. of
 secs. 13, 14, 23 and 24.

Thence I run,
 East, on true line, bet. secs. 13 and 24.
 Through scattering timber and dense undergrowth. Descend
 slight NE. slope, to

1.00 Gulch, course NW. Ascend SW. slope, 460 ft. to

12.00 Ascend NW. slope, to

16.00 Spur ridge, brs. N. Descend NE. slope, 120 ft. to

24.00 Gulch, course NW. Ascend NW. slope, 240 ft. to

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S 13 in N., and
 S 24 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N.
 of cor. Pits impracticable.

Rocky ridge, brs. NE and SW. Descend steep east slope,
 510 ft. to

50.00 Canyon, course NE. Ascend NW. slope, 150 ft. to

62.60 Spur ridge, brs. N. Descend NE. slope, 40 ft. to

67.50 Gulch, course NW. Ascend steep west slope, 500 ft. to

79.50 Spur ridge brs. N. Descend NE. slope, to

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins.
 in the ground, for cor. of secs. 13, 18, 19 and 24,
 on the east bdy. of the Tp., marked on brass cap,
 1913 on S. rim,
 T 3 S in N. half;
 R 30 E S 13 in NW.,
 R 31 E S 18 in NE.;

Partial S bdivision of Township 3 South, Range 30 East. 9.

Chains.

S 19 in SE., and
 S 24 in SW. quadrant; from which,
 An oak, 6 ins. in diam., brs. N. $68\frac{1}{2}^{\circ}$ E., 87
 lks. dist., marked T 3 S R 31 E S 18 B T.
 An oak, 7 ins. in diam., brs. S. $64\frac{1}{2}^{\circ}$ E., 101
 lks. dist., marked T 3 S R 31 E S 19 B T.
 A juniper, 10 ins. in diam., brs. S. $19\frac{1}{4}^{\circ}$ W., 120
 lks. dist., marked T 3 S R 30 E S 24 B T.
 An oak, 8 ins. in diam., brs. N. $47\frac{1}{2}^{\circ}$ W., 64
 lks. dist., marked T 3 S R 30 E S 13 B T.

Land, mountainous and hilly.
 Soil, rocky, 4th rate,
 Timber, scattering oak, cedar, and juniper.
 Undergrowth, dense scrub oak, catclaw and cacti.
 Mountainous land, 72 chs.

Feb. 26, 1914.

Feb. 23, 1914:
 From the corner of secs. 13, 14, 23 and 24, hereinbefore de-
 scribed, I run,
 N. $0^{\circ} 1'$ W., bet. secs. 13 and 14.

Through scattering timber and dense undergrowth. Descend
 broken N. slope, along canyon, 75 ft. to
 0.85 Gulch, course NW. Ascend slight SW. slope, to
 2.00 Spur ridge, brs. W. Descend NW. slope to
 4.00 Gulch, course NE. Ascend SE. slope, 35 ft. to
 8.00 Spur ridge, brs. E. Descend NE. slope, 185 ft. to
 15.00 Gulch, course NW. Ascend slight SW. slope, to
 22.00 Spur ridge, brs. NW. Descend NW. slope.
 33.00 Trail, brs. E. and W.
 34.00 Canyon, 125 lks. wide, course NE. Ascend steep SE. slope,
 625 ft.

40.00 Set an iron post 3 ft. long, 1 in. in diam, 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S 14 in W., and
 S 13 in E. half; from which,
 A cedar limb, 7 ins. in diam., brs. S. $39\frac{3}{4}^{\circ}$ E.,
 105 lks. dist., marked $\frac{1}{4}$ S 13 B T.
 A cedar, 6 ins. in diam., brs. S. 8° W., 91 lks.
 dist., marked $\frac{1}{4}$ S 14 B T.

60.00 Narrow, rocky ridge, brs. NE and SW. Descend NW. slope,
 555 ft.

64.00 Rock ledge brs. E. and W.
 78.00 Head of draw, course NW. Ascend slight SW. slope to
 80.00 Set an iron post, 3 ft long, 2 ins. in diam., 24 ins. in
 the ground, for cor. of secs. 11, 12, 13 and 14, marked
 on brass cap,

1913 in S. rim,
 T 3 S R 30 E in N. half;
 S 11 in NW.,
 S 12 in NE.,
 S 13 in SE., and
 S 14 in SW. quadrant;

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

Note: At this corner I set off $9^{\circ} 54\frac{1}{2}'$ S. on the decl.
 arc; and at apparent noon, I observe the sun on the
 meridian; the resulting lat. is $33^{\circ} 10\frac{1}{2}'$ N.

Land, mountainous and hilly.
 Soil, roky, 4th rate.
 Timber, scattering cedar and pine.
 Undergrowth, dense scrub oak, mesquite, catclaw and cacti.
 Mountainous land, 70 chs.

Feb. 23, 1914.

10. Partial Subdivision of Township 3 South, Range 30 E.

Chains.

Feb. 26, 1914:
 East, on a random line, bet. secs. 12 and 13.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.20 Intersect east bdy. of Tp., 14 lks. north of the cor. of
 secs. 7, 12, 13 and 18, established by me, as described
 in Book "A."
 Thence I run,
 N. $89^{\circ}54'$ W., on a true line, bet. secs. 12 and 13.
 Along north slope, through scattering timber and under-
 growth.
 12.00 Descend NW slope, 60 ft. to
 17.00 Gulch, course N. Ascend NE slope, 30 ft. to
 21.00 Spur ridge, brs. N. Descend NW slope, 170 ft. to
 39.40 Rocky spur ridge, brs. NW. Descend steep west slope.
 40.10 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S 12 in N., and
 S 13 in S. half;
 and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N.
 of corner. Pits impracticable.
 48.75 Trail, brs. NW. and SE.
 49.50 Gulch, course NW. Thence along N. slope, to
 54.00 Spur ridge, brs. NW. Descend W. slope, to
 59.50 Rim rock, brs. NW and SE. Descend west slope, into
 Hickey Canyon.
 61.00 Trail in canyon, brs. NE and SSW.
 61.20 Small stream of water 6 lks. wide, 3 ins. deep, course NE.
 Ascend steep east slope, 410 ft. to
 69.00 Ascend SE slope, to
 78.20 Ridge, brs. N. and S. Descend W. slope, 20 ft. to
 80.20 The cor. of secs. 11, 12, 13 and 14.
 Land, rolling, hilly and mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar; cottonwood in Hickey Canyon.
 Undergrowth, scattering scrub oak, catclaw and caci.
 Mountainous land, 56 chs.
 Note: The sky was overcast at noon, making an observation
 for latitude impossible.

Feb. 26, 1914.

Feb. 27, 1914: At 9h. 3m., a.m., l.m.t., I set off 33°
 $10\frac{1}{2}'$ N. on the lat. arc; $8^{\circ}28'$ 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,
 N. $0^{\circ}1'$ W., bet. secs. 11 and 12.
 Through scattering timber and dense undergrowth.
 Ascend SW slope, 40 ft. to
 3.50 Ridge, brs. NW and SE. Descend east slope, 680 ft. to
 8.00 Thence along east slope.
 10.00 Descend steep broken, NE slope.
 19.50 Top of bluff, brs. E. and W.
 20.00 Foot of bluff. Descend N. slope.
 32.00 Trail, brs. NW and SE. Enter Hickey Canyon, course NW.
 40.00 True point for $\frac{1}{4}$ sec. cor. falls in canyon; impracticable to set post.
 40.05 Ledge, brs. NW and SE. 10 ft. high. Leave Hickey Canyon.
 40.55 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked
 on brass cap,
 1913 on S. rim,
 W C $\frac{1}{4}$ in N. half;
 S 12 in SE., and
 S 11 in SW. quadrant; from which,
 A cottonwood, 36 ins. in diam., brs. N. 19° E., 324
 lks. dist., marked W C $\frac{1}{4}$ S 12 B T.
 A cottonwood, 40 ins. diam., brs. N. 19° W., 224
 lks. dist., marked W C $\frac{1}{4}$ S 11 B T.
 41.00 Enter San Francisco River bottom, brs. E. and W.

Partial Subdivision of Township 3 South, Range 30 East 11.

Chains.

44.30 Wagon road, brs.E. and W.
 45.55 South channel of San Francisco River, 50 lks.wide, 1 ft. deep, course SW.
 46.80 Old road, brsE.and W.
 49.15 North channel of river, 65 lks.wide, 1 ft.deep, course SW.
 52.87 Foot of bluff, bs.NE. and SW. Ascend SE. slope, 455 f.to
 55.00 Spur ridge, brs.E.; descend.
 57.00 Wash, course SE. Ascend SE. slope, to
 68.00 Ascend SW. slope, to
 80.00 Set an iron post, 3 ft.lng, 2 ins. in diam., 24 ins.in the ground, for cor.of secs. 1,2,11 and 12, marked on brass cap,
 1913 on S.rim,
 T 3 S R 30 E in N.half;
 S 2 in NW.,
 S 1 in NE.,
 S 12 in SE., and
 S 11 in SW.quadrant;
 & raise a mound of stone, 2 ft. base, 1 1/2 f. high west of cor. Pits impracticable.
 Land, rolling, hilly and mountainous.
 Soil, rocky, 4th rat.
 Timber, scattering cedar and pine; cottonwood along river bottom.
 Undergrowth, dense mesquite, scrub oak, catclaw and cacti.
 Mountainous land, 52 chs.

 S. 89°54'E., on a random line, bet. secs.1 and 12.
 40.00 Set temp. 1/4 sec.cor.
 44.80 Rod point on bluff, brs.NW. and SE. Stadia across San Francisco River. Mean of three rod readings, 2.955 ft.; ratio. 1 ft.= 2 chs. Focal constant 1.025 ft. Angle of depression = 17° 24'. The distance is therefore .9106 x 2 x 2.955 plus .016 = 5.40 chs., which added to 44.80 chs. makes 50.20 chs.
 50.20 Instrument point on sand bar.
 64.20 Instrument point in river bottom. Stadia to top of perpendicular cliff on east side of river. Mean of three rod readings, 5.507 ft. Ratio 1 ft.= 2 chs. Focal constant, 1.025. Vertical angle, plus 22° 18'. The distance is therefore .8560 x 2 x 5.507 plus .016 = 9.44 chs., which added to 64.20 chs. = 73.64 chs.
 73.64 Rod point on top of bluff.
 80.20 Intersect east bdy.of the Tp., 23 lks.south of the cor. of secs.1,6,7 and 12, established by me, as described in Book "A."
 Thence I run,
 S. 89°56'W., on a true line, bet. secs.11 and 12.
 Through scattering timber and undergrowth. Descend W. slope, 200 ft.to
 4.00 Descend NW. slope.
 6.62 Top of bluff, brs.NE. and SW.
 8.45 Foot of bluff, thence across San Francisco River bottom.
 15.00 San Francisco River, 110 lks.wide, 2 ft. deep, course SW.
 30.00 East side of San Francisco River, 3 chs.wide, 1 ft. deep, course NW.
 35.40 Top of bluff, brs.NW. and SE. Ascend NE. slope, 200 ft.
 40.10 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec.cor., marked on brass cap,
 1913 on S.rim,
 1/4 S 1 in N., and
 S 12 in S.half; from which,
 A cedar, 5 ins. in diam., brs.N.3°W., 42 lks. dist., marked 1/4 S 1 B T.
 A cedar limb 8 ins. in diam., brs.S.28°W., 95 lks.dist., marked 1/4 S 12 B T.
 40.40 Trail, brs.NW. and SE.

12. Partial Subdivision of Township 3 South, Range 30 East.

Chains.

43.65 Spur ridge, brs.N. Descend W. slope, 300 ft.to
 50.60 Foot of bluff, brs.NE° and SW. Thence across river bottom.
 57.60 San Francisco River, 75 lks.wide, 2 ft. deep, course S.
 Gravel bottom and muddy water.
 62.00 Road brs.NE° and SW.
 62.45 Foot of bluff, brs.NE° and SW. Ascend SE. slope, 400 ft.to
 80.20 The cor.of secs.1,2,11 and 12.
 Land, level, rolling, hilly and mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar and cottonwood.
 Undergrowth, scattering scrub oak, mesquite, catclaw and
 cacti.
 Mountainous land, 45 chs.
Note: The sky was overcast at noon, making an observa-
 tion for latitude impossible.
 Feb.27, 1914.

March 3, 1914: At 7h. 59m. a.m., l.m.t., I set off
 33°11'N. on the lat.arc; 6°57'S. on the decl.arc;
 and determine a meridian with the solar at the cor.of
 secs. 1,2,11 and 12, hereinbefore described.
 Thence I run,
 N.0° 1'W., on a random line, bet. secs.1 and 2.
 40.00 Set temp. $\frac{1}{4}$ sec.cor.
 80.17 Intersect N.bdy.of the Tp., 9 lks.west of the cor.of secs.
 1,2,35 and 36, established by me, as described in Book
 "A."
 Thence I run,
 S.0° 3'W., on a true line, bet. secs.1 and 2.
 40.00 Through scattering timber and dense undergrowth. Descend
 80.17 Int. SE. slope, 400 ft. to the west of the cor. of secs.
 23.70 Gulch, course SW. Ascend NW. slope, 230 ft. to
 31.45 Ascend slight NE. slope, to
 37.20 Ridge, brs. NW and SE. Descend SW. slope, 30 ft.
 40.17 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec.cor., marked on brass cap,
 1913 on S.rim,
 $\frac{1}{4}$ S 2 in W., and
 S 1 in E. half; from which,
 A cedar, 5 ins. in diam., brs.S.5 $\frac{1}{2}$ °E., 99 lks.
 dist., marked $\frac{1}{4}$ S 1 B T.
 A cedar, 12 ins. in diam., brs.S.7 $\frac{1}{2}$ °W., 135
 lks.dist., marked $\frac{1}{4}$ S 2 B T.
 43.20 Wash, course W. Ascend NW. slope, 40 ft. to
 48.00 Spur ridge, brs.W. Descend SW. slope, 30 ft. to
 51.20 Wash, course W. Ascend NW. slope, 130 ft. to
 59.80 Rocky ridge, brs.NE° and SW. Thence along E. slope of
 ridge, to
 80.17 The cor.of secs.1,2,11 and 12.
 Land, hilly and mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar.
 Undergrowth, dense scrub oak, mesquite, catclaw and cacti.
 Mountainous land, 55 chs.
 March 3, 1914.

Feb. 22, 1914: At the cor.of secs. 14,15,22 and 23,I
 set off 10°16 $\frac{1}{2}$ 'S. on the decl.arc; and at apparent
 noon, I observe the sun on the meridian; the resulting
 lat.is 33°9 $\frac{1}{2}$ ' N.
 Thence I run,
 N.0°1'W., bet. secs.14 and 15.
 Through scattering timber and dense undergrowth. Descend N.
 slope, 350 ft. to
 12.50 Gulch, course NW. Thence along west slope to
 14.00 Spur ridge, brs.W. Descend slight NW. slope, 150 ft. to

Partial Subdivision of Township 3 South, Range 30 East 13.

Chains.	
23.50	Gulch, course NW. Ascend SW. slope, 120 ft. to
34.00	Spur ridge, brs. NW. Descend NE. slope, 325 ft.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S. rim, $\frac{1}{4}$ S 15 in W., and S 14 in E. half; from which, A cedar, 6 ins. in diam., brs. S. $64\frac{1}{2}^{\circ}$ E., 40 lks. dist., marked $\frac{1}{4}$ S 14 B T. A cedar, 10 ins. in diam., brs. N. $47\frac{1}{2}^{\circ}$ W., 181 lks. dist., marked $\frac{1}{4}$ S 15 B T.
49.00	Descend N. slope, 425 ft.
60.00	Descend slight N. slope, along draw.
72.00	Top of ledge, brs. NW and SE. Descend in wash, course N. into River bottom.
74.00	Enter San Francisco River bottom, brs. E and W.
76.00	San Francisco River, 50 lks. wide, $3\frac{1}{2}$ ft. deep, course W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, marked on brass cap, 1913 on S. rim, T 3 S R 30 E in N. half; S 10 in NW., S 11 in NE., S 14 in SE., and S 15 in SW. quadrant; from which, A willow, 8 ins. in diam., brs. S. $83\frac{1}{2}^{\circ}$ E., 194 lks. dist., marked T 3 S R 30 E S 14 B T. An ash, 14 ins. in diam., brs. S. $69\frac{1}{2}^{\circ}$ W., 75 lks. dist., marked T 3 S R 30 E S 15 B T. No other trees within limits; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, west of cor. Pits impracticable. Land, rolling, hilly and mountainous. Soil, rocky, 4th rate. Timber, scattering cedar, pine, willow and cottonwood. Undergrowth, scattering mesquite, catclaw and cacti. Mountainous land, 64 chs.
	Feb. 22, 1914.
	Feb. 23, 1914:
	East, on a random line, bet. secs. 11 and 14.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.08	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 11, 12, 13 and 14, hereinbefore described. Thence I run, S. $89^{\circ}58'$ W., on a true line, bet. secs. 11 and 14. Through scattering timber and undergrowth. Descend SW. slope 620 ft.
25.15	Wash, course NW. Continue to descend NW. slope.
31.63	Hansford's house, brs. N. 32° W.
32.00	Spur ridge, brs. NW. Descend W. slope to
37.75	Gulch, course NW. Ascend NE. slope.
40.04	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S. rim, $\frac{1}{4}$ S 11 in N., S 14 in S. half; from which, A mesquite 6 ins. in diam., brs. N. $30\frac{1}{4}^{\circ}$ W., 88 lks. dist., marked $\frac{1}{4}$ S 11 B T. A cedar, 8 ins. in diam., brs. S. 70° W., 34 lks. dist., marked $\frac{1}{4}$ S 14 B T.
	Hansford's house brs. N. 18° W.
41.45	Spur ridge, brs. NW. Descend SW. slope, 110 ft. to
50.00	Enter San Francisco River bottom, brs. NE and SW.
52.85	Wagon road brs. NE and SW.
56.35	Wagon road brs. NW and SE.
58.70	San Francisco River, 130 lks. wide, 18 ins. deep, course SW.
64.00	Wagon road brs. NE and SW.

14. Partial Subdivision of Township 3 South, Range 30 East.

Chains.

68.50 Wagon road, brs. NW. and SE.
80.08 The cor. of secs. 10, 11, 14 and 15.
Land, rolling, hilly and mountainous.
Soil, rocky, 4th rate.
Timber, scattering pine, cedar, cottonwood and willow.
Undergrowth, scattering mesquite, catclaw and scrub oak.
Mountainous land, 60 chs.

Feb. 23, 1914.

Feb. 25, 1914: At 8h. 58m. a.m., l.m.t., I set off $33^{\circ}10\frac{1}{2}'$ N. on the lat. arc; $9^{\circ}12\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solab at the cor. of secs. 10, 11, 14 and 15, hereinbefore described.

Thence I run,
N. $0^{\circ}1'$ W., bet. secs. 10 and 11. Through scattering timber and dense undergrowth.

3.70 Wagon road, brs. E. and W.
4.75 Foot of bluff, brs. E. and W. Ascend SE. slope, 750 ft. to
25.50 Ridge brs. NE and SW. Descend NW. slope, 80 ft. to
40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
1913 on S. rim,
 $\frac{1}{4}$ S 10 in W., and
S 11 in E. half; and raise a mound of stone
2 ft. base, $1\frac{1}{2}$ ft. high, west of cor. Pits impracticable.
Thence along broken west slope to
44.00 Draw, course SW.; ascend.
48.00 Spur ridge, brs. SW.; descend.
54.00 Draw, course SW. Ascend SW. slope, 50 ft. to
65.00 Ridge, brs. E. and W. Descend NW. slope, to
70.00 Head of draw, course W. Ascend SW. slope 150 ft. to
79.50 Ridge, brs. NW and SE. Thence along east slope, to
80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, marked on brass cap,

1913 on S. rim,
T 3 S R 30 E in N. half;
S 3 in NW.,
S 2 in NE., and
S 11 in SE., and
S 10 in SW. quadrant;

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

Noted: At this corner, I set off $9^{\circ}10'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian, the resulting latitude is $33^{\circ}11'$ N. Thence, along east slope, to the cor. of secs. 2, 3, 10 and 11.

Land, rolling, hilly and mountainous.
Soil, rocky, 4th rate.
Timber, scattering cedar, and pine.
Undergrowth, dense scrub oak, mesquite, catclaw and cacti.
Mountainous land, 32 chs.

March 4, 1914.

~~Feb. 21, 1914: At apparent noon, I set off $10^{\circ}38'S$ on the decl. arc; and observe the sun on the meridian at the cor. of secs. 15, 16, 21 and 22, hereinbefore described; the resulting lat. is $33^{\circ}9\frac{1}{2}'$ N.~~

~~Thence I run,
N. $0^{\circ}2'$ W., bet. secs. 15 and 16.
Across river bottom, through dense undergrowth.~~

~~1.75 Small stream of water, 2 lks. wide, course W.
4.35 Wagon road brs. NE. and SW.
5.10 San Francisco River, 100 lks. wide, 3 ins. to 2 ft. deep, course SW.~~

Partial Subdivision of Township 3 South, Range 30 East. 15.

Chains.	N. $89^{\circ}58'$ E., on a random line, bet. secs. 2 and 11.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.20	Intersect N. and S. line, 9 lks. S. of cor. of secs. 1, 2, 11 and 12, hereinbefore described.
	Thence I run, S. $89^{\circ}54'$ W. on a true line, bet. secs. 2 and 11. Through scattering timber and dense undergrowth. Descend SW. slope, 295 ft. to
15.20	Box Canyon, course S. Ascend E. slope, 75 ft. to
20.20	Thence along south slope.
37.00	Descend broken S. slope, to
39.85	Wash, 60 lks. wide, course SE.
40.10	Point for $\frac{1}{4}$ sec. cor. falls in wash. Impracticable to set post.
40.70	Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S. rim, W C $\frac{1}{4}$ in E. half; S 2 in NW., and S 11 in SW. quadrant; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, north of cor. Pits impracticable.
	Ascend NE. slope, 90 ft. to
44.00	Spur ridge, brs. S. Descend SW. slope, 70 ft. to
53.20	Gulch, course S. Ascend SE. slope, 435 ft. to
65.20	Wash, course SE. Ascend E. slope, to
80.20	The cor. of secs. 2, 3, 10 and 11. Land, rolling, hilly and mountainous. Soil, rocky, 4th rate. Timber, scattering cedar. Undergrowth, dense mesquite, catclaw, scrub oak and cacti. Mountainous land, 48 chs.
	Feb. 25, 1914.

	March 4, 1914.
40.00	N. $0^{\circ}1'$ W., on a random line, bet. secs. 2 and 3.
79.90	Set temp. $\frac{1}{4}$ sec. cor.
	Intersect N. bdy. of Tp., 24 lks. west of the cor. of secs. 2, 3, 34 and 35, established by me, as described in Book "A."
	Thence I run, S. $0^{\circ}9'$ W., on a true line, bet. secs. 2 and 3. Through scattering timber and dense undergrowth. Ascend slight NE. slope, 25 ft. to
2.00	Spur ridge, brs. E. Descend SE. slope, 15 ft.
4.00	Trail, brs. NE. to Pigeon Creek, and SW.
7.00	Gulch, course NE. Ascend NW. slope, 265 ft. to
23.00	Ridge, brs. NW. and SE. Descend SW. slope, 60 ft. to
34.00	Wash, course W. Ascend NW. slope, 30 ft. to
39.90	Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S rim, $\frac{1}{4}$ S 3 in W., and S 2 in E. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Ascend NW. slope, 130 ft. to
56.00	Thence along west slope to
62.00	Descend SE. slope, 190 ft. to
75.90	Head of wash, course SE. Thence along east slope to
79.90	The cor. of secs. 2, 3, 10 and 11. Land, rolling, hilly and mountainous. Soil, rocky, 4th rate. Timber, scattering cedar. Undergrowth, dense scrub oak, mesquite, catclaw and cacti. Mountainous land, 32 chs.
	March 4, 1914.

	Feb. 21, 1914: At apparent noon, I set off $10^{\circ}38'$ S. on the decl. arc; and observe the sun on the meridian at the cor. of secs. 15, 16, 21 and 22, hereinbefore described; the resulting lat. is $33^{\circ}9\frac{1}{2}'$ N. Thence I run, N. $0^{\circ}2'$ W., bet. secs. 15 and 16. Across river bottom, through dense undergrowth.

16. Partial Subdivision of Township 3 South, Range 30 East.

Chains.

1.75 Small stream of water, 2 lks. wide, course W.

4.35 Wagon road, brs. NE and SW.

5.10 San Francisco River, 100 lks. wide, 3 ins. to 2 ft. deep, course SW.

16.00 Leave river bottom; ascend ridge, brs. S. 160 ft. to Ascend very slight south slope.

37.00 Wash, course SW. Ascend south slope to

40.00 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S. rim, $\frac{1}{4}$ S 16 in W., and S 15 in E. half; from which,
A cedar, 8 ins. in diam., brs. N. $66\frac{1}{2}^{\circ}$ E., 36 lks. dist., marked $\frac{1}{4}$ S 15 B T.
A cedar, 6 ins. in diam., brs. S 21° W., 44 lks. dist., marked $\frac{1}{4}$ S 16 B T?

46.35 Ascend SE. slope, 25 ft. to Rod point on south point of deep box canyon, course SE. Stadia across; mean of three rod readings, 6.742 ft. Ratio, 1 ft. = 2 chs. Focal constant, 1.025 ft. Angle of depression - $10^{\circ}28'$. The distance is therefore, $.9670 \times 2 \times 6.742$ plus $.016 = 13.05$ chs., which added to 46.35 chs. = 59.40 chs.

59.40 Instrument point. Ascend SW. slope, 55 ft. to

63.85 Rock spur ridge, brs. W. Descend NW. slope, 50 ft. to

72.35 Gulch, course SW. Ascend SW. slope, 65 ft. to

76.00 Thence along west slope, to

79.75 Wash, course SW.; ascend.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, marked on brass cap, 1913 on S. rim,
T 3 S R 30 E in N. half;
S 9 in NW.,
S 10 in NE.,
S 15 in SE., and
S 16 in SW. quadrant;
and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.

Land, level, hilly and mountainous.
Soil, rocky, 4th rate.
Timber, scattering cedar.
Undergrowth, dense mesquite, catclaw and cacti.
Mountainous land, 22 chs.

Feb. 21, 1914.

Feb. 23, 1914:

East, on a random line, bet. secs. 10 and 15.

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

80.22 Intersect N and S. line, 16 lks. south of the cor. of secs. 10, 11, 14 and 15, hereinbefore described.

Thence $\frac{1}{2}$ run,
S. $89^{\circ}53'$ W., on a true line, bet. secs. 10 and 15.

Over level river bottom, through scattering timber and dense undergrowth.

14.00 Wagon road brs. N. and S.

14.50 Foot of bluff, brs. S. 70° W. and N. 70° E.

19.00 Ascend SE. slope of bluff, 85 ft. to

24.00 Rocky spur ridge, brs. SE. Descend SW. slope, 55 ft. to

26.15 Gulch course S. Ascend E. slope, 55 ft. to

31.50 Spur ridge, brs. S. Descend SW. slope, 80 ft. to

35.25 Center of gulch, 6 chs. wide, course south.

36.00 Trail brs. N. and S.

39.50 Ascend east slope, 125 ft. to

40.11 Spur ridge, brs. S. Ascend SE. slope.

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S. rim, $\frac{1}{4}$ S 10 in N., and S 15 in S. half;

Partial Subdivision of Township 3 South, Range 30 East. 16 1/2.

Chains.	and raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor. Pits impracticable.
43.00	Spur ridge, brs. S. Descend SW. slope, 90 ft. to
45.00	Top of bluff brs. N. and S.
45.25	Foot of bluff. Enter Sardine Canyon, 4.75 chs. wide, course S.
50.00	Leave canyon; ascend east slope, 410 ft. to
62.20	Foot of bluff, brs. NE. and SW., 80 ft. high.
62.90	Top of bluff. Ascend SE. slope, to
66.00	Ridge, brs. NE. and SW. Descend W. slope, 70 ft. to
79.90	Wash, course SW.; ascend.
80.22	The cor. of secs. 9, 10, 15 and 16.
	Land, level, rolling, hilly and mountainous.
	Soil, rocky, 4th rate.
	Timber, scattering cedar and cottonwood.
	Undergrowth, dense mesquite, catclaw and cacti.
	Mountainous land, 48 chs.
	Feb. 23, 1914.

	Feb. 24, 1914: At 8h. 50m. a.m., l.m.t., I set off 33° 10 1/2' N. on the lat. arc; 9° 35' S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 9, 10, 15 and 16, hereinbefore described.
	Thence I run,
	N. 0° 2' W., bet. secs. 9 and 10.
	Through scattering timber and dense undergrowth. Ascend south slope, 180 ft. to
7.75	Spur ridge, brs. SE. Descend NE. slope, 90 ft. to
12.00	Gulch, course E. Ascend SE. slope, 50 ft. to
17.20	Wash, course NE. Ascend slight SE. slope, 25 ft. to
30.00	Spur ridge, brs. E. Descend N. slope, 30 ft.
31.64	Instrument point for stadia. Stadia across Sardine Box Canyon, course SE. Mean of three rod readings, 4.583 ft. Ratio, 1 ft. = 2 chs. Focal constant, 1.025 ft. Angle of depression - 8° 20'. Dist. to rod is therefore, .9790 x 2 x 4.583 plus .016 = 8.99 chs., which added to 31.64 chs. = 40.63 chs. rod point. Stadia again from same instrument point to a point for witness cor. to 1/4 sec. cor. Mean of three rod readings, 4.186 ft. Ratio, 1 ft. = 2 chs. Focal constant, 1.025 ft. Angle of depression - 14° 30'. Dist. to rod is therefore, .9373 x 2 x 4.186 plus .016 = 7.86 chs., which added to 31.64 chs. = 39.50 chs.
39.50	Rod point at foot of cliffs where I set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to 1/4 sec. cor., marked on brass cap, 1913 on S. rim, W C 1/4 in N. half; S 10 in SE., and S 9 in SW. quadrant; and raise a mound of stone 2 ft. base, 1 1/2 ft. high, west of cor. Pits impracticable.
40.63	Rod point on top of rocky cliff, brs. NE. and SW.
42.60	Instrument point for stadia across box canyon, course SE. Mean of three rod readings, 5.185 ft. Ratio, 1 ft. = 2 chs. Focal constant, 1.025 ft. Vertical angle, plus 12° 24'. Dist. to rod is therefore, .9539 x 2 x 5.185 plus .016 = 9.89 chs., which added to 42.60 chs. = 52.49 chs.
52.49	Rod point on top of rock cliff, brs E. and W. Ascend SE. slope, 270 ft. to
66.35	Ridge, brs. NE. and SW. Descend NW. slope.
72.00	Head of gulch, course W. Ascend SW. slope, 125 ft. to
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, marked on brass cap, 1913 on S. rim, T 3 S R 30 E in N. half;

Partial Subdivision of Township 3 South, Range 30 East. 17.

Chains.

S 4 in NW.,
 S 3 in NE.,
 S 10 in SE., and
 S 9 in SW. quadrant;
 and raise a mound of stone, 2 ft. base, 1½ ft. high,
 west of cor. Pits impracticable.
 Land, mountainous and hilly.
 Soil, rocky, 4th rate.
 Timber, scattering cedar and pine.
 Undergrowth, dense scrub oak, mesquite, catclaw and cacti.
 Mountainous land, 56 chs.

40.00 N. 89° 53' E., on a random line, bet. secs. 3 and 10.
 40.40 Set temp. ¼ sec. cor.
 Instrument point on west edge of box canyon, across which
 I stadia. Mean of three rod readings, 4.664 ft. Ratio,
 1 ft. = 2 chs. Focal constant, 1.025 ft. Vertical angle
 plus 6° 10' Dist. to rod is therefore .9885 x 2 x
 4.664 plus .016 = 9.24 chs. which added to 40.40 chs.
 = 49.64 chs.
 49.64 Rod point on east edge of box canyon.
 80.12 Intersect N and S. line, 7 lks. N. of the cor. of secs. 2, 3,
 10 and 11, hereinbefore described.
 Thence I run,
 S. 89° 56' W., on a true line, bet. secs. 3 and 10.
 Through scattering timber and dense undergrowth. Descend
 SW. slope, 425 ft. to
 6.60 Wash, course S. Continue to descend SW. slope.
 17.60 South end of rocky spur ridge; continue to descend SW. slope.
 30.50 East edge of Ora Hanna box canyon, course S.
 34.00 (Approx). center of Ora Hanna box canyon, course S. Trail
 brs. N. and S.
 39.70 West side of box canyon, on spur ridge, brs. SE. Descend
 SW. slope.
 40.06 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for ¼ sec. cor., marked on brass cap,
 1913 on S. rim,
 ¼ S 3 in N., and
 S 10 in S. half;
 and raise a mound of stone, 2 ft. base, 1½ ft. high, N.
 of corner. Pits impracticable.
 42.00 Wash, course SE. Ascend NE. slope, 250 ft. to
 48.00 Foot of bluff, brs. N. and S.
 48.85 Top of bluff, brs. N. and S.; ascend.
 52.10 Ridge, brs. N. and S. Descend W. slope, 80 ft. to
 56.10 Gulch, course SW. Ascend SE. slope, 100 ft. to
 64.10 Spur ridge, brs. S. Descend SW. slope, to
 67.00 Wash, course S. Ascend SE. slope, 40 ft. to
 70.00 Spur ridge, brs. S. Descend SW. slope, 30 ft. to
 73.35 Gulch, course SE. Ascend SE. slope, 150 ft. to
 80.12 The cor. of secs. 3, 4, 9 and 10.
 Note: At this corner, I set off 9° 32½' S. on the decl.
 arc; and at apparent noon, I observe the sun on the
 meridian; the resulting lat. is 33° 11' N.
 Land, mountainous and hilly.
 Soil, rocky, 4th rate.
 Timber, scattering cedar and pine.
 Undergrowth, dense scrub oak, catclaw, mesquite and cacti.
 Mountainous land, 72 chs.

4.00 N. 0° 2' W., on a random line, bet. secs. 3 and 4.
 Instrument point for stadia across canyon, course SW.

18. Partial Subdivision of Township 3 South, Range 30 East.

Chains.

- Mean of three rod readings, 3.570 ft. Ratio, 1 ft. = 2 chs. Focal constant, 1.025 ft. Vertical angle $+1^\circ$ Dist. to rod is therefore, $.9997 \times 2 \times 3.570$ plus $.016 = 7.15$ chs., which added to 4.00 chs. = 11.15 chs.
- 11.15 Rod point on steep SW. slope.
40.00 Set $\frac{1}{4}$ sec. cor.
62.54 Rod point for stadia on ledge, brs. NW. and SE. Stadia over box canyon, course SE. Mean of three rod readings, 7.586 ft. Ratio 1 ft. = 2 chs. Focal constant 1.025 ft. Level. Dist. to instrument is therefore, 7.586×2 plus $.016 = 15.19$ chs., which added to 62.54 chs. = 77.73 chs.
- 77.73 Instrument point on ridge, brs. NW. and SE.
79.98 Intersect the N. bdy. of the Tp., 19 lks. west of the cor. of secs. 3, 4, 33 and 34, established by me, as described in Book "A."
- Thence I run,
S. $0^\circ 6'$ W., on a true line, bet. secs. 3 and 4.
Through scattering timber and dense undergrowth. Ascend NE. slope, 35 ft. to
2.25 Ridge, brs. NW. and SE. on north side of box canyon, course SE.
- 17.44 Ledge brs. NW. and SE. Ascend NE. slope, 40 ft. to
19.00 Spur ridge, brs. NE. Descend SE. slope, 375 ft.
25.00 Spur ridge, brs. SE. Descend SE. slope.
32.50 Gulch, course SE.; ascend.
36.00 Spur ridge, brs. E. Descend.
38.00 Gulch, course east. Ascend NE. slope, 20 ft. to
39.98 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S. rim,
 $\frac{1}{4}$ S 4 in W., and
S 3 in E. half; from which,
A cedar, 6 ins. in diam., brs. N. 64° E., 24 lks. dist., marked $\frac{1}{4}$ S 3 B T.
A pine, 12 ins. in diam., brs. S. $75\frac{1}{2}^\circ$ W., 78 lks. dist., marked $\frac{1}{4}$ S 4 B T.
- Ascend NE. slope, 30 ft. to
41.30 Spur ridge, brs. NE. Descend SE. slope, 15 ft. to
43.00 Gulch, course NE. Ascend NW. slope, 145 ft. to
51.00 Ridge, brs. E. and W. Descend SW. slope, 20 ft. to
54.00 Head of draw, course SW. Ascend slight NW. slope, 35 ft. to
68.00 Spur ridge, brs. W. Descend.
68.85 North side of box canyon, course SW.
76.00 South side of box canyon. Ascend NW. slope, 35 ft. to
78.25 Ridge, brs. NE. and SE. Descend SE. slope, 20 ft. to
79.98 The cor. of secs. 3, 4, 9 and 10.
Land, mountainous and hilly.
Soil, rocky, 4th rate.
Timber, scattering cedar and pine.
Undergrowth, dense scrub oak, mesquite, catclaw and cacti.
Mountainous land, 60 chs.
- Feb. 24, 1914.
-
- Feb. 10, 1914: At apparent noon, I set off $14^\circ 25'$ S. on the decl. arc; and observe the sun on the meridian with the solar at the corner of secs. 20, 21, 28 and 29, here-inbefore described; the resulting lat. is $33^\circ 8\frac{1}{2}'$ N.
- Thence I run,
N. $0^\circ 2'$ W., bet. secs. 20 and 21.
Through scattering timber and dense undergrowth. Descend N. slope, 250 ft. to
7.60 Enter level river bottom.
9.80 Wagon road, brs. NE. and SW.
11.70 San Francisco River, 60 lks. wide, 2 ft. deep, course SW.
12.30 Perpendicular cliff, 125 ft. high, at north edge of water.
15.95 Top of bluff; descend NW. slope, 40 ft. to
22.00 Gulch, course SW. Ascend S. slope, 115 ft. to

Partial Subdivision of Township 3 South, Range 30 East. 19.

Chains.

28.00 Spur ridge, brs.SW. Descend N. slope, 15 ft.to
 33.00 Gulch, course SW. Ascend SW. slope, 155 ft.to
 40.00 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec.cor., marked on brass cap,
 1913 on S.rim,
 $\frac{1}{4}$ S 20 in W., and
 S 21 in E.half;
 and raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft. high, west
 of corner. Pits impracticable.
 Ascend slight NW. slope, 15 ft.to
 41.50 Ridge, brs.NW. and SE. Descend N. slope, 415 ft.to
 45.00 Head of draw, course NE. Descend NE. slope, to
 62.65 Silver Creek Canyon, course E. Ascend SE. slope, 140 ft.
 to
 67.35 Spur ridge, brs.SE. Descend NE. slope; instrument point.
 Thence by stadia measurement across box canyon, course E.
 Mean of three rod readings, 6.635 ft. Ratio, 1 ft.= 2 chs.
 Focal constant, 1.025 ft. Vertical angle, $+8^{\circ} 26'$. Dist.
 to rod point is therefore, $.9785 \times 2 \times 6.635$ plus $.016$
 $= 13.00$ chs., which added to 67.35 chs. = 80.35 chs. =
 rod point on cliffs, bear NW. and SE. True point for
 corner falls on cliffs; impossible to set post; therefore,
 Set rod at a point at foot of cliffs for position of wit-
 ness corner, and measure by stadia from instrument
 point on spur ridge at 67.35 ch. point. Mean of three
 rod readings, 5.241 ft. Ratio 1 ft. = 2 chs. Focal
 constant, 1.025 ft. Angle of depression, $-1^{\circ} 30'$
 Dist. to rod point is therefore, $.9993 \times 2 \times 5.241$ plus
 $.016 = 10.49$ chs., which added to 67.35 chs. = 77.84
 chs.
 77.84 Set an iron post, 3 ft.long, 2 ins. in diam., 24 ins. in
 the ground, for witness cor. to cor.of secs.16,17,20
 and 21, marked on brass cap,
 1913 on S.rim,
 W C S of center,
 T 3 S R 30 E in N.half;
 S 17 in NW.,
 S 16 in NE.,
 S 21 in SE., and
 S 20 in SW.quadrant; from which,
 A cedar limb, 6 ins. in diam., brs.N. $45\frac{1}{4}^{\circ}$ W., 8
 lks.dist., marked W C T 3 S R 30 E S 17 BT.
 No other trees within limits. Raise a mound of stone, 2
 ft.base, $1\frac{1}{2}$ ft. high, west of cor. Pits impracticable.
 Land, mountainous and hilly.
 Soil, rocky, 4th rate.
 Timber, scattering cedar.
 Undergrowth, dense mesquite, catclaw, cacti, and scrub oak.
 Mountainous land, 58 chs.

Feb. 10, 1914.

Feb. 14, 1914: At 9h. 50m. a.m., l.m.t., I set off 33°
 $9\frac{1}{2}'$ N. on the lat.arc; $13^{\circ} 7'$ S. on the decl.arc, and
 determine a meridian with the solar at the witness
 corner to cor.of secs. 16,17,20 and 21, which is
 2.16 chs. $S.0^{\circ} 2'$ E. of true corner point.
 From true point for corner of secs.16,17,20 and 21, in
 Box Canyon, course E., I run,
 East, on a random line, bet. secs. 16 and 21.
 40.00 Set temp. $\frac{1}{4}$ sec.cor.
 79.90 Intersect N.and S. line, 9 lks.S.of the cor.of secs.15,
 16,21 and 22, hereinbefore described.
 Thence I run,
 $S.89^{\circ} 56'$ W., on a true line, bet. secs.16 and 21.
 Through scattering timber and undergrowth. Ascend E.slope,
 85 ft.to
 1.35 Spur ridge, brs.N. Descend W. slope, to
 5.00 Gulch, course N. Ascend NE. slope, 70 ft.to
 11.20 Spur ridge, brs.N. Descend NW. slope, 80 ft.to

20. Partial Subdivision of Township 3 South, Range 30 East.

Chains.	
20.00	Enter river bottom, brs.NE and SW. Mexican's cabin brs.N. about 8 chs.dist.
28.80	San Francisco River, 100 lks.wide, 2 ft.deep, course SW.
32.00	Enter wagon road, brs.ENE.
36.00	Leave wagon road, brs.SW.
39.95	Set an iron post 3 ft.long, 1 in. in diam., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor., marked on brass cap, 1913 on S.rim, $\frac{1}{4}$ S 16 in N., and S 21 in S.half; from which, A cottonwood, 20 ins. in diam., brs.S.26°E., 54 lks.dist., marked $\frac{1}{4}$ S 21 B T.
	No other trees within limits, Raise a mound of stone, 2 ft.base, 1 $\frac{1}{2}$ ft.high, north of cor. Pits impracticable.
43.65	San Francisco River, 235 lks. wide, 3 ins. to 2 ft.deep, course NW. Wagon road in river, brs.NW. and SE.
47.60	Wagon road, brs.NE. and SW.
56.00	San Francisco River, 150 lks.wide, 2 ft.deep, course SW. Ascend E. slope, 430 ft.to
74.65	Spur ridge, brs.SE. Descend SW. slope, 120 ft.to
79.90	The point for cor.of secs.16,17,20 and 21, in box canyon, course east, 2.16 chs. N.0°2' W. from witness cor. Land, rolling, hilly and mountainous. Soil, rocky, 4th rab. Timber, scattering cedar. Undergrowth, dense mesquite, catclaw and cacti. Mountainous land, 42 chs.
	<u>Note:</u> At the witness cor. to cor.of secs. 16,17,20 and 21, I set off 13° 5' S. on the decl.arc; and at apparent noon, I observe the sun on the meridian; the resulting lat is 33° 9 $\frac{1}{2}$ ' N.

	N.0°2'W., bet. secs. 16 and 17, by stadia measurement from top of spur ridge at 67.35 ch.point on line bet. secs.20 & 21 to rod at top of 35 lks N.0°2'W.of cor.pt.
0.35	Rod point on cliff, thence by stadia measurement, over broken canyon and cliff. Mean of three rod readings, 1.820 ft. Ratio 1 ft.= 2 chs. Focal constant, 1.025 ft. Angle of depression, 7° 55' Dist. to instrument point is therefore .9811 x 2 x 1.820 plus .016 = 3.57 chs., which added to 0.35 chs.= 3.92 chs.
3.92	Instrument point on ridge; ascend SW. slope, 60 ft.to
5.00	Spur ridge, brs.SW. Descend to
6.00	Gulch, course SW. Ascend to
8.14	Rod point on spur ridge, brs.SW.; thence by stadia measurement across deep box canyon, course SW. Mean of three rod readings, 3.986 ft. Ratio 1 ft.= 2 chs. Focal constant 1.025 ft. Angle of depression, 10° 32' Dist. to instrument point is therefore, .9666 x 2 x 3.986 plus .016 = 7.72 chs., which added to 8.14 chs. = 15.86 chs.
15.86	Instrument point on spur ridge, brs.SW. thence by stadia measurement across box canyon, course SW. Mean of three rod readings, 2.710 ft. Ratio 1 ft.= 2 chs. Focal constant 1.025 ft. Level. Dist. to rod point is therefore, 2.710 ft. x 2 + .016 = 5.44 chs., which added to 15.86 chs. = 21.30 chs.
21.30	Rod point on steep south slope. Ascend S. slope, 90 ft.to
25.75	Ridge brs.NW and SE. Descend NE. slope, 45 ft.to
30.00	Rod point. Thence by stadia measurement across deep box canyon, course SE. Mean of three rod readings, 6.190 ft. Ratio 1 ft.= 2 chs. Focal constant, 1.025 ft. Vertical angle plus 6°10'. Dist. to instrument point is therefore, .9885 x 2 x 6.190 plus .016 = 12.25 chs., which added to 30.00 chs. = 42.25 chs.

Partial S. division of Township 3 South, Range 30 East. 21.

Chains.

42.25
48.28
52.00
53.00
57.50
63.50
70.65
77.45
80.00

Instrument point on short spur ridge brs. W. The true pt. for $\frac{1}{4}$ sec. cor. at 40.00. falling in inaccessible place, at this point, I set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 W C $\frac{1}{4}$ on N. half;
 S 16 in SE., and
 S 17 in SW. quadrant;
 and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, west of corner. Pits impracticable. Set rod at this corner and make stadia measurement over broken W. slope, Mean of three rod readings, 3.041 ft. Ratio 1 ft. = 2 chs. Focal constant, 1.025 ft. Vertical angle, plus 6°. Dist. to instrument point is therefore, .9891 x 2 x 3.041 plus .016 \pm 6.03 chs., which added to 42.25 chs. = 48.28 chs.

Instrument point. Ascend S. slope, 115 ft. to Spur ridge, brs. SW. Descend NW. slope, 85 ft. to Wash, course SW. Ascend S. slope, 20 ft. to Spur ridge, brs. SW. Ascend SW. slope, 15 ft. to Spur ridge, brs. SW. Descend NW. slope, 190 ft. to Gulch, course SW. Ascend SE. slope, 75 ft. to cor. Trail, brs. E. and W. Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, marked on brass cap,
 1913 on S. rim,
 T 3 S R 30 E. on N. half;
 S 8 in NW.,
 S 9 in NE.,
 S 16 in SE., and
 S 17 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.
 Timber, scattering cedar and pine.
 Undergrowth, scattering scrub oak, catclaw, mesquite and cacti.
 Mountainous land, 80 chs.

Feb. 14, 1914.

40.00
80.10
4.00
8.00
14.00
18.00
20.00
21.75
24.00
25.90
29.00
36.60

Feb. 20, 1914: At 9h. 4m., a.m., l.m.t., I set off 33°10 $\frac{1}{2}$ ' N. on the lat. arc; 11°2'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. 89°56'E., on a random line, bet. secs. 9 and 16. Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 7 lks. S. of the cor. of secs. 9, 10, 15 and 16, hereinbefore described.

Thence I run, S. 89°53'W., on a true line, bet. secs. 9 and 16. Through scattering timber and undergrowth. Ascend SE. slope, 40 ft. to

Thence along south slope, to Wash, course SE. Ascend SE. slope, 55 ft. to Spur ridge, brs. S. Descend broken SW. slope, to Gulch, course S.; ascend. Spur ridge, brs. S.; descend. Gulch, course S.; ascend. Spur ridge, brs. S.; descend. Gulch, course SE. Ascend NE. slope, 35 ft. to Spur ridge, brs. N. Descend W. slope, to Gulch, course NE. in draw, course E. Ascend E. slope, 135 ft. to

22. Partial Subdivision of Township 3 South, Range 30 East.

Chains.

40.05 Set an iron post 3 ft long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S. rim, $\frac{1}{4}$ S 9 in N., and S 16 in S. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high. N. of corner. Pits impracticable.

Ascend east slope, 255 ft. to
 45.80 Foot of bluff, brs. NW and SE.
 46.60 Top of bluff, brs. NW and SE. Descend SW. slope, 40 ft. to
 56.00 Wash, course SE. Ascend NE. slope, 40 ft.
 60.10 Trail, brs. NE and SW.
 61.50 Ridge, brs. N. and S. Descend west slope, 55 ft. to
 63.35 Gulch, course SW. Ascend SE. slope, 20 ft. to
 68.40 Spur ridge, brs. SW. Descend NW. slope, 55 ft. to
 72.10 Wash, course SW. Ascend SE. slope, 60 ft. to
 73.10 Spur ridge, brs. S. Thence along broken S. slope.
 73.90 Trail, brs. NW and SE.
 74.40 Wash, course S.; ascend.
 74.85 Trail, brs. NE and SW.
 80.10 The cor. of secs. 8, 9, 16 and 17.

Note: At this corner, I set off $10^{\circ} 59\frac{1}{2}'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $33^{\circ} 10\frac{1}{2}'$ N.

Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar.
 Undergrowth, scattering mesquite, catclaw and cacti.
 Mountainous land, 80 chs.

Feb. 20, 1914.

March 9, 1914: At 8h. 55m. a.m., l.m.t., I set off $33^{\circ} 10\frac{1}{2}'$ N. on the lat. arc; $4^{\circ} 37\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 8, 9, 16 and 17, hereinbefore described.

Thence I run, N. $0^{\circ} 2'$ W., bet. secs. 8 and 9. Through scattering timber and dense undergrowth. Ascend SW. slope, 470 ft. to

22.50 Ridge, brs. NW and SE. Descend NE. slope, 295 ft. to
 26.80 Spur ridge, brs. NE. Descend N. slope.
 30.00 Descend NW. slope.
 39.20 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., marked on brass cap,

1913 on S. rim,
 W $C\frac{1}{4}$ in N. half;
 S 9 in SE., and
 S 8 in SW. quadrant; from which
 A pine, 8 ins. in diam., brs. S. $69\frac{1}{4}'$ W., 31 lks. dist., marked W $C\frac{1}{4}$ S 8 B T.

No other trees within limits. Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, west of cor. Pits impracticable. Instrument point, from which I run stadia measurement over box canyon, course NE. Rod reading (mean of three) 3.000; ratio, 1 ft. = 2 chs. Focal constant, 1.025 ft. Vertical angle, plus $4^{\circ} 28'$. Dist. to rod point is therefore, $.9939 \times 2 \times 3.000$ plus $.016 = 5.98$ chs., which added to 39.20 chs. = 45.18 chs.

40.00 True point for $\frac{1}{4}$ sec. cor. cannot be established.

45.18 Rod point on spur ridge, brs. NE.

46.00 Descend NE. slope:

47.15 Instrument point. Thence by stadia measurement, over V-shaped canyon, course E. Mean of three rod-readings, 1.230 ft. Ratio, 1 ft. = 2 chs. Focal constant, 1.025 ft. Level. Dist. to rod point is therefore, 1.230×2 plus $.016 = 2.48$ chs., which added to 47.15 chs. =

49.63 Rod point on rock spur ridge, brs. E.

49.68 Set flag ahead on line, and leave flag at this point for triangulation. From the flag ahead, measure a base

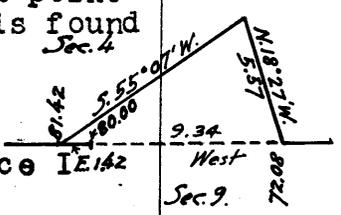
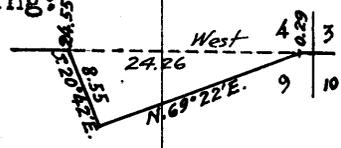
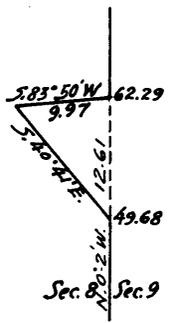
Partial Subdivision of Township 3 South, Range 30 East. 23.

Chains

line S.83° 50' W., 9.97 chs., from the west end of which, flag on line at 49.68 chs. point brs. S.40°41' E. Distance is found from the following:
 $\sin. 55^\circ 29' \times 9.97 = 12.61$ chs.
 $\sin 40^\circ 39'$
 which added to, 49.68 chs. = 62.29 chs.
 60.50 (Approx.) Sardine Creek, 10 lks. wide, 5 ins. deep, 50 ft. below flag point at 49.68 ch. point
 62.29 Flag point from west end of measured base line, Tom Hay's garden brs. N.40°W., about 4 chs. dist.
 62.30 Trail, brs. NE and SW.
 63.00 Gulch, course SE. Ascend in gulch, 15 ft.
 67.50 Spur ridge, brs. W. Thence along west slope of gulch,
 70.00 Ascend slight SW. slope, to
 71.00 Spur ridge, brs. W.; descend.
 72.00 Wash, course W.; ascend.
 73.00 Thence along broken west slope, to
 79.25 Gulch, course SW. Ascend S. slope.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, marked on brass cap,
 1913 on S. rim,
 T 3 S R 30 E in N. half;
 S 5 in NW.,
 S 4 in NE.,
 S 9 in SE., and
 S 8 in SW. quadrant; from which,
 A pine, 11 ins. in diam., brs. N.84 $\frac{1}{4}$ ° E., 123 lks. dist., marked T 3 S R 30 E S 4 B T.
 A pine, 10 ins. in diam., brs. S.21 $\frac{1}{2}$ ° E., 79 lks. dist., marked T 3 S R 30 E S 9 B T.
 A cedar, 14 ins. in diam., brs. S.12 $\frac{1}{8}$ ° W., 65 lks. dist., marked T 3 S R 30 E S 8 B T.
 No other trees within limits; raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, west of corner. Pits impracticable.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering pine and cedar.
 Undergrowth, dense scrub oak, mesquite, catclaw and cacti.
 Mountainous land, 80 chs.

March 9, 1914.

March 5, 1914:
 From the corner of secs. 3, 4, 9 and 10, hereinbefore described, I run,
 West, on a random line, bet. secs. 4 and 9.
 0.29 Set flag for point for Tr. across deep broken rocky canyon, course SE. I regain line at a point on bench on west side of canyon, from which I lay off a base line S.20°42' E., 8.55 chs. to a point whence the flag brs. N.69°22' E.; distance is found from the following:
 $\sin. 90^\circ 04' \times 8.55 = 24.26$ chs.
 $\sin, 20^\circ 38'$
 which added to 0.29 chs. = 24.55 chs.
 24.55 Point for triangulation.
 40.00 Set temp. sec. cor.
 72.08 Point for triangulation, To determine dist. across steep broken, rocky W. slope, I set a flag to the west, on line on top of low spur, and from Pt. for Tr., I measure a base line N.18° 27' W., 5.57 chs. to a point whence the flag brs. S.55° 07' W. Distance is found from the following:
 $\sin. 73^\circ 34' \times 5.57 = 9.34$ chs.
 $\sin. 34^\circ 53'$
 which added to 72.08 chs. = 81.42 chs.; thence I E. 1.42 run east 1.42 chs. to



Partial Subdivision of Township 3 South, Range 30 East. 25.

Chains.

80.15 To the cor. of secs. 4, 5, 8 and 9, 1050 ft. below 19.45 ch. point.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar, pinon and oak.
 Undergrowth, dense scrub oak, mesquite and cacti.
 March 9, 1914.

February 6, 1914: At 7h. 30m. a.m., l.m.t., I set off 33°07' N. on the lat. arc; 15° 41' S. on the decl. arc; and determine a meridian with the solar at the original cor. of secs. 5, 6, 31 and 32, on the south bdy, of the Tp., hereinbefore described,

Thence I run,
 N. 0° 3' W., bet. secs. 31 and 32.
 Over rocky land, through dense undergrowth and scattering timber. Descend N. slope, 150 ft.
 4.60 Old wagon road, brs. NW. and SE.
 5.00 Gulch, course E. Ascend SE. slope, 190 ft.
 5.80 Same road, brs. NE. and SW.
 13.00 Spur ridge, slopes east; descend NE. slope, 175 ft.
 13.25 Trail, brs. NW. and SE.
 19.80 Same old road, brs. NW. and SE.
 20.00 Gulch, course SE.; ascend south slope, 250 ft. to
 33.15 Ridge, brs. NW. and SE.; descend NE. slope, 175 f.
 40.00 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{2}$ S 31 in W., and
 S 32 in E. half;
 raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, west of cor. No trees within limits. Pits impracticable.
 43.75 Gulch, course SE. Ascend S. slope, 155 ft. to
 48.80 Ridge, brs. NW. and SE.; descend NE. slope.
 57.50 Spur ridge, slopes NE.; descend NW. slope, 135 ft. to
 62.00 Canyon, course E.; ascend S. slope.
 67.75 Ascend along west slope.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. the ground, for cor. of secs. 29, 30, 31 and 32, marked on brass cap,
 1913 on S. rim,
 T 3 S S 30 in NW.,
 R 30 E S 29 in NE.,
 S 32 in SE., and
 S 31 in SW. quadrant;
 raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, west of corner. No trees within limits. Pits impracticable.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar.
 Undergrowth, dense mesquite, catclaw, scrub oak and cacti.
 Feb. 6, 1914.

Feb. 9, 1914:
 S. 89° 50' E., on a random line, bet. secs 29 and 32.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.97 Intersect N. and S. line 26 1/2 lbs. S. of the cor. of secs. 28, 29, 32 and 33. Thence I run, S. 89° 59' W. on true line, bet. secs. 29 & 32.
 Descend west slope, over rocky land, through dense undergrowth and scattering timber.
 10.50 Gulch, course NW.; ascend.
 17.00 Descend NW. slope.
 26.50 Spur ridge, slopes NW.; descend SW. slope.
 27.00 Top of cliffs, 165 ft. high, brs. NW. and SE.
 28.80 Foot of cliffs; enter river bottom, brs. N. and S. 700 ft.

26. Partial Subdivision of Township 3 South, Range 30 East.

Chains.	
	ft. below sec.cor.
32.40	Wagon road, brs.NE and SW.
32.50	San Francisco River, 240 lks.wide, 10 ins. deep, muddy water, gravel bottom, flows SW.
35.00	Ascend SE. slope.
39.985	Set an iron post 3 ft. long, 1 in. in diam., 18 ins. in the ground, on bedrock, supported by a mound of stone for $\frac{1}{4}$ sec.cor., marked on brass cap, 1913 on S.rim, $\frac{1}{4}$ S 29 on N., and S 32 in S.half; raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft. high, north of cor. No trees within limits. Pits impracticable.
41.85	Spur ridge, slopes south; continue along south slope.
46.60	Gulch, course SE. Ascend E. slope.
51.45	Foot of cliff, 40 ft high, brs. NW. and SE.
51.50	Top of cliff.
52.00	Spur ridge, slopes SE., 500 ft. above river; descend SW. slope, 100 ft. to
60.00	Gulch, course S. Ascend SE. slope, 150 ft
77.75	Spur ridge, slopes S.; descend west slope, 40 ft. to
79.97	To the cor. of secs. 29, 30, 31 and 32. Land, mountainous. Soil, rocky, 4th rate, with the exception of a narrow strip along the river, which is sandy loam, 1st rate. Timber, scattering cedar, with a fringe of cottonwood and sycamore along river. Undergrowth, dense mesquite, catclaw and cacti. Feb. 9, 1914/

	February 6, 1914: At the cor. of secs. 29, 30, 31 and 32, I set off $15^{\circ} 40'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $33^{\circ} 08' N.$
40.00	N. $89^{\circ} 49' W.$, on a random line, bet. secs. 30 and 31.
79.61	Set temp. $\frac{1}{4}$ sec.cor. Intersect the west bdy. of the Tp. of Secatehagon and Secatehagon (5th. Guide Meridian East) 19 lks. N. of the cor. of secs. 25, 30, 31 and 36, reestablished by me, as described in Book "B." Thence I run, S. $89^{\circ} 57' E.$, on a true line, bet. secs. 30 and 31. Over rocky land, through dense undergrowth and scattering timber; descend E. slope, 145 ft. to
5.00	Canyon, course SE. Ascend broken SW. slope, 280 ft. to
18.75	Broken rocky ridge, brs. NW and SE.; descend NE. slope, 235 ft. to.
28.00	Canyon, course SE.; ascend SW. slope, 270 ft.
39.61	Set an iron post 3 ft. long, 1 in. in diam., 12 ins. in the ground, on bedrock, supported by a mound of stone for $\frac{1}{4}$ sec.cor., marked on brass cap, 1913 on S.rim, $\frac{1}{4}$ S 30 in N., and S 31 in S.half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of corner. No trees within limits. Pits impracticable.
40.00	Rocky ridge, brs. NW. and SE.; descend E. slope.
75.60	Gulch, course SE., 930 ft. below ridge; ascend W slope, 80 ft. to
79.61	The cor. of secs. 29, 30, 31 and 32. Land, mountainous. Soil, rocky, 4th rate. Timber, scattering cedar and pinon. Undergrowth, dense scrub oak, mesquite, catclaw and cacti.

Partial Subdivision of Township 3 South, Range 30 East. 27.

Chains.

N.0°3'W., bet. secs.29 and 30.

Over rocky land, through dense undergrowth and scattering timber. Ascend SW. slope, 185 ft to

11.65 Ridge, brs. NW. and SE.; descend NE. slope, 90 ft. to

26.00 Gulch, course SE. Ascend S. slope, 75 ft. to

31.00 Spur ridge, slopes east; descend NE. slope, 100 ft. to

39.30 Head of draw, course E.; ascend SE. slope, 25 ft.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 14 ins. in the ground, on bedrock, supported by a mound of stone for $\frac{1}{4}$ sec.cor., marked on brass cap,

1913 in S rim,
 $\frac{1}{4}$ S 30 in W., and
 S 29 in E.half; from which,
 A cedar, 6 ins. in diam., brs.S.23 $\frac{3}{4}$ °E., 81 lks. dist., marked $\frac{1}{4}$ S 29 B. T.
 A cedar, 8 ins. in diam., brs.S.1 $\frac{1}{2}$ °W., 140 lks.dist., marked $\frac{1}{4}$ S30 B T.

41.50 Spur ridge, slopes NE.; descend N.slope, 255 ft.

48.55 Trail brs.E.and W.

49.85 Sycamore Creek, 4 lks.wide, 4 ins. deep, clear water, rocky bottom, flows E.; ascend SE. slope.

77.00 Foot of broken cliffs, 200 ft.high, brs.NE. and SW.

80.00 Set an iron post, 3 ft.long, 2 ins. in diam., 20 ins. in crevice of cliff; supported by a mound of stone, for the cor.of secs.19,20,29 and 30, marked on brass cap,

1913 on S.rim,
 T 3 S S 19 in NW.,
 R 30 E S 20 in NE.,
 S 29 in SE., and
 S 30 in SW.quadrant;

raise a mound of stone 2 ft.base, 1 $\frac{1}{2}$ ft. high, 8 ft. NW. of cor. No trees within limits; pits impracticable.

Land, mountainous.
 Soil, rocky, 4th bate.
 Timber, scattering cedar and pinon, with a fringe of sycamore along the creek.

Feb. 6, 1914.

Feb.10,1914: From the cor.of secs.20,21,28 and 29,here-
 inbefore described, I run,
 West, on a random line, bet. secs.20 and 29.

5.34 Set flag; point for Tr. on top of cliff, 200 ft. high, brs. N.20°E. and S.20°W. Impossible to continue chaining. I regain line at a point on a bluff, brs.NE. and S., about 40 ft.high on west side of river, from which, point I lay off a base line N.47° 53' E., 11.73 chs. to a point whence the flag brs. S.58° 02' E.; distance is found from the following:

$\sin. 105^\circ 55' \times 11.73 = 21.31$ chs.
 which added to $\sin. 31^\circ 58'$
 which added to 5.34 chs. = 26.65 chs.

Feb.10, 1914.

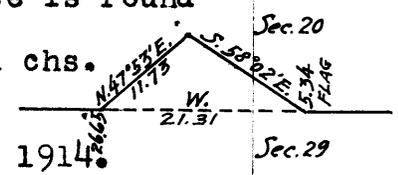
26.65 Note: At this point, Feb.12, 1914, at 7h. 30m. a.m., l. m. t., I set off 33° 08 $\frac{1}{2}$ ' N.on the lat.arc; 13°47 $\frac{1}{2}$ ' S. on the decl.arc; and determine a meridian with the solar.

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

79.84 Intersect the N. and S. line, 9 lks.south of the cor.of secs.19,20,29 and 30, I now return to the cor.of secs.20,21, 28 and 29, from which I run, N.89°56'W., on a true line, bet. secs.20 and 29. Descend NW. slope, over rocky land, through dense undergrowth and scattering timber.

5.34 Top of bluff, brs.N.20°E. and S.20°W. on east side of San Francisco River; descend abruptly 200 ft.to

6.00 (Approx.) Center of San Francisco River, 260 ft.below sec.cor. Gravel bottom, flowing muddy water, varying in depth from a few inches to several feet. River comes from the NE. to this point; thence west along line.



28. Partial Subdivision of Township 3 South, Range 30 East.

Chains.

- 20.35 (Approx.) wagon road, brs.N.and S.
 26.50 (Approx.) Leave river, course S. Ascend abruptly 40 ft to
 26.65 Top of bluff, brs.NE and E. on west side of river. Ascend east slope.
 35.50 Spur ridge, slopes SE., 300 ft. above river; continue along rolling, broken south slope.
 39.92 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor., marked on brass cap, 1913 on S.rim, $\frac{1}{4}$ S 20 in N., and S 29 in S.half; raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft. high, N.of cor. No trees within limits. Pits impracticable.
 49.00 Draw, course SE.; ascend SE. slope, 290 ft.
 50.00 Trail, brs.NE. and SW.
 63.50 Top of ascent; continue along rolling south slope.
 69.00 Draw, course SE. Ascend SE. slope, 300 ft.to
 79.84 The cor.of secs.19,20,29 and 30.
 Land, mountainous.
 Soil, rocky, 4th rate, with the exception of a narrow strip along the river, which is sandy loam, 1st rate,
 Timber, scattering cedar, with a fringe of cottonwood and sycamore along the river.
 Undergrowth, dense catclaw, mesquite, scrub oak and cacti.

Feb.12, 1914.

- Feb. 7, 1914: At 8h. 05m. a.m., l.m.t., I set off $33^{\circ} 08\frac{1}{2}'$ N. on the lat.arc; $15^{\circ} 24'$ S. on the decl.arc; and determine a meridian with the solar at the cor.of secs. 19,20,29 and 30; thence I run, N. $89^{\circ} 57'$ W., on a random line, bet. secs.19 and 30.
 40.00 Set temp. $\frac{1}{4}$ sec.cor.
 79.64 Intersect the west bdy.of the Tp. (5th.Guide Meridian East) 5 lks.south of the corner of secs. 19,24, 25 and 30, reestablished by me, as described in Book "B."
 Thence I run, S. $89^{\circ} 55'$ E., on a true line, bet. secs.19 and 30.
 Over rocky land, through dense undergrowth and scattering timber. Ascend SW. slope, 75 ft.to
 3.15 Spur ridge, slopes SE., 75 ft.above sec.cor.; descend NE. slope, 440 ft.to
 18.00 Gulch, course SE.; ascend west slope, 40 ft.to
 19.00 Rocky spur, slopes SE.; descend NE. slope, 40 ft.to
 20.45 Gulch, course SE. Ascend SW. slope, 155 ft.to
 28.90 Spur ridge, slopes SE.; descend SE. slope, 355 ft.to
 37.65 Gulch, course S.; ascend SW. slope, 90 ft.
 39.64 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec.cor., marked on brass cap, 1913 on S rim, $\frac{1}{4}$ S 19 in N., and S 30 in S.half; from which,
 An oak, 8 ins. in diam., brs.N. 1° W., 127 lks. dist., marked $\frac{1}{4}$ S 19 B T.
 An oak, 10 ins. in diam., brs.S. $14\frac{1}{2}^{\circ}$ W., 58 lks. dist., marked $\frac{1}{4}$ S 30 BT.
 John Fisher's house, brs.S. 11° W., about 12.00 chs. dist.
 45.15 Spur ridge, slopes S.; descend SE. slope, 150 ft.to
 55.65 Gulch, course SE. Ascend SW. slope, 240 ft.to
 65.55 Spur ridge. slopes S.; continue along rolling, broken S.slope.
 69.65 Spur ridge, slopes S.; descend SE. slope, 255 ft.to
 79.64 The cor.of secs.19,20,29 and 30.
 Land, mountainous.
 Soil, rocky, 4th rate,
 Timber, scattering with patches of heavy pinon, oak and cedar.

Feb.7, 1914.

Partial Subdivision of Township 3 South, Range 30 East. 29.

Chains.

- Feb. 12, 1914.
 N $0^{\circ}3'W.$, bet. secs. 19 and 20.
 Through dense undergrowth and scattering timber. Ascend
 broken, rocky SE. slope, 190 ft. to
 7.00 Spur ridge, slopes E.; descend NE. slope.
 10.00 Rocky ridge, brs. NE and SW.
 Note: February 12, 1914: At this point, I set off 13°
 $45\frac{1}{2}'S.$ on the decl. arc; and at apparent noon, I observe
 the sun on the meridian; the resulting lat. is $33^{\circ}09'$
 N.
 Descend N. slope, 320 ft. to
 17.00 Bottom of canyon, course E.; ascend SE. slope, 500 ft. to
 32.30 Ridge, brs. E. and W.; descend NE. slope, 70 ft. to
 35.75 Bottom of canyon, course E.; ascend SE. slope, 150 ft.
 40.00 Set an iron post 3 ft. long, 1 in. in diam., 20 ins. in
 the ground, on bedrock, supported by a mound of stone
 for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S 19 on W., and
 S 20 in E. half; from which,
 A pinon 8 ins. in diam., brs. N. $2^{\circ}E.$, 44 lks.
 dist., marked $\frac{1}{4}$ S 20 BT.
 A pinon, 10 ins. in diam., brs. S. $89^{\circ}W.$, 19
 lks. dist., marked $\frac{1}{4}$ S 19 B T.
 42.00 Spur ridge, slopes E. Descend NE. slope, 400 ft. to
 58.00 Bottom of canyon, course E. Ascend SW. slope, 640 ft. to
 75.90 Rocky ridge, brs. NW and SE.; descend NE. slope.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in
 the ground, on bedrock, supported by a mound of stone
 for the cor. of secs. 17, 18, 19 and 20, marked on brass
 cap,
 1913 on S. rim,
 T $\frac{3}{4}$ S S 18 in NW.,
 R 30 E S 17 in NE.,
 S 20 in SE., and
 S 19 in SW. quadrant; from which,
 A pinon, 6 ins. in diam., brs. S. $58^{\circ}W.$, 30 lks.
 dist., marked T $\frac{3}{4}$ S R 30 E S 19 B T.
 A pinon, 10 ins. in diam., brs. N. $73^{\circ}W.$, 42 lks.
 dist., marked T $\frac{3}{4}$ S R 30 E S 18 B T.
 Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, west of
 cor. No other trees within limits. Pits impracti-
 cable.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering with patches of heavy pinon, cedar
 and oak.
 Undergrowth, dense scrub oak, catclaw, mesquite, manzan-
 ita and cacti.

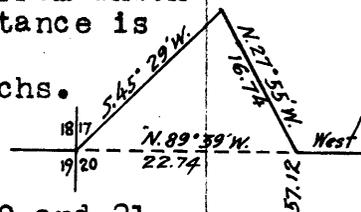
- The true point for cor. of secs. 16, 17, 20 and 21, being
 inaccessible, from a point 35 lks. N. of cor. point,
 I run,
 West, on a random line, bet. secs. 17 and 20.
 By stadia measurement across deep box canyon, course S.,
 rod reading 6.500 ft.; ratio 1 ft. = 2 chs. Focal constant
 1.025 ft. vertical angle plus $13^{\circ}35'$ therefore,
 the distance is $.9448 \times 2 \times 6.500$ plus $.016 = 12.30$
 chs.
 12.30 Rod point; thence run south, 35 lks., and continue random
 line west
 19.71 Thence by stadia measurement across Silver Creek Can-
 yon, course SE., rod reading 6.157 ft. Ratio 1 ft. =
 2 chs. Focal constant, 1.025 ft.; angle of depress-
 ion 3° Therefore, the distance is $.9973 \times 2 \times$
 6.157 plus $.016 = 12.30$ chs., which added to 19.71
 chs. = 32.01 chs.
 32.01 Rod point. Thence by stadia measurement across steep

30. Partial Subdivision of Township 3 South, Range 30 East.

Chains.

- rocky N. slope, rod reading 2.793 ft. Ratio 1 ft. = 2 chs. Focal constant, 1.025 ft. Angle of depression = $2^{\circ} 20'$; therefore, the distance is $.9983 \times 2 \times 2.793$ plus $.016 = 5.590$ chs., which added to 32.01 chs. = 37.60 chs.
- 37.60 Rod point on spur ridge.
40.00 Set temp. $\frac{1}{4}$ sec. cor.
57.12 Point for triangulation, flag on the corner of secs. 17, 18, 19 and 20, brs. N. $89^{\circ} 39' W.$; lay off a base line with stadia, N. $27^{\circ} 55' W.$, 16.74 chs. to a point, from which the flag on sec. cor. bears S. $45^{\circ} 29' W.$; distance is found from the following:
$$\frac{\sin. 73^{\circ} 24' \times 16.74}{\sin. 44^{\circ} 52'} = 22.74 \text{ chs.}$$

which added to 57.12 chs. = 79.86 chs.
- 79.86 Intersect the cor. of secs. 17, 18, 19 and 20. The true point for the corner of secs. 16, 17, 20 and 21, being inaccessible, from a point 35 lks. north of cor. point, I run, N. $89^{\circ} 54' W.$, on an offset line, bet. secs. 17 and 20. Over rocky land, through dense undergrowth and scattering timber, across box canyon, course S. about 400 ft. deep. At a point 12.30 chs. N. $89^{\circ} 54' W.$, I run south 35 lks. to sec. line, at
- 12.30 A point on spur ridge, slopes SE., 180 ft. above true point for sec. cor. Thence on true sec. line, N. $89^{\circ} 54' W.$, continuing measurement from cor. point. Descend SW. slope, 50 ft. to
- 16.00 Head of gulch, course SE.; ascend SE. slope, 30 ft. to
19.71 Spur ridge, slopes S. Descend abruptly into rocky box canyon, about 400 ft. deep.
25.75 (Approx.) bottom of canyon, Silver Creek, a small stream of clear water, flowing south. Ascend abruptly 470 ft. to
32.01 Rocky spur ridge, slopes NE.; thence over broken cliffy north slope. Ascend 30 ft. to
37.60 A point on edge of canyon; ascend NE. slope, 170 ft. to
39.93 Set an iron post 3 ft. long, 1 in. in diam., 12 ins. in the ground, on bedrock, supported by a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap,
1913 on S. rim,
 $\frac{1}{4}$ S 17 on N., and
S 20 on S. half; from which,
A pinon, 10 ins. in diam., brs. S. $52^{\circ} W.$, 150 lks. dist., marked $\frac{1}{4}$ S 20 BT.
A cedar, 6 ins. in diam., brs. N. $43^{\circ} W.$, 26 lks. dist., marked $\frac{1}{4}$ S 17 B T.
- 52.00 Spur ridge, slopes north; descend NW. slope, 100 ft. to
55.75 Gulch, course N.; ascend NE. slope, 25 ft. to
57.12 Spur ridge, slopes N.; descend steep NW. slope.
65.00 (Approx.) gulch, course N.; ascend up a steep rocky, cliffy NE. slope to
- 79.86 The cor. of secs. 17, 18, 19 and 20, 700 ft. above 57.12 chain point.
Land, mountainous.
Soil, rocky, 4th rate.
Timber, scattering pinon and cedar.
Undergrowth, dense scrub cedar, catclaw, manzanita, cacti and mesquite.



- 40.00 N. $89^{\circ} 55' W.$, on a random line, bet. secs. 18 and 19,
Set temp. $\frac{1}{4}$ sec. cor.
79.64 Intersect the west bdy. of the Tp. (5th. Guide Meridian East) 30 lks. north of the corner of secs. 13, 18, 19 and 24, reestablished by me, as described in Book "B."
Thence I run,
N. $89^{\circ} 52' E.$, on a true line, bet. secs. 18 and 19.

31. Partial Subdivision of Township 3 South, Range 30 East. 31.

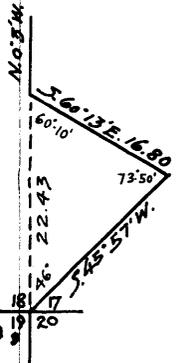
Chains.

Over rocky land, through scattering timber and dense undergrowth. Descend SE. slope, 160 ft. to
 7.50 Gulch, course NE.; ascend rolling N. slope, 250 ft. to
 33.30 Top of ascent; descend N. slope.
 37.25 Ridge. brs. N. 60° E. and S. 60° W.; descend SE. slope.
 39.64 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S 18 on N., and
 S 19 on S. half; from which,
 A juniper, 12 ins. in diam., brs. S. 87° E., 179 lks. dist, marked $\frac{1}{4}$ S 19 B T.
 A pinon, 8 ins. in diam., brs. N. 19 $\frac{1}{4}$ ° W., 44 lks. dist., marked $\frac{1}{4}$ S 18 B T.
 52.00 Foot of descent, 200 ft. below 33.30 chain point; ascend SW. slope, 170 ft. to
 58.00 Rocky ridge, brs. east, and N. 60° W? Continue along top of broken rocky ridge.
 75.24 Offset south 284 lks. to avoid cliffs; thence N. 89° 52' E., 440 lks.; thence north 284 lks. to
 79.64 The cor. of secs. 17, 18, 19 and 20, 90 ft. below 75.24 chain point.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering pinon and cedar.
 Undergrowth, dense scrub oak, manzanita, mesquite, cat-claw and cacti.
 Feb. 12, 1914.

Feb. 16, 1914:
 N. 0° 3' W., bet. secs. 17 and 18. It being impossible to accurately chain the beginning of this line, I set a flag at corner of secs. 17, 18, 19 and 20, and proceed to a point on the sec. line, bet. secs. 17 and 18, about 3.00 chs. north of and 200 ft. above Silver Creek, which is a stream of clear water, about 6 lks. wide, and 6 ins. deep, flowing east at this point. At 9h. 15m., a.m., l.m.t., I set off 33° 10' N. on the lat. arc; 12° 26' S. on the decl. arc; and determine a meridian with the solar. Thence I lay off a base line S. 60° 13' E., 16.80 chs. to a point, from which the flag on the sec. cor. bears S. 45° 57' W.; distance is found from the following:

$$\frac{\sin. 73^{\circ} 50' \times 16.80}{\sin. 46^{\circ} 00'} = 22.43 \text{ chs.}$$

22.43 Point for Triangulation, 660 ft. below sec. cor.; ascend SW. slope.
 31.60 Foot of cliff, 80 ft. high, brs. E and W.
 32.00 Top of cliffs.
 40.00 Set an iron post 3 ft. long, 1 in. in diam., 10 ins. in the ground, on bedrock, supported by a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S 18 on W., and
 S 17 on E. half;
 raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, west of cor. No trees within limits. Pits impracticable.
 41.00 Head of draw, course SW.; ascend SE. slope.
 57.00 Ridge, brs. E and W., 405 ft. above 22.43 chain point; descend N. slope, 230 ft. to
 68.80 Gulch, course E.; ascend SE. slope, 80 ft.
 74.10 Trails br. E and W.
 75.00 Spur ridge, slopes E.; descend NE., 135 ft. to
 79.00 Draw, course E.; ascend SE. slope.
 80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in the ground, on bedrock, supported by a mound of stone, for the cor. of secs. 7, 8, 17 and 18, marked on brass cap,
 1913 on S. rim,



68.00

32. Partial Subdivision of Township 3 South, Range 30 E.

Chains.	
	<p>T 3 S S 7 in NW., R 30 E S 8 in NE., S 17 in SE., and S 18 in SW. quadrant; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, west of corner. No trees within limits. Pits impracticable. Land, mountainous. Soil, rocky, 4th rate. Timber, scattering pinon and cedar. Undergrowth, scattering scrub oak, mesquite, catclaw and cacti.</p>

	<p>S. $89^{\circ}55'$ E., on a random line, bet. secs. 8 and 17. Set temp. $\frac{1}{4}$ sec. cor.</p>
40.00	Intersect N. and S. line, 21 lks. N. of the cor. of secs.
80.13	8, 9, 16 and 17.
	Thence I run,
	N. $89^{\circ}46'$ W., on a true line, bet. secs. 8 and 17. Over rocky land, through scattering timber and undergrowth. Descend SW. slope, 80 ft.
3.80	Trail, brs. N. and S.
10.25	Gulch, course SE.; ascend east slope, 180 ft. to
18.00	Ridge, brs. N. and S.; descend west slope, 205 ft. to
25.85	Gulch, course S.; ascend E. slope, 500 ft.
27.90	Bartlett's house, brs. north 50 lks. dist.
28.65	Corral, brs. S. 20 lks. dist.
34.85	Trail, brs. NE and SW.; ascend SE. slope.
40.065	Set an iron post 3 ft. long, 1 in. in diam., 16 ins. in the ground, on bedrock, supported by a mound of stone for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913. on S. rim, $\frac{1}{4}$ S 8 on N., and S 17 on S. half; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, north of corner, No trees within limits. Pits impractica- ble.
43.00	Spur ridge, slopes south; descend SW. slope, 85 ft. to
47.00	Gulch, course S.; ascend E. slope, 25 ft. to
49.00	Spur ridge, slopes south; descend SW. slope, 20 ft. to
51.00	Enter gulch, course SE.; ascend up gulch.
57.00	Leave gulch, from SW.; ascend SE. slope, 425 ft. to cor.
69.05	Trail, brs. NE and SW.
80.13	The cor. of secs. 7, 8, 17 and 18. Land, mountainous. Soil, rocky, 4th rate. Timber, scattering cedar and pinon. Undergrowth, dense scrub oak, mesquite, catclaw and cacti.

	<p>S. $89^{\circ}52'$ W., on a random line, bet. secs. 7 and 18. Set temp. $\frac{1}{4}$ sec. cor.</p>
40.00	Intersect the west bdy. of the Tp. (5th. Guide Meridian East)
79.70	9 lks. south of the cor. of secs. 7, 12, 13 and 18, reestab- lished by me, as described in Book "B."
	Thence I run,
	N. $89^{\circ}56'$ E., on a true line, bet. secs. 7 and 18. Over rolling bench, drains S.; rocky land, through dense undergrowth and scattering timber.
22.50	Descend east slope.
29.25	Gulch, course SE., 190 ft. below bench; ascend SW. slope, 110 ft. to
35.00	Spur ridge, slopes south; descend SE. slope, 20 ft. to
38.50	Gulch, course SW.; ascend west slope, 200 ft.
39.70	Set an iron post 3 ft. long, 1 in. in diam., 6 ins. in the ground, on bedrock, supported by a mound of stone, for $\frac{1}{4}$ sec. cor., marked on brass cap, 1913 on S. rim,

Partial Subdivision of Township 3 South, Range 30 East. 33.

Chains.

$\frac{1}{4}$ S 7 on N., and
 S 18 on S. half;
 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of
 cor. No trees within limits. Pits impracticable.
 51.00 Ridge, brs. N. and S.; descend east slope.
 61.70 Rocky ledge, 10 ft. high, brs. N. and S.; descend SE slope.
 79.70 The cor. of secs. 7, 8, 17 and 18, 830 ft. below ridge.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering pinon and cedar.
 Undergrowth, dense scrub oak, mesquite, catclaw and cacti.
 Feb. 16, 1914.

March 10, 1914: At 8h. 10m. a.m., l.m.t., I set off $33^{\circ} 10\frac{1}{2}'$
 N. on the lat. arc; $4^{\circ} 15' S.$ on the decl. arc; and de-
 termine a meridian with the solar at the cor. of secs.
 7, 8, 17 and 18.

Thence I run,
 N. $0^{\circ} 3' W.$, bet. secs. 7 and 8.
 Over rocky land, through dense undergrowth and scattering
 timber.
 Ascend SE slope, 70 ft. to
 3.00 Ridge, brs. E. and W.; descend NE slope, 20 ft. to
 7.50 Draw, course E.; ascend SE slope, 60 ft. to
 11.00 Spur ridge, slopes east; descend N. slope, 95 ft. to
 16.00 Gulch, course E.; ascend SE slope, 115 ft. to
 20.00 Ridge, brs. E. and W.; descend NE slope, 180 ft. to
 38.50 Draw, course SE.; ascend SE slope, 190 ft.
 40.00 Set an iron post, 3 ft. long, 1 in. in diam., 6 ins. in
 the ground, on bedrock, supported by a mound of stone
 for $\frac{1}{4}$ sec. cor., marked on brass cap,

1913 on S. rim,
 $\frac{1}{4}$ S 7 on W., and
 S 8 on E. half; from which,
 A cedar, 10 ins. in diam., brs. S. $31\frac{1}{4}^{\circ} E.$, 83
 lks. dist., marked $\frac{1}{4}$ S 8 B T.
 A cottonwood, 12 ins. in diam., brs. S. $88^{\circ} W.$,
 302 lks. dist., marked $\frac{1}{4}$ S 7 B T.
 52.00 Spur ridge, slopes east; descend NE slope, 60 ft. to
 57.00 Draw, course E.; ascend S. slope, 95 ft. to
 63.00 Ridge, brs. NW. and SE.; descend NE slope, 160 ft. to
 69.50 Canyon, course SE.; ascend SW. slope, 165 ft. to
 77.50 Ridge, brs. NW. and SE.; descend NE slope.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam., 24 ins. in
 the ground, for cor. of secs. 5, 6, 7 and 8, marked on
 brass cap,

1913 on S. rim,
 T 3 S S 6 in NW.,
 R. 30 E S 5 in NE.,
 S 8 in SE., and
 S 7 in SW. quadrants; from which,
 A juniper, 6 ins. in diam., brs. S. $78^{\circ} E.$, 56 lks.
 dist., marked T 3 S R 30 E S 7 B T.
 No other trees within limits; raise a mound of stone 2 ft.
 base, $1\frac{1}{2}$ ft. high, west of cor. Pits impracticable.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar, juniper and pinon.
 Undergrowth, dense scrub oak, mesquite and cacti.
 March 10, 1914.

March 11, 1914: At 8h. a.m., l.m.t., I set off $33^{\circ} 11' N.$ on
 the lat. arc; $3^{\circ} 51' S.$ on the decl. arc; and determine
 a meridian with the solar at the cor. of secs. 5, 6, 7
 and 8; thence I run,

34. Partial Subdivision of Township 3 South Range 30 East.

Chains.

- S. $89^{\circ} 46' E.$, on a random line, bet. secs. 5 and 8.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 79.89 Intersect N. and S. line at the cor. of secs. 4, 5, 8 and 9.
 Thence I run,
 N. $89^{\circ} 46' W.$, on a true line, bet. secs. 5 and 8.
 Over rocky land, through scattering timber and dense under-
 growth. Descend SW. slope, 40 ft. to
 4.00 Gulch, course S.; ascend E. slope.
 5.00 Trail, brs. NE and SW.
 10.00 Ascend SE slope.
 21.80 Offset south 150 lks. to avoid cliffs, 100 ft. high, brs.
 NE and SW., 460 ft. above gulch; thence N. $89^{\circ} 46' W.$
 31.50 Offset north 150 lks. to the true line, at foot of cliffs,
 bear NW. and SE.; descend SW. slope, 285 ft.
 39.945 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap,
 1913 on S. rim,
 $\frac{1}{4}$ S 5 in N., and
 S 8 in S. half; from which,
 An oak, 8 ins. in diam., brs. N. $58\frac{1}{4}^{\circ} E.$, 26 lks.
 dist., marked $\frac{1}{4}$ S 5 B T.
 An oak, 6 ins. in diam., brs. S. $44\frac{1}{4}^{\circ} E.$, 56 lks.
 dist., marked $\frac{1}{4}$ S 8 B T.
 40.70 Sardine Creek, clear water, 10 lks. wide, 4 ins. deep, flows
 SE. Ascend NE slope, 845 ft.
 40.80 Trail, brs. NW and SE.
 73.00 Spur slopes NE.; descend NW. slope.
 79.00 Head of draw, course NE.; ascend NE slope, 5 ft. to
 79.89 The cor. of secs. 5, 6, 7 and 8.
 Land, mountainous.
 Soil, rocky, 4th rate.
 Timber, scattering cedar, oak and pinon, with a little
 cottonwood and sycamore along the creeks.
 Undergrowth, dense scrub oak, mesquite, cacti, catclaw.
-
- S. $89^{\circ} 56' W.$, on a random line, bet. secs. 6 and 7.
 24.00 Note: At this point, March 11, 1914, I set off $3^{\circ} 48' S.$ on
 the decl. arc; and at apparent noon, I observe the sun
 on the meridian; the resulting lat. is $33^{\circ} 11' N.$
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 43.76 A pt. from which I stadia over broken, rocky, cliffy north
 slope, rod reading 6.108 ft. Ratio 1 ft. = 2 chs. Focal
 constant, 1.025 ft. Level. Therefore, the dist.
 is 6.108×2 plus $.016 = 12.23$ chs., which added to
 43.76 chs. = 55.99 chs.
 55.99 A pt. from which I stadia over broken rocky N. slope.
 Rod reading, 3.985 ft. Ratio 1 ft. = 2 chs. Focal constant
 1.025 ft.; angle of depression = $13^{\circ} 2'$; therefore
 the distance is $.9491 \times 2 \times 3.985$ plus $.016 = 7.58$
 chs., which added to 55.99 chs. = 63.57 chs.
 63.57 Rod point.
 79.85 Intersect the west bdy. of the Tp. (5th Guide Meridian
 East), 14 lks. north of the cor. of secs. 1, 6, 7 and 12,
 reestablished by me as described in Book "B."
 Thence I run,
 N. $89^{\circ} 50' E.$, on a true line, bet. secs. 6 and 7.
 Over rocky land, through scattering timber and dense
 undergrowth. Descend east slope, 60 ft. to
 2.15 Draw, course NE.; ascend SW. slope, 15 ft. to
 2.75 Spur slopes north; descend SE. slope, 55 ft. to
 4.65 Gulch, course N. Ascend NW. slope, 405 ft. to
 16.08 Rocky spur ridge, slopes north; ascend over broken rocky
 north slope, 115 ft. to
 23.66 Rocky spur, slopes NE.; thence across steep rocky, cliffy
 north slope.
 35.89 Ascend NW. slope, 20 ft. to
 36.15 Spur, slopes N.; descend NE. slope, 140 ft.
 39.65 Set an iron post 3 ft. long, 1 in. in diam., 5 ins. in
 the ground, on bed rock, supported by a mound of stone
 for $\frac{1}{4}$ sec. cor., marked on brass cap,

Partial S. bdivision of Township 3 South, Range 30 East. 35.

Chains.

1913 on S rim,

$\frac{1}{4}$ S 6 on N., and

S 7 on S. half; from which,

A pinon, 6 ins. in diam., brs. N. $35\frac{1}{4}^{\circ}$ E., 158 lks. dist., marked $\frac{1}{4}$ S 6 B T.

A pinon, 6 ins. in diam., brs. S. 72° E., 40 lks. dist., marked $\frac{1}{4}$ S 7 B T.

39.85 Head of draw, course N.; continue along N. slope.

42.65 Head of draw, course NW.; ascend NW. slope.

49.65 Rim rock, 15 ft. high, brs. N. and S.; ascend SW. slope.

55.65 Top of ascent, 320 ft. above draw; thence along south slope.

60.00 Ridge, brs. E. and N. 80° W.; thence along ridge.

62.90 Top of cliffs, 40 ft. high, brs. NE and SW.

63.15 Foot of cliffs; descend SE. slope.

75.75 Ridge, brs. NW and SE.; descend NE. slope.

79.65 The cor. of secs. 5, 6, 7 and 8, 380 ft. below top of cliffs.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, scattering pinon, cedar and juniper.

Undergrowth, dense scrub oak, mesquite and cacti.

March 11, 1914.

March 10, 1914.

N. $0^{\circ}3'$ W., on a random line, bet. secs. 5 and 6.

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

Note: At this point, March 10, 1914, I set off $4^{\circ}11\frac{1}{2}'$ S. on the decl. arc; and at apparent noon, I observe the sun on the meridian; the resulting lat. is $33^{\circ}11\frac{1}{2}'$ N.

80.03 Intersect the N. bdy. of the Tp., 21 lks. west of the cor. of secs. 5, 6, 31 and 32, established by me, as described in Book "A."

Thence I run,

S. $0^{\circ}6'$ W., on a true line, bet. secs. 5 and 6.

Over rocky land, through scattering timber and dense undergrowth. Descend SE. slope, 245 ft. to

9.00 Gulch, course SW. Ascend NW. slope, 110 ft. to

Partial Subdivision of Tp. 3 S. R. 30 E.

Chains

- 23.20 Spur, slopes SW. descend. SE. slope, 1440 ft. to top of cliff.
- 38.00 Gulch, course SW., ascend SW. slope, 25 ft. to top of cliff.
- 39.00 Spur, slopes W., descend SW. slope, ascend SE. slope.
- 40.03 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap 1913 on S. rim
 $\frac{1}{4}$ S 6 on W. half and
 $\frac{1}{4}$ S 5 on E. half; from which
A cedar, 8 ins. in diam., bears N. $58\frac{3}{4}^{\circ}$ E., 71 lks. dist., marked $\frac{1}{4}$ S 5 B T.
A pinon, 6 ins. in diam., bears S. $84\frac{1}{2}^{\circ}$ W., 61 lks. dist., marked $\frac{1}{4}$ S 6 B T.
- 45.73 Top of cliff, 50 ft. high, bears NW. and SE.,
- 46.25 Foot of cliff.
- 51.63 Trail, bears E. and W.
- 51.70 Sardine creek, clear water, 6 lks. wide, 4 ins. deep, 225 ft. below spur, ascend NE. slope.
- 64.50 Spur, slopes NE, descend.
- 68.50 Draw, course NE, ascend.
- 72.00 Spur, slopes NE, descend.
- 80.03 The cor. of secs. 5, 6, 7 and 8, 725 ft. above creek. Land, mountainous. Soil, rocky; 4th rate. Timber, scattering cedar and pinon. Undergrowth, dense scrub oak, mesquite, cacti and catclaw. March 10. 1914.

General Description.

This township is nearly all mountainous, and the soil is rocky 4th rate, with the exception of a narrow strip along the San Francisco river, which is sandy loom 1st. rate, is covered with a scattering growth of rich and nutritious grass, good grazing.

Cottonwood, sycamore and ash are found along the San Francisco river and along the creeks, the township is covered with a scattering growth of pinon, juniper and cedar, timber with small patches of heavy timber.

There are several settlers in this township, there is no agricultural land in the unsurveyed sections.

William B. Kimmel

U.S. Surveyor.

Boundaries of T. 3 S., R. 30 E.
 (Surveyed portion)
 Latitudes, departures and closing errors.

Line designated	True course	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
Subdivisional Bdy.	West	320.00				320.00
	S.0° 2'E.	240.00		240.00	.14	
South bdy. of Tp.	West	40.36				40.36
	N.89°40'W.	39.64	.23			39.64
	N.89°49'W.	79.89	.26			79.89
West bdy. of Tp. (5th Guide Mer. E.)	North	480.00	480.00			
North bdy. of Tp.	N.89°59'E.	479.83	.14		479.83	
East bdy. of Tp.	South	240.00		240.00		
Convergency					.33	
Totals			480.63	480.00	480.30	479.89
			480.00		479.89	
Error in Latitude			0.63			
			Error in Departure		0.41	

William B. Kimmel,

U.S. Surveyor.

40 164

FOR FINAL OATH OF UNITED STATES SURVEYOR.
See Book "D."

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 Ariz. June 19, 1915

The foregoing field notes of the survey of *part of the*
Subdivision lines of
Township 3 South Range 30 East
of the Gila and Salt River Base & Meridian
in the State of Arizona
and retracement of part of the South bdy. of said township.

executed by *William B. Kimmel, U.S. Surveyor*
under his special instructions dated *Feb. 18, 1913 for Group 26*, ~~and~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys ^{& retracements} they describe, are hereby approved.

Frank S. Ingalls
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.