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BOOK "ZA"

BOOK 2677

FIELD NOTES

OF THE SURVEY OF
A PORTION OF

Subdivision Lines and RESURVEY of a PORTION of the

West Boundary of Tp. 12 S. Rg. 20 E.

Of the Gila and Salt River Base and Meridian,

In the State of Arizona.

EXECUTED BY

John E. Hesse

In the capacity of U. S. Surveyor, under instructions dated May 23rd, 1912,
issued by the United States Surveyor General to govern surveys included in
Group No. 18, which were approved by the Commissioner of the General Land
Office, June 20th, 1912, pursuant to authority contained in the Act of
Congress dated June 23rd, 1913.

and resurvey
Survey, commenced September 16, 1913

and resurvey
Survey, completed September 27, 1913

BOOK 2677

INDEX DIAGRAM.

Township _____, Range _____

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a portion of the
Resurvey of West boundary of T12S R20E.

Chains.

September 16, 1913. At 7h.00m a.m., l.m.t., I set off $32^{\circ}20'N$ on the lat. arc; $2^{\circ}47'N$ on the decl. arc; and determine with the solar a meridian at the cor. of Ts. 12 and 13 S, R19E, formerly cor. of Tps. 12 & 13 S, R. 19 & 20 E, but recently changed by me as described in Book "Z". Thence I run random line North, on the East bdy. of sec. 36, T.12S, R.19E. Over mountainous land through dense brush. Ascend.

0.30 Ridge bears NW and SE. Descend.

12.30 Cross wash 20 lks. wide course W. Ascend.

23.40 Ridge bears E and W. Descend.

28.30 Cross wash 20 lks. wide course SW. Ascend.

39.81 Traces of old mound bears W, 6 lks. dist. I destroy all traces of old $\frac{1}{4}$ sec. cor. and re-establish it in its original position as follows-
Set a granite stone, 18 x 10 x 8 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face.
Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
The course of this $\frac{1}{2}$ mile is therefore N. $0^{\circ}05'W$ and the dist. is 39.81 chs. Thence I run, from $\frac{1}{4}$ sec. cor., on random line North, on East bdy. of sec. 36, T.12S, R.19E, on $\frac{1}{2}$ mile Ascend over mountainous land through dense brush.

11.70 Ridge bears NE and SW. Descend.

26.70 Cross wash 12 lks. wide course SW. Ascend.

34.40 Ridge bears NE and SW. Descend.

39.30 Old cor. of secs. 25, 30, 31 & 36, which is a post marked and witnessed as described by the Surveyor General, bears W 62 lks. As the post is poorly set and the marks nearly obliterated I re-establish it as follows-
Set a granite stone, 18 x 14 x 6 ins., 12 ins. in the ground, for cor. of secs. 25 and 36, marked with 5 notches on N. and 1 notch on S. edge.
Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
The course of this $\frac{1}{2}$ mile is therefore N. $0^{\circ}53'W$, and the dist. is 39.30 chs.
Land, mountainous.
Soil, gravelly and rocky 3rd and 4th rate.
No timber.
Undergrowth, mesquite, catclaw, cacti.

NOTE: ~~September 16, 1913.~~ At this cor. I set off $2^{\circ}40'N$ on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is $32^{\circ}20\frac{1}{2}'N$.

September 16, 1913.

Partial Subdivision of T12S R20E.

Chains.

Survey commenced September 18, 1913 and was executed with a W. and L.E. Gurly transit, not numbered, with solar attachment. The horizontal limb is provided with one double vernier, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

This instrument was approved by the Supervising Surveyor, August 28, 1913.

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

At the S end of the meridian, previously established in my camp, I set off $32^{\circ}20\frac{1}{2}'N$ on the lat. arc; $1^{\circ}50\frac{1}{2}'N$ on the decl. arc; and at 5h.00m p.m., l.m.t., I determine a meridian with the solar, marking a point thereof on the stone already set 5 chs, N of my station; this mark falls 0.3 ins. W of the meridian established by observation on Polaris.

September 18, 1913.

September 19, 1913. At 7h.00m a.m., l.m.t., I set off $32^{\circ}20\frac{1}{2}'N$ on the lat. arc; $1^{\circ}37'N$ on the decl. arc; and at the S end of the meridian, previously established in my camp, I determine with the solar a meridian and mark a point thereof on the stone already set 5 chs. N of my station; this mark falls 0.3 ins. E of the meridian established by Polaris observations.

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

September 18, 1913.

September 20, 1913. At 8h.00m a.m., l.m.t., I set off $32^{\circ}20'N$ on the lat. arc; $1^{\circ}35'N$ on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 35 and 36, on S bdy. of Tp., recently estab. by me as described in Book "Z", Thence I run

N $0^{\circ}01'W$ bet secs. 35 and 36.

Over mountainous land through scattered timber and dense brush. Ascend.

- 8.70 Ridge from high peak to the NE, bears NE and SW. Descend.
- 9.10 Cross wire fence bears NE and SW.
- 16.80 Cross wash 8 lks. wide course NE. Ascend.
- 24.00 Descend.
- 31.60 Cross wash 10 lks. wide course NW. Ascend.
- 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;} $\frac{1}{4}$ S35 in W and S36 in E half; from which
 - A cedar, 4 ins. in dia., bears S $28^{\circ}E$, 119 lks. dist.; marked $\frac{1}{4}$ S36BT.
 - A cedar, 14 ins. in dia., bears S $32^{\circ}W$, 110 lks. dist.; marked $\frac{1}{4}$ S35BT.
- 41.00 Ridge bears NW and SE. Descend.
- 43.70 Cross gulch 10 lks. wide course NW. Ascend.
- 49.40 Ridge bears NW and SE. Descend.
- 59.70 Cross wire fence bears NW and SE.
- 80.00 Set an iron post 3 ft. long 2 ins. in diam, 24 ins. in the ground, for cor. of secs., 25, 26, 35 and 36, marked on brass cap, ^{1913;}
 - T12SR20E in N half;

Partial Subdivision of T12S R20E.

Chains.

S26 in NW,
 S25 in NE,
 S36 in SE and
 S35 in SW quadrant; from which
 A juniper, 18 ins. in diam, bears N. 23°W, 81 lks.
 dist.; marked T12SR20ES26BT.
 A cottonwood 24 ins. in diam, bears N. 54°E, 201 lks.
 dist.; marked T12SR20ES25BT.
 A walnut 16 ins. in diam, bears S. 68°E. 170 lks. dist.;
 marked T12SR20ES36BT.
 A juniper, 8 ins. in diam, bears S. 44°W, 130 lks.
 dist.; marked T12SR20ES35BT.

Land, mountainous.

Soil, rocky 4th rate.

Timber, juniper, cedar, walnut, cottonwood.

Undergrowth, mesquite, cacti, catclaw.

Note: ----- At this cor. I set off 1°30 $\frac{1}{2}$ 'N. on the
 decl. arc and observe the sun on the meridian at noon;
 the resulting lat. is 32°20 $\frac{1}{2}$ 'N.

 East, on a random line, bet. secs. 25 and 36.

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

80.04 Intersect E bdy. of Tp., 12 lks. S. of the ^{old} cor. of secs. 25,
 30, 31 and 36, which is a granite stone marked and wit-
 nessed as described by the Surveyor General.

Thence I run,

S. 89°55'W, on a true line, bet. secs. 25 and 36.

Descend along broken N. slope of mountain through dense
 brush.

35.50 Enter dense timber.

40.02 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 $\frac{1}{4}$ S25 in N
 and S36 in S half; from which

An ash, 11 ins. in diam, bears N. 76°W, 60 lks. dist.;
 marked $\frac{1}{4}$ S25BT.

An ash, 11 ins. in diam, bears S. 4°E, 20 lks. dist.;
 marked $\frac{1}{4}$ S36BT.

43.70 Cross canyon, 300 lks. wide, course NW.

49.00 Cross canyon, 200 lks. wide, course SW.

53.10 Cross canyon, 200 lks. wide, course NW. Descend along N. slope.

71.90 Cross canyon, 200 lks. wide, course SW.

76.50 Cross canyon, 250 lks. wide, course NW. Ascend.

80.04 The cor. of secs. 25, 26, 35 and 36, ~~hereinbefore~~ described.

Land, mountainous.

Soil, rocky 4th rate.

Timber, cedar, ash, cottonwood, willow, walnut, mesquite.

Undergrowth, cacti, catclaw, mesquite.

September 19, 1913.

 September 20, 1913. At 7h.00m a.m., l.m.t., I set off 32°
 20 $\frac{1}{2}$ 'N on the lat. arc; 1°14'N on the decl. arc; and deter-
 mine a meridian at the cor. of secs. 25, 26, 35 and 36,
 with the solar apparatus. ~~hereinbefore described,~~

Thence I run,

N. 0°01'W, bet. secs. 25 and 26.

Over mountainous land, through dense timber and brush.

Descend.

2.00 Cross canyon, 250 lks. wide, course NW. Ascend.

8.40 Ridge, bears NE and SW. Descend.

35.90 Cross wash, 15 lks. wide, course W. Ascend.

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 $\frac{1}{4}$ S26 in W.
 and S25 in E. half; from which

A mesquite 6 ins. in diam, bears S. 84°E, 94 lks. dist.;
 marked $\frac{1}{4}$ S25BT.

A mesquite 4 ins. in diam, bears S. 57°W, 157 lks.
 dist.; marked $\frac{1}{4}$ S26BT.

71.60 Ridge, bears NE and SW. Descend.

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Chains.

- 79.00 Cross wash 8 lks. wide 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. 23, 24, 25 and 26, marked on brass cap, 1913;
 T12SR20E in N. half;
 S23 in NW,
 S24 in NE,
 S25 in SE. and
 S26 in SW. quadrant; from which
 A mesquite, 6 ins. in diam, bears N. 28 $\frac{1}{2}$ °W, 48 lks. dist.; marked T12SR20ES23BT.
 A mesquite, 6 ins. in diam, bears N. 40 $\frac{1}{2}$ °E, 149 lks. dist.; marked T12SR20ES24BT.
 A cedar, 10 ins. in diam, bears S. 74°E, 63 lks. dist.; marked T12SR20ES25BT.
 A mesquite, 4 ins. in diam, bears S. 54 $\frac{1}{2}$ °W, 53 lks. dist.; marked T12SR20ES26BT.

Land, mountainous.

Soil, rocky 4th rate.

Timber, mesquite, cedar, cottonwood.

Undergrowth, mesquite, catclaw, cacti.

Note: ~~September 20, 1913.~~ At this cor. I set off 1°07 $\frac{1}{2}$ ' N. on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 32°21 $\frac{1}{2}$ ' N.

- N. 89°55'E, on a random line, bet. secs. 24 and 25.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.10 Intersect E bdy. of Tp., 9 lks. S. of ^{old} cor. of secs. 19, 24, 25 and 30, which is a granite stone marked and witnessed as described by the Surveyor General.
 Thence I run
 S. 89°51'W, on a true line, bet. secs. 24 and 25.
 Ascend along broken NE. slope, through timber and brush.
 35.65 Ridge, bears NW and SE. Descend.
 37.80 Cross canyon, 115 lks. wide, course SW. Ascend.
 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;} S24 in N. and S25 in S. half;
 Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
 54.50 Top of N. slope of peak. Descend.
 79.60 Cross wash, 8 lks. wide, course SW. Ascend.
 80.10 The cor. of secs. 23, 24, 25 and 26. ~~hereinbefore~~ described
 Land, mountainous.
 Soil, rocky 4th rate.
 Timber, cedar, mesquite.
 Undergrowth, catclaw, cacti, mesquite.

September 20, 1913.

September 21, 1913. At 7h.00m a.m., l.m.t., I set off 32°20' N on the lat. arc; 0°50 $\frac{1}{2}$ ' W on the decl. arc; and determine a meridian with the ~~sun at the~~ ^{Witness} ~~cor. of~~ ^{at the} ~~secs. 2, 3,~~ ^{cor. of} ~~secs. 2, 3,~~ ^{secs. 2, 3,} 34 and 35, on S bdy. of Tp., ~~recently estab. by me as described in Book "Z"~~
 Thence I run, from true point for cor.

N. 0°01'W, bet. secs. 24 and 35.

Ascend over mountainous land, through scattered timber and dense brush.

- 18.80 Ridge, bears NW and SE. Descend.
 30.50 Cross wash, 15 lks. wide, course NW. Ascend.
 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;} S34 in W. and S35 in E. half.
 Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
 43.05 Ridge, bears NW and SE. Descend.
 64.30 Ridge, bears NW and SE. Descend.

Partial Subdivision of T128 R20E.

Chains.

80.00 Set an iron post 3 ft. long, 2 ins. in diam, 24 ins. in the ground; for cor. of secs. 26, 27, 34 and 35, marked on brass cap, 1913;
 T128R20E in N. half;
 S27 in NW,
 S26 in NE,
 S35 in SE. and
 S34 in SW. quadrant; from which
 A cedar, 13 ins. in diam, bears N. 47°W, 74 lks. dist.; marked T128R20ES27BT. No other trees available.
 Raise a mound of stone 3 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, mountainous.

Soil, rocky 4th rate.

Timber, juniper.

Undergrowth, mesquite, cacti; catclaw.

Note: At this cor. I set off 0°44'N on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 32°20½'N.

East, on a random line, bet. secs. 26 and 35.

40.00 Set temp. ¼ sec. cor.

80.18 Intersect N. and S. line, 19 lks. N. of the cor. of secs. 25, 26, 35 and 36, hereinbefore described,

Thence I run,

N. 89°52'W, on a true line, bet. secs. 26 and 35.

Ascend along broken N. slope, through scattered timber and dense brush.

23.77 Top of ridge, bears N. and S. Descend. From this point,

Frame house of D.W. Isaacson, bears N. 11°37'E.

Adobe house of D.W. Isaacson, bears N. 14°E.

39.80 Cross canyon, 225 lks. wide course SW. Ascend.

40.09 Point for ¼ sec. cor. falls in canyon.

41.50 Set an iron post 3 ft. long, 1 in. in diam, 26 ins. in the ground for witness cor. to ¼ sec. cor.; marked on brass cap, WC ¼

In E. half, S26 in NW and S35 in SW. quadrant; from which
 A mesquite, 7 ins. in diam, bears N. 34°E, 12 lks. dist.; marked WC ¼ S26BT.

A sycamore, 18 ins. in diam, bears S. 10°E, 136 lks. dist.; marked WC ¼ S35BT.

Descend.

43.25 Cross canyon, 225 lks. wide, course NW. Ascend.

52.25 Ridge, bears N. and S. Descend. From this point

Frame house of D.W. Isaacson, bears N. 72°E.

Adobe house of D.W. Isaacson, bears N. 72°05'E.

60.00 Cross wash, 20 lks. wide, course NE. Ascend, broken NE slope.

80.18 The cor. of secs. 26, 27, 34 and 35, hereinbefore described.

Land, mountainous.

Soil, rocky 4th rate.

Timber, juniper, mesquite.

Undergrowth, mesquite, cacti.

September 21, 1913.

September 22, 1913. At 7h.00m a.m., l.m.t., I set off 32° 20½'N on the lat. arc; 0°27'N on the decl. arc; and determine with the solar a meridian at the cor. of secs. 26, 27, 34 and 35, hereinbefore described,

Thence I run,

N. 0°01'W, bet. secs. 26 and 27.

Descend steep N. slope, through scattered timber and dense brush.

12.80 Cross canyon, 230 lks. wide, course W. Ascend.

33.60 Ridge, bears NW. and SE. Descend.

47.20 Cross point 225 lks. wide course SW. Ascend.

Partial Subdivision of T12S R20E.

Chains.
 39.50 Set an iron post 3 ft. long, 1 in. in diam, 26 ins. in the ground for ~~some 3000~~ ¹⁹¹³ sec. cor., marked on brass cap ¹⁹¹³ WC¹ in N. half; S26 in SE. and S27 in SW. quadrant; from which A forked cedar, 8 ins. in diam, bears N. 76°W, 76 lks. dist.; marked WC¹S27BT.
 A mesquite 7 ins. in diam, bears N. 82°E, 54 lks. dist.; marked WC¹S26BT.

40.00 Point for ¹/₄ sec. cor. falls in wash, 20 lks. wide, course SW. Ascend, over broken SW. slope.

79.50 Cross wash, 15 lks. wide, course SW.

80.00 Set an iron post 3 ft. long, 2 ins. in diam, 24 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, marked on brass cap, 1913;
 T12SR20E in N. half;
 S22 in NW,
 S23 in NE,
 S26 in SE. and
 S27. in SW. quadrant; from which
 A mesquite 5 ins. in diam, bears N. 30°W, 68 lks. dist.; marked T12SR20ES22BT.
 A cedar 8 ins. in diam, bears N. 62°E, 190 lks. dist.; marked T12SR20ES23BT.
 A cedar, 10 ins. in diam, bears S. 2°E, 85 lks. dist.; marked T12SR20ES26BT.
 A cedar 7 ins. in diam, bears S. 31°W, 247 lks. dist.; marked T12SR20ES27BT.

Land, mountainous.
 Soil, rocky 4th rate.
 Timber, juniper, cedar, mesquite.
 Undergrowth, cacti, catclaw, ocatilla, mesquite.

Note: ~~At this cor. I set off 0°20'N on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 32°21 1/2'N.~~

40.00 S. 89°52'E, on a random line, bet. secs. 23 and 26.
 Set temp. ¹/₄ sec. cor.

80.12 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 23, 24, 25 and 26. ~~hereinbefore described~~

Thence I run,
 N. 89°55'W, on a true line, bet. secs. 23 and 26.
 Descend over mountainous land, through scattered timber and dense brush.

4.00 Cross wash, 20 lks. wide, course S. Ascend.

12.50 Ridge, bears NW. and SE. Descend.

36.40 Cross wash, 30 lks. wide, course S. Ascend.

40.06 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 S23 in N. and S26 in S. half; from which
 A cedar, 8 ins. in diam, bears N. 55°W, 82 lks. dist.; marked ¹/₄S23BT.
 A mesquite, 4 ins. in diam, bears S. 70°W, 56 lks. dist.; marked ¹/₄S26BT.

52.80 Ridge, bears NE. and SW. Descend.

56.60 Cross wash, 12 lks. wide, course SW. Ascend.

65.20 Ridge, bears NE and SW. Descend.

79.30 Cross wash, 15 lks. wide, course SW. Ascend.

80.12 The cor. of secs. 22, 23, 26 and 27, ~~hereinbefore described~~.
 Land, mountainous.
 Soil, rocky 4th rate.
 Timber, juniper, mesquite, cedar.
 Undergrowth, mesquite, cacti, catclaw, ocatilla.

September 23, 1913.

September 23, 1913, At 7h.00m a.m., l.m.t., I set off 32° 20'N on the lat. arc; 0°04'N on the decl arc; and determine a meridian with the solar, at the cor. of secs. 23 on 4, 23 and 24, on S bdy. of Tp, recently estab. by me as described in Book " Z "

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Chains.

- Thence I run,
N. 0°02' W, bet. secs. 33 and 34.
Ascend W. slope of high peak, through scattered timber and dense brush.
- 2.00 Top of W. slope of peak. Descend.
- 17.80 Cross gulch, 30 lks. wide, course SW. Ascend.
- 36.50 Ridge, bears E. and W. Descend.
- 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 S33 in W. and S34 in E. half.
Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 50.60 Cross gulch, 30 lks. wide, course SW. Ascend.
- 54.60 Ridge, bears NNE and SW. Descend.
- 62.00 Cross Hot Springs canyon, running water, 4 ft. wide, 6 ins. deep, 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. 27, 28, 33 and 34, marked on brass cap, 1913;
T12SR20E in N. half;
S28 in NW,
S27 in NE,
S34 in SE. and
S33 in SW. quadrant.
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, juniper, cedar, cottonwood.

Undergrowth, mesquite, cacti, catclaw.

Note: ----- At this cor. I set off 0°03' S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 32°20 $\frac{1}{2}$ ' N.

- East, on a random line, bet. secs. 27 and 34.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.32 Intersect N. and S. line, 14 lks. N. of cor. of secs. 26, 27, 34 and 35, hereinbefore described,
Thence I run,
N. 89°54' W, on a true line, bet. secs. 27 and 34.
Over mountainous country, through scattered timber and dense undergrowth. Ascend,
- 28.54 Ridge, bears NW. and SE. Descend,
- 40.16 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 S27 in N. and S34 in S. half.
Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 60.00 Cross Hot Springs canyon, 150 lks. wide, running water 4 ft. wide, 6 ins. deep, course SW. Ascend.
- 80.32 The cor. of secs. 27, 28, 33 and 34, hereinbefore described.
Land, mountainous.
Soil, rocky 4th rate.
Timber, cedar, mesquite, cottonwood.
Undergrowth, cacti, catclaw, mesquite.

September 23, 1913.

September 24, 1913, At 7h.00m a.m., l.m.t., I set off 32°20 $\frac{1}{2}$ ' N. on the lat. arc; 0°19 $\frac{1}{2}$ ' S. on the decl. arc; and determine with the solar a meridian at the cor. of secs. 27, 28, 33 and 34, on S. ldy. of Tr. hereinbefore described

- Thence I run
N. 0°02' W, bet. secs. 27 and 28.
Over mountainous land, through scattered timber and dense brush. Ascend steep.
- 39.40 Rim of canyon, Ascend gradually.

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Partial Subdivision of T12S R20E.

- Chains.
- 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 cap¹⁹¹³ S28 in W. and S27 in E. half.
Raise a mound of stone 3 ft, base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
- 45.00 Ridge bears NW and SE. Descend.
- 66.00 Cross gulch 20 lks. wide course NW.
- 71.90 Cross wash 20 lks. wide course NW. Ascend.
- 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 cap¹⁹¹³;
T12SR20E in N. half;
S21 in NW,
S22 in NE,
S27 in SE, and
S28 in SW. quadrant; from which
A mesquite, 8 ins. in diam, bears N. 19° W, 257 lks. dist.; marked T12SR20ES21BT.
A mesquite, 9 ins. in diam, bears N. $20\frac{1}{4}^{\circ}$ E, 264 lks. dist.; marked T12SR20ES22BT.
A mesquite 11 ins. in diam, bears S. $59\frac{1}{4}^{\circ}$ E, 288 lks. dist.; marked T12SR20ES27BT.
A cedar, 5 ins. in diam, bears S. $40\frac{1}{4}^{\circ}$ W, 330 lks. dist.; marked T12SR20ES28BT.
- Land, mountainous.
Soil, rocky 4th rate.
Timber; mesquite, cedar,
Undergrowth, mesquite, cacti, catclaw.
- Note: ~~Set on Sept. 24, 1913.~~ At this cor. I set off $0^{\circ}26'S$ on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is $32^{\circ}21\frac{1}{2}'N$.

- S. $89^{\circ}54'E$, on a random line, bet. secs. 22 and 27.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.24 Intersect N. and S. line, 5 lks. S. of cor. of secs. 22, 23, 26 and 27, ~~hereinbefore described~~,
Thence I run
 $N. 89^{\circ}56'W$, on a true line, bet. secs. 22 and 27.
Over mountainous land through scattered timber and dense brush. Ascend.
- 4.60 Ridge bears N and S. Descend.
- 32.80 Cross wash 12 lks. wide course SW. Ascend.
- 40.12 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 cap¹⁹¹³ S22 in N. and S27 in S. half.
Raise a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 40.60 Ridge bears N and S. Descend.
- 63.90 Cross wash 12 lks. wide course SW. Ascend.
- 80.24 The cor. of secs. 21, 22, 27 and 28, ~~hereinbefore described~~.
Land, mountainous.
Soil, rocky 4th rate.
Timber, juniper.
Undergrowth, mesquite, cacti, catclaw.

September 24, 1913.

- September 25, 1913, At 7h.00m a.m., l.m.t., I set off $32^{\circ}20'N$ on the lat. arc; $0^{\circ}43'S$ on the decl. arc; and determine with the solar a meridian at the cor. of secs. 4, 5, 22 and 23 on the S. bdy. of Tp., recently estab. by me as ~~described in Book "z"~~, Thence I run
 $N. 0^{\circ}02'W$, bet. secs. 22 and 23.
Descend over mountainous land through dense brush.
- 9.50 Cross Hot Springs canyon 200 lks. wide running water 4 ft. wide 6 ins. deep course SW. Ascend.
- 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 cap¹⁹¹³ S32 in W.

Partial Subdivision of T12S R20E.

Chains.	
	and S33 in E. half; Raise a mound of stone 2 ft. base, 1½ ft. high, W of cor. Pits impracticable.
73.80	Ascend gradually on a flat mesa.
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; T12SR20E in N. half; S29 in NW, S28 in NE, S33 in SE. and S32 in SW. quadrant. Raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Land, mountainous. Soil, rocky 4th rate. No timber. Undergrowth, mesquite, cacti, catclaw.

	East, on a random line, bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 27, 28 33 and 34, herainbefore described Thence I run S. 89°58'W, on a true line, bet. secs. 28 and 33, Over mountainous land, through dense brush. Ascend.
31.70	Ridge, bears NW. and SE. Descend.
40.03	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 , ¼ S28 in N. and S33 in S. half. Raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.
41.00	Cross gulch, 8 lks. wide, course S. Ascend.
66.40	Rim of mesa. Ascend gradually.
80.06	The cor. of secs. 28, 29, 32 and 33. herainbefore described Land, mountainous. Soil, rocky 4th rate. No timber. Undergrowth, mesquite, cacti, catclaw.
Note:	At this cor. I set off 0°49½'S on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 32°20½'N.

	N. 0°02'W, bet secs. 28 and 29. Over level mesa through dense brush.
24.80	Rim of mesa. Descend.
29.30	Cross gulch, 12 lks. wide, course W. Ascend.
34.60	Rim of mesa; thence over level land.
40.00	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 , ¼ S29 in W. and S28 in E. half. Raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
46.10	Rim of mesa. Descend.
61.25	Cross gulch, 15 lks. wide, course SW. Thence along SW slope.
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; T12SR20E in N. half; S20 in NW, S21 in NE, S28 in SE. and S29 in SW. quadrant. Raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Land, mountainous. Soil, rocky rth rate. No timber. Undergrowth, mesquite, ocatilla, cacti, catclaw.

September 25, 1913.

BOOK 2677

Partial Subdivision of T12S R20E.

Chains.

September 27, 1913, At 7 h.00m a.m., l.m.t., I set off $32^{\circ} 21\frac{1}{2}'$ N. on the lat. arc; $1^{\circ} 29\frac{1}{2}'$ S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29, hereinbefore described,

Thence I run,
 N. $83^{\circ} 58'$ E., on a random line, bet. secs. 21 and 28.

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

80.14 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 21, 22, 27 and 28, hereinbefore described

Thence I run
 N. $89^{\circ} 57'$ W., on a true line, bet. secs. 21 and 28.

Descend over mountainous land, through dense brush and scattered timber.

8.97 Cross wash, 10 lks. wide, course NW.

12.20 Cross wash, 10 lks. wide, course SW.

17.80 Cross wash, 10 lks. wide, course NW.

25.60 Cross wash, 30 lks. wide, course WNW. Ascend.

40.07 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 $\frac{1913}{A}$ $\frac{1}{4}$ S21 in N. and S28 in S. half; from which

A cedar, 34 ins. in diam, bears N. 66° W., 76 lks. dist.; marked $\frac{1}{4}$ S21BT.

A cedar, 16 ins. in diam, bears S. 8° E., 22 lks. dist.; marked $\frac{1}{4}$ S28BT.

80.14 Enter dense timber. Along a broken N. slope.
 The cor. of secs. 20, 21, 28 and 29, hereinbefore described.
 Land, mountainous.
 Soil, rocky 4th rate.
 Timber, cedar.
 Undergrowth, mesquite, cacti, ocatilla, catclaw.

September 27, 1913.

September 26, 1913, At 7h.00m a.m., l.m.t., I set off $32^{\circ} 20'$ N. on the lat. arc; $1^{\circ} 6\frac{1}{2}'$ S. on the decl. arc; and determine with the solar a meridian at the cor. of secs. 5, 6, 31 and 32, on S bdy. of Tp, recently estab. by me as described in Book "Z" Thence I run,
 N. $0^{\circ} 03'$ W., bet. secs. 31 and 32.

Over mountainous land, through dense brush. Descend.

4.80 Cross wash, 8 lks. wide, course SE. Ascend.

25.00 Ridge, bears NE. and SW. Descend.

29.30 Cross wash, 10 lks. wide, course SW. Ascend.

38.00 Ridge, bears NE and SW. Descend.

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 $\frac{1913}{A}$ $\frac{1}{4}$ S31 in W. and S32 in E. half.

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

48.10 Cross gulch, 20 lks. wide, course SW. Ascend.

58.70 Ridge, bears NE. and SW. Descend.

68.00 Cross wash, 15 lks. wide, course SW. Ascend.

74.60 Rim of mesa. Over nearly level land.

80.00 Set an iron post 3 ft. long, 2 ins. in diam, 24 ins. in the ground, for cor. of secs. 29, 30, 31 and 32., marked on brass cap, 1913;

T12SR20E in N. half;
 S30 in NW,
 S29 in NE,
 S32 in SE. and
 S31 in SW. quadrant.

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

Land, mountainous.
 Soil, rocky 4th rate.
 No timber.
 Undergrowth, mesquite, cacti, catclaw.

Partial Subdivision of T12S R20E.

Chains.	East, on a random line, bet. secs. 29 and 32.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.98	Intersect N. and S. line, 2 lks. N. of the cor. of secs. 28, 29, 32 and 33, hereinbefore described, Thence I run, N. 89°53' W., on a true line, bet. secs. 29 and 32. Over nearly level land, on mesa through dense brush.
39.99	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 S29 in N. and S32 in S. half. Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
57.70	Cross wash, 15 lks. wide, course SW.
79.98	The cor. of secs. 29, 30, 31 and 32. hereinbefore described Land, mountainous. Soil, rocky 4th rate. No timber. Undergrowth, greasewood.
Note:	September 30, 1913 . At this cor. I set off 1°13' S on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 32°20 $\frac{1}{2}$ ' N.

	West, bet. secs. 30 and 31, on true line Over nearly level mesa through dense brush.
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 S30 in N. and S31 in S. half. Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
45.00	Rim of mesa. Descend over broken SW slope.
57.52	Intersect W. bdy. of Tp., 8.28 chs. S. 0°53' E., of the cor. of secs. 25 and 36, T12 S. R. 19 E., recently reestab. by me hereinbefore described. At point of intersection I Set an iron post 3 ft. long, 2 ins. in diam, 24 ins. in the ground, for closing cor. of secs. 30 and 31, T12 S. R. 20 E. marked on brass cap, 1913; CC W. of center; T12S in N. and S25S36R19E in W. half; S30 in NE. and S31R20E in SE. quadrant. Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, E. of cor. Pits impracticable. Land, mountainous. Soil, rocky 4th rate. No timber. Undergrowth, mesquite, cacti, catclaw, greasewood.

	N. 0°03' W., bet. secs. 29 and 30. Over nearly level land, through dense brush.
24.00	Rim of mesa. Descend.
31.80	Cross wash, 20 lks. wide, course WSW. Ascend.
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 S30 in W. and S29 in E. half. Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
57.50	Rim of mesa, nearly level.
80.00	Rim of mesa. Descend. Set an iron post 3 ft. long, 2 ins. in diam, 24 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, marked on brass cap, 1913; T12SR20E in N. half; S19 in NW, S20 in NE, S29 in SE. and S30 in SW. quadrant. Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, E. of cor. On account of bluff 3 ft. W. of cor. I place

BOOK 2677

Partial Subdivision of T12S R20E

Chains.

mound on F. Pits impracticable.
Land, mountainous.
Soil, rocky 4th rate.
No timber.
Undergrowth, mesquite, cacti, greasewood, ocatilla.

September 26, 1913.

September 27, 1913,
S. 89°59'E., on a random line, bet. secs. 20 and 29.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.02 Intersect N. and S. line, 14 lks. S. of the cor. of secs. 20, 21, 28 and 29, hereinbefore described,
Thence I run,
S. 89°55'W., on a true line, bet. secs. 20 and 29.
Over mountainous land, through scattered timber and dense brush. Descend.
- 19.40 Cross wash, 60 lks. wide, course SW. Ascend.
- 28.00 Descend.
- 36.30 Cross wash, 60 lks. wide, course NW.
- 40.01 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 S20 in N. and S29 in S. half; from which
A cedar, 6 ins. in diam, bears N. 76°W., 82 lks. dist.; marked $\frac{1}{4}$ S30BT.
A cedar, 5 ins. in diam, bears S. 63°E., 63 lks. dist.; marked $\frac{1}{4}$ S29BT.
- 43.50 Cross wash, 60 lks. wide, course SW. Ascend.
- 47.00 Spur from SE. Descend.
- 55.00 Cross wash, 60 lks. wide, course NW. Along N slope of ridge.
- 80.02 The cor. of secs. 19, 20, 29 and 30, hereinbefore described.
Land, mountainous.
Soil, rocky 4th rate.
Timber, cedar.
Undergrowth, cacti, ocatilla, greasewood.

Note: ~~September 27, 1913.~~ At this cor. I set off 1°36 $\frac{1}{2}$ 'S on the decl. arc and observe the sun on the meridian at noon; the resulting lat. is 33°21 $\frac{1}{2}$ 'N.

West, bet. secs. 19 and 30, on true line,
Over mountainous land, through dense brush and scattered timber. Descend.

- 3.00 Ascend.
- 19.70 Ridge, bears N. and S. Descend.
- 34.60 Cross wash, 10 lks. wide, course SW. Ascend.
- 39.60 Ridge, bears N. and S. Descend.
- 35.60 Cross wash, 8 lks. wide, course NW. Ascend.
- 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 S19 in N. and S30 in S. half.
Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
- 45.30 Cross wash, 4 lks. wide, course SW. Ascend.
- 47.40 Ridge, bears N. and S. Descend.
- 57.54 Intersect W. bdy. of Tp., 8.28 chs. S. of the cor. of secs. 24 and 25, T.12 S. R. 19 E., recently estab. by me as described in Book "Z". At point of intersection I
Set an iron post 3 ft. long, 2 ins. in diam, 24 ins. in the ground, for closing cor. of secs. 19 and 30 T.12 S. R. 20 E. marked on brass cap, 1913;
CC W. of center;
T12S in N. and
S24S25R19E in W. half;
S19 in NE. and
S30R20E in SE. quadrant; from which
A mesquite, 12 ins. in diam, bears N. 49 $\frac{1}{2}$ °E., 53 lks. dist.; marked CCT12SR20ES19BT.
A mesquite, 8 ins. in dia., bears S. 34 $\frac{1}{2}$ °E., 59 lks. dist.; marked CCT12SR20ES30BT.

Partial Subdivision of T128 R20E.

Chains.

Land, mountainous.
Soil, rocky 4th rate.
Timber, cedar, mesquite.
Undergrowth, mesquite, ocatilla, cacti.

September 27, 1913.

GENERAL DESCRIPTION.

This township is very mountainous and rough. The soil is rocky and 4th rate. The drainage is to the southwest. There is a small stream of running water in the Hot Springs canyon. There is scattered growth of timber covering the entire township. A dense growth of undergrowth covers all of the township.

There is one settler in sec. 26. This was the entry of Russel T. Johnson, the applicant, but has been sold to D.W. Isaacson.

John A. Hesse


U.S. Surveyor.

For FINAL OATH OF UNITED STATES SURVEYOR.
See Book "ZB" Group 18

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

U. S. Surveyor.

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



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, July 21, 1914

The foregoing field notes of the survey of *the*
Subdivision lines
and resurvey of part of the West boundary of
Township No 12 South, Range No 20 East of the
Gila and Salt River Base and Meridian, Arizona.

executed by *John F. Hesse, U.S. Surveyor*
under his special instructions dated *May 22nd*, 1912, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the *and resurveys* surveys they describe, are hereby approved.

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

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