

Subdivisional
BOOK "ZQ"

2621

1

BOOK 2621
FIELD NOTES

OF THE SURVEY OF THE

Subdivision lines of Tp 31 N. R. 15 E.

[Blank lined area for notes]

*Of the Gila and Salt River Base and Meridian,
in the Territory of Arizona*

EXECUTED
AS SURVEYED BY

*Van L. White U.S. Practitioner, ~~United States Deputy Surveyor~~,
Special Instructions from the Commissioner of the General Land Office,
Under ~~his Contract No.~~, dated *Oct 2nd 1907*, and *May 15th 1908**

Survey commenced *December 22nd*, 1910

Survey completed *January 6th*, 1911

1B

Plat No. 2621

INDEX DIAGRAM.

Township 21N Range 15E

6	42	5	30	4	22	3	15	2	8	1
41		40		29		21		14		8
7	40	8	29	9	20	10	14	11	7	12
39		38		28		20		13		7
18	37	17	27	16	19	15	12	14	6	13
37		36		27		18		12		5
19	35	20	26	21	18	22	11	23	5	24
34		34		25		17		11		4
30	33	29	24	28	16	27	10	26	3	25
32		31		23		16		9		3
31	31	32	23	33	15	34	9	35	2	36

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, J. V. White, George B. Seig and Richard L. Shumway
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

the Subdivision lines of Tp 31 N. R. 15 E. G. & S. P. B. & M. Arizona.

George B. Seig }
J. V. White, Chainman.
Richard L. Shumway, Chainman.

Subscribed and sworn to before me this 20th
day of December, 1910



Van L. White
U.S. Surveyor

I, Rolph C. Sampson

do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~me~~ to the best of ~~my~~ skill and ability, in the survey of

the Subdivision lines of Tp 31 N. R. 15 E. G. & S. P. B. & M. Arizona.

Rolph C. Sampson, Moundman.

Subscribed and sworn to before me this 20th
day of December, 1910



Van L. White
U.S. Surveyor

I, Nelson Polacca

do solemnly swear that we will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ~~me~~ to the best of ~~my~~ skill and ability, in the survey of

the Subdivision lines of Tp 31 N. R. 15 E. G. & S. P. B. & M. Arizona.

Nelson Polacca, Axman.

Subscribed and sworn to before me this 20th
day of December, 1910



Van L. White
U.S. Surveyor

I, William R. Carson

do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

the Subdivision lines of Tp 31 N. R. 15 E. G. & S. P. B. & M. Arizona.

William R. Carson, Flagman.

Subscribed and sworn to before me this 20th
day of December, 1910



Van L. White
U.S. Surveyor

Survey Commenced December 22nd 1910 and executed with a W & P. E. Gurley engineers transit No. 76 with a Burk Solar attachment. The horizontal limb being provided with one double vernier reading to single minutes of arc. The verniers of the latitude and declination arcs, reading to 0' 30" of arc.

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

At my camp, which I have located near the point for Cor. of Secs. 15, 16, 21 and 22 Twp. 31 N., R15 E. Latitude $36^{\circ} 04' 30''$ N., Longitude $110^{\circ} 44' 11''$; I set off $36^{\circ} 04' 2''$ N. on the lat. arc and $23^{\circ} 23' 3''$ on the decl. arc and at $3^h 59^m$ p.m. l.m.t., determine with the solar a meridian and mark a point thereof, by a tack driven in a stake set firmly in the ground 5.00 chs. N. of my instrument.

At $9^h 47^m$ p.m. by my watch which is correct local mean time I observe Polaris, in accordance with instructions in the Manual and mark the direction thus determined by a tack driven in a stake set in the ground 5.00 chs. N. of my instrument.

Astronomical time of observation Dec 22 nd 1910	$9^h 47^m$
Astron. time U.C. Polaris Dec. 21 (Table V, Part I)	$7^h 53.3^m$
Reduction to Dec. 22 (Part II) Subtract	<u>216</u>
Astron. time U.C. Polaris, Dec 22.	$7^h 25.7$ Subtract <u>$7^h 25.7$</u>
Hour angle and time argument of Polaris at obs.	$2^h 21.3$
Azimuth of Polaris at observation	$0^{\circ} 51' W.$
December 22 nd 1910.	

December 23rd 1910 at $7^h 30^m$ a.m. l.m.t. I lay off the azimuth of Polaris $0^{\circ} 51'$ to the east, and mark the meridian thus determined by a tack driven in the stake set last evening, on which the meridian falls 0.6 ins east of the point determined by the Solar.
At $7^h 59^m$ a.m. l.m.t. I set off $36^{\circ} 04' 2''$ N. on the lat.

BOOK 2621

arc. $23^{\circ} 22\frac{1}{2}' S.$ on the decl. arc, and determined a meridian with the solar and mark a point thereof by a tack driven in the stake already set 5.00 ch. N. of my instrument; this point falls 0.3 in. East of the meridian established by the Polaris observation. The solar apparatus by p.m. and a.m. observations defines positions for meridians, respectively about $0' 31''$ West, and $0' 15''$ East of the meridian established by the Polaris observation, therefore I conclude that the instrument is in satisfactory adjustment.

I begin at the cor. of sec. 1, 2, 35 and 36. on S. 1/2 of Np. estab. by Sidney E. Blunt, May 13, 1909 as described in Extensor Book "X" latitude $36^{\circ} 01' 54'' N.$ longitude $110^{\circ} 41' 52'' W.$

At 8^h 57^m. a.m. I set off $36^{\circ} 02' N.$ on the lat. arc, $23^{\circ} 24\frac{1}{2}' S.$ on the decl. arc and determined a meridian with the solar, thence I run,

$N. 0^{\circ} 01' W.$; 1/4 sec. 35 and 36;

across SW slope over hilly sandy land, through scattering cedar timber and sage and greasewood brush undergrowth and bunch grass

8.00 Top of sand ridge bears NW. and S.E. desc.

8.90 Dry ravine 20 lks. wide course S.E. asc.

16.00 Road from Oraibi, Arizona to Tubg, Arizona, bears N.W. and S.E.

40.00 Set an iron post 3 ft. long 1 in. in diam. 26 in. in the ground for cor. marked out brass cap 1/4 S 35 on W. half and S 36 on E. half, from which

a cedar 7 ins. in diam. bears $N 88\frac{1}{4}^{\circ} E$ 244 lks. dist. marked 1/4 S 36 B.T. and

a cedar 4 ins. in diam. bears $S 45^{\circ} W.$ 109 lks. dist. marked 1/4 S 35 B.T.

40.00 Top of divide between the De Nebito and Moencopie Washes. bears E. and W. desc.

69.00 Last timber bears E. and W.

80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of sec. 25, 26, 35, and 36. marked out brass cap T 31 N, S 26 in NW., R 15 E, S 25 in NE. S 36 in SE. and S 35 in SW. quadrants.

Dig pits 18 x 18 x 12 ins. in each sec, 5 1/2 ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

Land hilly.

Soil sandy 3rd rate.

Chain

3

Pinewood Cedar

N. 89° 59' E on a round line bet. sec. 25 and 36,

40.00 Set temp. 1/4 sec. cor.

80.06 Intersect E. bdy. of Tp. 3 lks. S of the cor. of sec. 25, 30, 31, and 36. ^{recently estab. by me as described in} Exterior Book "AT", thence I run,

S. 89° 58' W, on a true line, bet. sec. 25 and 36,

Descend NW. slope through scattering cedar timber and greasewood brush undergrowth.

40.03 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. N. 43° 25' on N. half and S 36 on S. half. from which

A cedar 8 ins. in diam. bears S 29° E, 184 lks. dist. marked 1/4 S 36 B.T. No other trees within the prescribed limits

Dig pits 18 x 18 x 12 ins. E and W. of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.

57.70 Dry ravine 20 lks. wide course NW. and.

59.40 Top of sand ridge bears N. and S. desc.

68.00 Leave timber land N and S.

79.00 Hook of descent in depression bears N 28° W and S 25° E. and.

80.06 The cor. of sec. 25, 26, 35 and 36, hereinbefore described.

Sand hill.

Soil sandy & rate.

Pinewood Cedar

Not: - At this cor. set off 23° 25 1/2' S. on the decl. arc, and at noon observe the sun on the meridian and obtain a reading of 36° 03' N on the lat. arc.

N. 0° 01' W, bet. sec. 25 and 26,

Descend N.E. slope over rolling sandy land through scattering sage and greasewood brush undergrowth and bunch grass.

22.80 Dry ravine 25 lks. wide course N. 45° W. and.

Enter scattering cedar timber land N.W. and S.E.

40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked

Subdivision of T₃₁N., R15E.

4

Chain

BOOK 2621

on brass cap $\frac{1}{4}$ S 26 on W. half, and S 25 on E. half. from which.

A cedar 12 ins. in diam. bears $77\frac{1}{2}^{\circ}$ W 99 lbs. dist. marked $\frac{1}{4}$ S 26 B.T. No other trees within limits. Raised mound of stone 2 ft. base $1\frac{1}{2}$ ft. high. W. of cor. Pits impracticable

80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of sec. 23, 24, 25 and 26. marked on brass cap T 31 N. S 23 in NW. R15E. S 24 in N.E., S 25 in S.E. and S 26 in SW. quadrant., from which

A cedar 14 ins. in diam. bears $73\frac{1}{2}^{\circ}$ E 161 lbs. dist. marked T 31 N. R15E. S 24 B.T. and a cedar 8 ins. in diam. bears $84\frac{1}{2}^{\circ}$ W 487 lbs. dist. marked T 31 N. R15E. S 26 B.T. No other trees suitable for bearing trees available.

Dig pits 24x24x12 ins. in each sec. S.E. and NW. of post. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base. 2 ft. high W. of cor. Land rolling.

Soil sandy 3rd rate. Timber Cedar

$89^{\circ} 58' E$; on a random line, bet. sec. 24 and 25, 40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect E. l. by of T₃₁N., on the cor. of sec. 19, 24, 25 and 30. previously estab. by me as described in Exterior Book "AT", thence I run,

$89^{\circ} 58' W$, on a true line, bet. sec. 24. and 25; descend NW. slope over rolling sandy land through scattering sage and quasarwood bush undergrowth and bunch grass

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 $\frac{1}{4}$ S 24 on N. half and S 25 on S half. Dig pits 18 x 18 x 12 ins. E and W. of post 3 ft. dist. did raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high. N. of cor.

46.00 Enter scattering cedar timber bears NE and SW. at foot of descent in depression, bears NE and SW. drains N.E., ascend.

48.00 Top of sand ridge bears NW. and S.E. desc. gently

Chains

5

80.04 The cor. of secs. 23, 24, 25 and 26, hereinbefore described.
 Land rolling.
 Soil sandy 3rd rate.
 Timber Cedar

December 23rd 1910

December 29th ¹⁹¹⁰ At 8^h 02^m a.m. l. mt. Dsch off.
 36° 03½' N. on the lat. arc., 23° 11½' S. on the decl. arc.
 and determine a meridian with the solar sh.
 the cor. of secs. 23, 24, 25 and 26, ^{hereinbefore described} these corners,
 N. 0° 01' W., bet. secs. 23 and 24,

Ascend S.W. slope of sand ridge through scattering
 cedar timber and greasewood brush undergrowth

8.00 Top of sand ridge bears N 40° W. and S 46° E. desc.

18.00 Leave timber bears N.W. and S.E.

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
 N 45° 23' W. half and S 24° W. E. half.

Dig pits 18 x 18 x 12 ins N. and S. of post 3 ft. dist.
 and raise a mound of earth 3½ ft. base 1½ ft.
 high W. of cor.

48.00 Enter scattering cedar timber bears E and W.

74.90 Dry rocky ravine 15 lbs. wide course west. asc
 gently.

80.00 Set an iron post 3 ft. long, 2 in. in diam. 24 ins
 in the ground for cor. of secs. 13, 14, 23, and 24
 marked on brass cap T 31 N. S 14 in N.W. R 15
 E. S 13 in N.E. S 24 in S.E. and S 23 in S.W. quadrant
 from which

A cedar 12 ins in diam. bears S 75½° E 393 lbs. dist.
 marked T 31 N. R 15 E S 24 B.T. No other trees
 suitable for bearing trees within limits.

Dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and
 raise a mound of earth 4 ft. base, 2 ft. high W.
 of cor.

Land rolling.
 Soil sandy and stony 3rd and 4th rate.
 Timber Cedar

N 89° 58' E. on a random line, bet. secs. 13 and 24,

40.00 Set temp. ¼ sec. cor.

Subdivision of N/31 N., R 15 E.

Chain

BOOK 2621

- 80.02 Intersect E. line, of Np. 5 lks S. of the cor. of sec. 13, 18, 19 and 24. ^{recently estab. by me as described in Exterior Book "AT"; thence I run,}
 S89°56' W, on a true line, Secs. 13 and 24,
 Descend S.W. slope over rolling sandy land through scattering sage and greasewood bush undergrowth and bunch grass.
- 40.01 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked out brass cap 1/4 S 13 on N. half and S 24 on S. half.
 Dig pits 18 x 18 x 12 ins. E and W. of post 3 ft. dist. and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. N. of cor.
- 73.00 Dry rocky ravine 10 lks. wide course S.W. asc.
 Enter scattering cedar timber bear N.E. and S.W.
- 80.02 The cor. of sec. 13, 14, 23 and 24, hereinbefore described.
 Land rolling.
 Soil sandy 3rd rate.
 Timber Cedar
-
- N. 0° 01' W, Feb. Secs. 13 and 14,
 Ascend South slope over rolling sandy land through scattering cedar timber and greasewood bush undergrowth and bunch grass.
- 2.00 Leave timber bear E and W.
- 3900 Np. of gradual ascent, bear E. and W. Enter level land.
- 40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked out brass cap 1/4 S 14 on W. half and S 13 on E. half.
 Raise a mound of stone 2 ft. base, 1 1/2 ft. high. W. of cor. Pits impracticable
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of sec. 11, 12, 13, and 14, marked out brass cap. T 31 N. S 11 in N.W. R 15 E. S 12 in N.E. S 13 in S.E. and S 14 in S.W. quadrant.
 Dig pits 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.
 Land rolling.
 Soil sandy 3rd rate.
 Timber Scattering cedar

Subdivision of Tp 31 N., R 15 E.

Chains

N 89° 56' E, on a random line, bet. Secs. 12 and 13,
40.00 Set temp 1/4 sec. cor.

79.98 Intersect E. l. of Mc. 3 lks N. of the cor. of sec.
7, 12, 13, and 18. Recently estab. by me as described in
Exterior Book "AT"; thence I run,

S 89° 57' W, on a true line, bet. Secs. 12 and 13,
Descend gently over West. slope through scattering
sage and greasewood bush undergrowth and
bunch grass.

39.99 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
S 12 on N. half and S 13 on S. half.

Dig pits 18 x 18 x 12 ins. E and W. of post. 3 ft. dia.
and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high.
N. of cor.

Note: - At this cor. set off 23° 13 1/2' S. on the decl. arc and
at noon observe the sun on the meridian and
obtain a reading of 36° 0' 5 1/2" N. on the lat. arc.

79.98 The cor. of Secs. 11, 12, 13, and 14, hereinbefore described.

Land rolling.
Soil sandy 3rd rate.
No timber

N 0° 01' W, bet. Secs. 11 and 12,
Over nearly level sandy land sloped to N.W. through
scattering sage and greasewood bush undergrowth
and bunch grass.

40.00 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
N 11 on W. half and S 12 on E. half.

Dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dia. and
raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high. W.
of cor.

80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins.
in the ground for cor. of Secs. 1, 2, 11 and 12. marked
on brass cap T 31 N. S 12 in N.W., R 15 E. S 1 in N.E.
S 12 in S.E. and S 11 in S.W. quadrants.

Dig pits 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dia. and
raise a mound of earth 4 ft. base 2 ft. high. W.
of cor.
Land rolling.
Soil sandy 3rd rate.

BOOK 2621

No timber

40.00 N. 89° 57' E., on a random line, bet. sec. 1 and 12, Set temp. 1/4 sec. cor.

79.98 Intersect E. bdy. of Tp. 5 lks. S. of the cor. of sec. 1, 6, 7, and 12, recently estab. by me as described in Exterior Book AT, thence I run S. 89° 55' W., on a true line, bet. sec. 1 and 12, Descend W. slope over rolling sandy land, through scattering sage and greasewood brush undergrowth and bunch grass.

39.99 Set an iron post 3 ft. long 1 in. in diam. 26 in. in the ground for 1/4 sec. cor. marked on brass cap. N 51 on N. half and S 12 on S. half. Dig pits 18x18x12 ins. E and W. of post 3 ft. deep, and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.

79.98 The cor. of sec. 1, 2, 11, and 12, hereinbefore described. Land rolling. Soil sandy 3rd rate. No timber

40.00 N. 0° 01' W., on a random line, bet. sec. 1 and 2, Set temp. 1/4 sec. cor.

80.04 Intersect N. bdy. of Tp. 5 lks. E. of the cor. of sec. 1, 2, 35, and 36, recently estab. by me as described in Exterior Book AT, thence I run S. 0° 03' E., on a true line, bet. sec. 1 and 2, Ascend N.W. slope over rolling sandy land, through scattering sage and greasewood brush undergrowth and bunch grass.

40.04 Set an iron post 3 ft. long 1 in. in diam. 26 in. in the ground for 1/4 sec. cor. marked on brass cap 1/4 S 2 on W. half and S 1 on E. half Dig pits 18x18x12 ins N and S. of post 3 ft. deep, and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high W. of cor.

80.04 The cor. of sec. 1, 2, 11, and 12, hereinbefore described. Land rolling. Soil sandy 3rd rate. No timber.

Decem. bet 29th 1910

December 24th ¹⁹¹⁰ Ah. 8^h 00^m a.m. L. and D. set off. $36^{\circ}02'$
N. on the lat. arc. $23^{\circ}22'$ S. on the decl. arc and
determine a meridian with the solar ab. the cor.
of sees. 2, 3, 34 and 35 on S. side of Twp. estab. by
Sidney E. Blout, May 13, 1909 as described in Exterior Book "X", thence I run,
N. $0^{\circ}01'$ W., bet. sees. 34 and 35,

Ascend gradually, over N.W. slope, through scattering
sage and greasewood brush undergrowth and
bunch grass.

2.05 Road to Tuba, Arizona bears N.W. and S.E.

30.85 Road leads to Tuba, Ariz. bears $N75^{\circ}E$ and $S75^{\circ}W$.

40.00 Set an iron post 3 ft. long 1 in. in diam. 26 in. in
the ground for $\frac{1}{4}$ sec. cor. marked on brass cap
 $N45^{\circ}34'$ on W. half. and $S35^{\circ}$ on E. half.

Dig pits 18x18x12 ins. N. and S. of post 3 ft. deep.
and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft.
high W. of cor.

80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins.
in the ground for cor. of sees. 26, 27, 34 and 35
marked on brass cap $T31^{\circ}N$, $S27^{\circ}$ in N.W. R 15 E.

$S26^{\circ}$ in N.E. $S35^{\circ}$ in S.E. and $S34^{\circ}$ in S.W. quadrant
Dig pits 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. deep. and
raise a mound of earth 4 ft. base, 2 ft. high. W. of
cor.

Land rolling.

Soil sandy 3rd rate.

No timber

$N89^{\circ}59'E$ on a random line, bet. sees. 26 and 35,

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

80.08 Intersect N. and S. line, 2 lks. N. of the cor. of sees. 25, 26,
35 and 36, hereinbefore described, thence I run,

Wich, on a true line, bet. sees. 26 and 35,

Ascend E. slope over rolling sandy land, through
scattering sage and greasewood brush undergrowth
and bunch grass.

34.00 Enter scattering cedar timber bears N.W. and S.E.

40.04 Set an iron post 3 ft. long 1 in. in diam. 26 in. in
the ground for $\frac{1}{4}$ sec. cor. marked on brass cap
 $N45^{\circ}26'$ on N. half. and $S35^{\circ}$ on S. half. from which
a cedar 14 ins. in diam. bears $N46^{\circ}E$ 88 lks. dist.

BOOK 2621

- marked $\frac{1}{4}$ S 26 P.T. and.
 A cedar 12 ins. in diam. bears S $9\frac{3}{4}$ ° W. 105 lbs. dist.
 marked $\frac{1}{4}$ S 35 B.T.
- 61.10 Pyramine 50 lbs. wide 3 ft. deep. Course N 30 ° W.
 Bears timber bears N.W. and S.E.
- 80.08 This cor. of sec. 26, 27, 34 and 35, hereinbefore described.
 Sand rolling.
 Soil sandy 3rd rate.
 Timber Cedar
-
- N. $0^{\circ} 01'$ W., 1st sec. 26 and 27,
 Descend N.E. slope over rolling sandy land through
 scattering sage and greasewood brush undergrowth
 and bunch grass.
- 25.00 Enter scattering cedar timber bears N.W. and S.E.
- 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 $\frac{1}{4}$
 S 27° W. half and S 26° W. E. half. from which.
 A cedar 10 ins in diam. bears N 87 ° E 52 lbs. dist.
 marked $\frac{1}{4}$ S 26 B.T. and,
 A cedar 12 ins. in diam. bears N $56\frac{3}{4}$ ° W. 64 lbs.
 dist. marked $\frac{1}{4}$ S 27 B.T.
- 54.10 Pyramine 15 lbs wide, 20 ft. below the $\frac{1}{4}$ sec. cor.
 Course N 60 ° W. as above.
- 74.00 Bears timber bears East W.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins.
 in the ground for cor. of sec. 22, 23, 26, and 27
 marked on brass cap T 31 N S 22 in N.W., R 15 E.
 S 23 in N.E. S 26 in S.E. and S 27 in S.W. quadrant.
 Dig pits 18 x 18 x 12 ins. in each sec. 5 $\frac{1}{2}$ ft. dist.
 and raise a mound of earth 4 ft. base, 2 ft. high.
 W. of cor.
 Sand rolling
 Soil sandy 3rd rate.
 Timber Cedar
- Note: - At this cor. set off. $23^{\circ} 24\frac{1}{2}'$ S. on the decl. arc and
 at noon observe the sun on the meridian
 and obtain a reading of $36^{\circ} 03\frac{1}{2}'$ N. on the lat.
 arc.

Chain

11

- East, on a random line, *feh.* sec. 23 and 26;
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 80.06 Intersect N and S. line 8 lks. N. of the cor. of sec.
 23, 24, 25, and 26, hereinbefore described, thence I run,
 N $89^{\circ}57'$ W, on a true line, *feh.* sec., 23 and 26,
 Descend S.W. slope over rolling sandy land through
 scattering cedar timbers and sage brush undergrowth
 and bunch grass.
 3.00 Leave timber bears N. and S.
 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 $\frac{1}{4}$ S 23 on N. half and S 26. on S. half.
 Dig pits 18 x 18 x 12 ins. East W. of post 3 ft. dist.
 and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
 high N. of cor.
 80.06 The cor. of sec. 22, 23, 26, and 27, hereinbefore described.
 Land rolling.
 Soil sandy 3rd rate,
 Timber Cedar.

N $0^{\circ}01'$ W. *feh.* sec. 22, and 23.

Around South slope over rolling sandy land through
 scattering sage and greasewood brush undergrowth
 and bunch grass.

- 11.75 Top of sand ridge bears N 40° E. and S 40° W. desc
 37.00 Enter scattering cedar timber bears N.E. and S.W.
 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
 N $5^{\circ}22'$ on W. half and S 23° on E. half.
 from which.
 A Cedar 30 ins. in diam. bears N 47° E. 125 lks. dist.
 marked $\frac{1}{4}$ S 23 B.T. and
 A Cedar 18 ins. in diam. bears S $75\frac{1}{2}^{\circ}$ W 91 lks. dist.
 marked $\frac{1}{4}$ S 22 B.T.
 40.50 Dry ravine 10 lks. wide, 8 ft. below $\frac{1}{4}$ sec. cor.
 Course N.W. asc. gently over hilly land.
 43.50 Leave timber bears N.E. and S.W.
 50.20 Top of sand ridge bears E and W. desc.
 62.60 Dry ravine 25 lks. wide course S 35° W. asc. gently.
 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins.
 in the ground for cor. of sec. 14, 15, 22, and 23.

OOK 2621

marked on brass cap T₃₁ N. S₁₅ in N.W., R₁₅ E S₁₄ in N.E., S₂₃ in S.E. and S₂₂ in S.W. quadrants. Dig pits 18 x 18 x 12 ins. in each. rec. 5 1/2 ft. dia. and raise a mound of earth 4 ft. tall, 2 ft. high. W. of cor.

Land rolling and hilly.

Soil sandy 3rd rate

Number Cedar

December 24th 1910

December 30th 1910 Ah 8^h 02^m a.m. Com. Dep. off. 36° 04 1/2' N on the lat. arc. 23° 08' S. on the decl. arc and determine a meridian with the solar alt.

the cor. of recs. 14, 15, 22, and 23, ^{above described} thence 1 run,

N 89° 57' E, on a random line, bet. recs. 14 and 23,

40.00 Set temp. 1/4 rec. cor.

80.06 Intersect N. and S. line, 5 lks. S. of the cor. of recs. 13, 14, 23. and 24, hereinbefore described, thence 1 run,

N 89° 59' W, on a true line, bet. recs. 14 and 23,

Ascend E. slope of sand ridge through scattering sage and greasewood brush undergrowth and bunch grass.

6.25 Top of ridge bears N. and S. due.

10.00 Foot of descent in depression, drains to the south. arc. over rolling sandy land.

40.03 Set an iron post 3 ft. long, 1 in. in diam. 26 ins. in the ground for 1/4 rec. cor. marked on brass cap 4 S 14 on N. half and S 23 on S. half, low which. A lone Cedar 8 in. in diam. bears N 37 1/2° W, 128 lks. dia. marked 1/4 S 14 B.T. No other trees available. Dig pits 18 x 18 x 12 ins. East W. of post. 3 ft. dia. and raise a mound of earth 3 1/2 ft. tall, 1 1/2 ft. high. N. of cor.

80.06 The cor. of recs. 14, 15, 22. and 23, hereinbefore described.

Land hilly and rolling

Soil sandy 3rd rate

No timber

N 0° 01' W, bet. recs. 14 and 15,

Ascend S.E. slope of sand ridge over rolling land, through scattering sage and greasewood brush. under

growth and bunch grass.

24.00 Top of sand ridge from N.E. and S.W. desc.
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 4 S 15 on W. half and S 14 on E. half.

Dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high. W. of cor.

75.85 Dry ravine 10 lbs. wide course N.W. arc.

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 T 31 N, S 10 in N.W. R 15 E. S 11 in N.E. S 14 in S.E. and S 15 in S.W. quadrants. Dig pits 18 x 18 x 12 ins. in each. sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. base, 2 ft. high. W. of cor.

Land rolling.

Soil sandy 3rd rate.

No timber

S 89° 57' E, on a random line, bet. secs. 11 and 14

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

80.04 Intersect N and S. line 5 lbs. N. of the cor. of secs. 11, 12, 13, and 14, hereinbefore described, thence from N 89° 57' W, on a true line, bet. secs. 11 and 14.

Descend W. slope over rolling sandy land through scattering sage and greasewood brush undergrowth and bunch grass.

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 4 S 11 on N. half and S 14 on S. half.

Dig pits 18 x 18 x 12 ins. E and W. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high. N. of cor.

80.04 The cor. of secs. 10, 11, 14, and 15, hereinbefore described.

Land rolling.

Soil sandy 3rd rate.

No timber

W 0° 01' W. bet. secs. 10 and 11

BOOK 2621.

- Ascend S. slope of ridge overlooking sandy land through scattering sage and greasewood bush. undergrowth sand bunch grass.
- 10.45 Top of sand ridge bears E and W. desc.
- 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 N 45 10 on W. half and S 11 on E. half. Dig pits 18x18x12 ins. N. and S. of post 3 ft. dia. and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high. W. of cor.
- Note: - At this cor. S. decl. off. 23° 10' S. on the decl. arc and at noon observe the sun on the meridian, and obtain a reading of 36° 05' $\frac{1}{2}$ N. on the lat. arc.
- 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. T 31 N. S 3 in N.W., R 15 E S 2. in N.E. S 11 in S.E. and S 10 in S.W. quadrants. Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high. W. of cor. Pits impracticable.
- Land rolling.
- Soil sandy 3rd rate.
- W. timber

- S 89° 57' E., on a random line, bet. secs. 2 and 11,
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect N. and S. line, at the cor. of secs. 1, 2, 11, and 12., hereinbefore described, thence 1 run, N. 89° 57' W., on a true line, bet. secs. 2 and 11,
- Descend N.W. slope overlooking sandy land through scattering sage and greasewood bush undergrowth and bunch grass
- 11.30 Dry ravine 15 lbs. wide course S.W.
- 21.00 The same ravine 15 lbs. wide 2 ft. deep course N.W. ascend gradually.
- 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. N 45 2 on N. half and S 11 on S. half, Dig pits 18x18x12 ins. E and W. of post 3 ft. dia. and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high. N. of cor.
- 72.00 Top of sand ridge bears N. and S. desc. gently.

80.00 The cor. of sec. 2, 3, 10, and 11, hereinbefore described.
Land rolling.
Soil sandy 3rd rate.
No timber.

No^o 01' W., on a random line, bet. sec. 2 and 3.
40.00 Sub temp. 1/4 sec. cor.

80.06 Intersect N. bdy. of Twp. at the cor. of sec. 2, 3, 34, and 35, ^{recently estab. by me as described in} Exterior Book "AT", thence I run,
So^o 01' E. on a true line, bet. sec. 2, and 3,
Descend S. E. slope over rolling and hilly sandy land, through sage and greasewood brush, undergrowth and bunch grass.

.30 Dry ravine 10 lbs. wide course S 45° W. asc.

7.00 Top of sand ridge bears E and W. desc.

17.75 Dry rock ravine 20 lbs. wide 10 ft. below top of ridge course N 40° W. asc.

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. N 53° 00' W. half and S 2° 00' E. half.

Raise a mound of stone 2 ft. base, 1 1/2 ft. high. W. of cor. Pits impracticable.

80.06 The cor. of sec. 2, 3, 10, and 11, hereinbefore described.
Land rolling and hilly.
Soil sandy 3rd rate.
No timber.

December 30th 1910

December 26th 1910, Ah. 8^h 30^m a.m. l.m. & D set off 36° 02' N. on the lat. arc. 23° 20' 1/2 S. on the decl. arc. and determine a meridian with the solar at the cor. of sec. 3, 4, 33, and 34 on S. bdy. of Twp. ^{estab. by Sidney E. Blout, May 13, 1909 as described in Exterior Book "X", thence I run,}

No^o 02' W., bet. sec. 33, and 34,

Descend N.W. slope over rolling sandy land through scattering cedar timber, sage and greasewood brush undergrowth and bunch grass.

6.00 Last timber bears E. and W.

18.65 Road to Tuba, Arizona bears E. and W.

40.00 Set an iron post 3 ft. long 1 in. in diam., 26 ins. in the ground for 1/4 sec. cor. marked on brass

BOOK 2621

Cap 14533 on W. half and S34 on E. half.
 Dig pits 18x18x12 ins. N and S. of post 3 ft. dia. and
 raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. W.
 of cor.
 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 T 31 N. S 28 in N.W., R 15 E.
 S 27 in N.E. S 34 in S.E. and S 33 in S.W. quadrants.
 Dig pits 18x18x12 ins. in each sec. 5 1/2 ft. dia.
 and raise a mound of earth 4 ft. base, 2 ft. high.
 W. of cor.
 Land rolling.
 Soil sandy 3rd rate.
 Timber Cedar.

N. 89° 59' E. on a random line bet. secs. 27 and 34,
 40.00 Set temp. 1/4 sec. cor.
 80.06 Enter sec. N. and S. line, 3 lbs. S. of the cor. of
 sec. 26, 27, 34 and 35, hereinbefore described, thence from
 S. 89° 58' W. on a true line, bet. secs. 27 and 34
 Arced gradually over E. slope of sand ridge
 8.00 Enter scattering cedar timber bears N and S.
 13.00 Top of sand ridge bears N. and S. due. W. slope.
 22.50 Leave timber bears N.E. and S.W.
 40.03 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 14527 on N. half. and S 34 on S. half.
 Dig pits 18x18x12 ins. E and W. of post 3 ft.
 dia. and raise a mound of earth 3 1/2 ft. base
 1 1/2 ft. high N. of cor.
 80.06 The cor. of secs. 27, 28, 33. and 34, hereinbefore
 described.
 Land rolling and hilly.
 Soil sandy 3rd rate.
 Timber Cedar.

N 0° 02' W. bet. secs. 27 and 28.
 Descend N. slope over rolling & sandy land through
 scattering sage and greasewood brush undergrowth
 and bunch grass.
 40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins.
 in the ground for 1/4 sec. cor. marked on brass

Subdivision of T₃₁ N., R₁₅ E.

Claims

17

- Cap $\frac{1}{4}$ S 28 on W. half, and S 27 on E. half.
Dig pits 18x18x12 ins. N. and S. of post 3 ft. dist.
and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$
ft. high W. of cor.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24
ins. in the ground for cor. of sec. 21, 22, 27, and
28, marked on brass cap T₃₁ N. S 21 in NW, R₁₅ E.
S 22 in NE, S 27 in SE, and S 28 in SW, quadrants
from which.
- A cedar 10 ins. in diam. bears N 39° E. 302 lbs.
dist. marked T₃₁ N. R₁₅ E. S 22 B.T. and
A cedar 8 ins. in diam., bears N 12 $\frac{1}{2}$ ° W 214 lbs.
dist. marked T₃₁ N. R₁₅ E. S 21 B.T.
- No other trees within limits.
- Dig pits 24x24x12 ins. in each sec. S.E. and S.W.
of post 5 $\frac{1}{2}$ ft. dist. and raise a mound of earth
4 ft. base, 2 ft. high W. of cor.
- Land rolling.
- Soil sandy 3rd rate.
- No timber
- Note:— At this cor. I set off 23° 21 $\frac{1}{2}$ ' S. on the decl. arc,
and at noon observe the sun on the meridian
and obtain a reading of 36° 03 $\frac{1}{2}$ ' N. on the hor.
arc.
-
- 40.00 N 89° 58' E. on a random line bet. sec. 22 and 27
Set temp 4 sec. cor.
- 79.98 Intersect N. and S. line 8 lbs. N. of the cor. of
sec. 22, 23, 26, and 27, hereinbefore described, thence I run,
N 89° 59' W., on a true line, bet. sec. 22 and 27.
Descend S.W. slope over rolling sandy land, through
scattering sage and greasewood brush undergrowth
and bunch grass.
- 37.80 Dry ravine 30 lbs. wide course N 65° W. asc.
- 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 $\frac{1}{4}$ S 22 on N. half and S 27 on S. half.
Dig pits 18x18x12 ins. E and W. of post 3 ft. dist.
and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$
ft. high N. of cor.
- 60.00 Top of sand ridge bears N and S, bears rolling

BOOK 2621

- land bears N. and S., Enter hilly land., desc
 70.60 East edge of canyon 50 ft. deep bears N. and S.
 descend abruptly into canyon.
 72.80 Bottom of canyon, cross dry ravine course North
 asc.
 74.45 West edge of canyon. Leave hilly land bear
 N. and S., Enter rolling land and scattering
 cedar timber bears N. and S.
 79.98 The cor. of sec. 21, 22, 27, and 28, hereinbefore
 Land rolling, and hilly. described.
 Soil sandy and stony 3rd and 4th rate
 Timber scattering cedar.

No 02 W. Sec. 21 and 22.

Descend N. slope through scattering cedar timber
 and greasewood bush undergrowth.

- 19.50 Rocky ravine 60 ft. below cor. Course west. asc
 steeply.
 33.25 Top of steep ascent, asc. gradually. Leave timber
 bears E. and W.
 40.00 Set an iron post 3 ft. long 1 in. in diam. 26 in. in
 the ground for $\frac{1}{4}$ sec. Cor. marked on brass cap.
 N 3 21 on W. half and S 22, on E. half.
 Dig pits 18 x 18 x 12 in. N. and S. of post 3 ft. dist.
 and raise a mound of earth 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft.
 high W. of cor.
 78.00 Top of sand ridge bears N.E. and S.W. desc.
 80.00 Set an iron post 3 ft. long 2 in. in diam. 24 in.
 in the ground for cor. of sec. 15, 16, 21, and 22
 marked on brass cap T 31 N. S 16 in N.W., R 15 E.
 S 15 in N.E., S 22 in S.E. and S 21 in S.W. quadrants.
 Dig pits 18 x 18 x 12 in. in each sec., 5 $\frac{1}{2}$ ft. dist. and
 raise a mound of earth 4 ft. base, 2 ft. high W.
 of cor.
 Land hilly.
 Soil sandy and stony 3rd and 4th rate.
 Timber cedar

- S 89° 57' E, on a random line, bet. sec. 15 and 22,
 40.00 Set temp. $\frac{1}{4}$ sec. Cor.

Chain

19

- 80.04 Intersect N. and S. line 18 lks. N. of the cor. of secs. 14, 15, 22, and 23. thence Drive
 N 89° 51' W. on a true line bet. secs. 15 and 22
 Ascend E slope over rolling sandy land through sage and greasewood brush undergrowth and bunch grass
- 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 $\frac{1}{4}$ S 15 on N. half and S 22 on S. half
 Dig pits 18 x 18 x 12 ins. E and W. of post 3 ft. dish. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high. N. of cor.
- 56.00 Mfg. of sand ridge bears N. and S. desc.
- 80.04 The cor. of secs. 15, 16, 21, and 22, hereinbefore described.
 Land rolling.
 Soil sandy 3rd rate.
 No timber

- N. 0° 02' W., bet. secs. 15 and 16,
 Descend N.W. slope over rolling sandy land through scattering sage and greasewood brush undergrowth and bunch grass.
- 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 $\frac{1}{4}$ S 16 on W. half and S 15 on E. half.
 Dig pits 18 x 18 x 12 ins. N. and S. of post. 3 ft. dish. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high. W. of cor.
- 64.00 Ascend gradually.
- 72.00 Enter scattering cedar timber bears NW. and S.E.
- 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 T 31 N., R 15 E, S 10 in N.E. S 15 in S.E. and S 16 in S.W. quadrant, from which
 A cedar 8 ins. in diam. bears N 64° E 330 lks. dish. marked T 31 N., R 15 E S 10 B.T.
 A cedar 16 ins. in diam. bears S 46 $\frac{1}{2}$ ° E 359 lks. dish. marked T 31 N., R 15 E S 15 B.T.
 A cedar 8 ins. in diam. bears S 44 $\frac{1}{2}$ ° W 38 lks. dish. marked T 31 N., R 15 E S 16 B.T. and
 A cedar 14 ins. in diam. bears N 45 $\frac{3}{4}$ ° W 102 lks. dish.

BOOK 2621

marked T₃₁N, R₁₅E S₉B.T.

Land rolling.

Soil sandy 3rd rate.

Timber Cedar

December 26th 1910

December 31st 1910 Ah. 9^h 02^m a.m. L. and S. of
 36° 05' 1/2" N. on the lat. arc., 23° 06' S. on the decl. arc
 and determine a meridian with the solar alt.
 the cor. of sec. 9, 10, 15 and 16, ^{above described} thence I run,
 S 89° 51' E, on a random line, bet. sec. 10 and 15

40.00 Set temp 1/4 sec. cor.

80.06 Intersect N. and S. line, 5 lks. S. of the cor. of sec.
 10, 11, 14, and 15, hereinbefore described, Thence I run,

N 89° 53' W, on a true line, bet. sec. 10 and 15,

Descend W. slope over rolling sandy land through
 scattering sage and greasewood brush undergrowth
 and bunch grass.

3.15 Dry ravine 10 lks. wide course N.W. arc.

40.03 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.
 1/4 5 10 on N. half and S 15 on S. half.Dig pits 18 x 18 x 12 ins E. and W. of post. 3 ft. dist.
 and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft.
 high N. of cor.

68.00 Top of sand ridge bears N. and S. decl. gradually

73.00 Enter scattering cedar timber bears N. and S.

80.06 The cor. of sec. 9, 10, 15 and 16, hereinbefore described.

Land rolling.

Soil sandy 3rd rate.

Timber Cedar.

N. 0° 02' W, bet. sec. 9 and 10,

Descend N.W. slope, over rolling sandy land through
 scattering cedar timber, and sage and greasewood
 brush undergrowth and bunch grass.40.00 The point for the 1/4 sec. cor. falls in bottom of dry
 ravine where natural course would insure the
 destruction of the cor. therefore ah.39.75 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in
 the ground for witness cor. to the 1/4 sec. cor.

marked on brass cap. T31N, R15E, S9. in W. half.
 S10 in E. half and W.C. 1/4 in N. half from which
 A cedar 12 ins. in diam. bears S 61° E 177 lbs. dist.
 marked W.C. 1/4 S10 B.T. and
 A cedar 10 ins. in diam. bears S 31° W 191 lbs. dist.
 marked W.C. 1/4 S9 B.T.

40.00 Dry ravine 10 lbs. wide 3 ft. deep course N.E.

41.00 The same ravine course N.W.

48.40 The same ravine course N.E.

75.20 The same ravine course with asc. gently.

80.00 Set an iron post 3 ft. long. 2 ins. in diam. 24 ins.
 in the ground for cor. of sec. 3, 4, 9, and 10
 marked on brass cap T31N, S4 in N.W., R15E.
 S3 in N.E. S10 in S.E. and S9 in S.W. quadrants.
 from which.

A cedar 7 ins. in diam. bears N 72° E 240 lbs. dist.
 marked T31N, R15E, S3 B.T.

A cedar 6 ins. in diam. bears S 31° E 77 lbs. dist.
 marked T31N, R15E, S10 B.T. and,

A cedar 8 ins. in diam. bears S 44 1/2° W. 69 lbs. dist.
 marked T31N, R15E S9 B.T. No other trees suitable
 for bearing trees available

Dig pits 18x18x12 ins. in each sec. 5 1/2 ft. dist.
 and raise a mound of earth 4 ft. base, 2 ft. high
 W. of cor.

Land rolling.
 Soil sandy 3rd rate.
 Timber Cedar.

Note: - At this cor. Set off. 23° 06' S. on the decl. arc and
 on noon observe the sun on the meridian and
 obtain a reading of 36° 06' N. on the lab. arc.

40.00 S 89° 53' E, on a random line bet. sec. 3 and 10,
 Set temp. 1/4 sec. cor.

80.08 Intersect N. and S. line 5 lbs. N. of the cor. of
 sec. 2, 3, 10 and 11, hereinbefore described, thence 1 run,
 N 89° 51' W, on a true line, bet. sec. 3 and 10,
 Descend N.W. slope over rolling sandy land through
 scattering sage and greasewood brush undergrowth
 and bunch grass.

40.04 Set an iron post 3 ft. long 2 in. in diam. 26 ins. in

the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S
30 W. half and 310 on S. half.

Dig pits 18x18x12 ins. E and W. of post 3 ft. dish.
and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high
N. of cor.

78.00 Enter scattering cedar timber bears N and S.

80.08 The cor. of sec. 3, 4, 9, and 10, hereinbefore described.

Land rolling.

Soil sandy 3rd rate

Timber Cedar

$N 0^{\circ} 02' W$, on a random line, bet. sec. 3 and 4

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

79.92 Enter bet N. bdy of Twp., 5 lks. W. of the cor. of
sec. 3, 4, 33, and 34, recently estab. by me as described in
Exterior Book "AT", thence I run,

South, on a true line, bet. sec. 3 and 4,

Descend S.W. slope over rolling sandy land
through scattering sage and greasewood brush
mudgrass and blue grass

17.20 Dry ravine 100 lks. wide course west. asc. N.

Slope over hilly land.

34.30 Top of ridge bears N.W. and S.E. desc. Enter timber bears E and W.

38.70 Dry ravine 20 lks. wide course N. $40^{\circ} W$. asc.

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. $\frac{1}{4}$ S 40 W. half and 33 on E. half. From which
a cedar 8 ins. in diam. bears $N 21\frac{1}{2}^{\circ} W$ $1\frac{1}{2}$ lks. dish.
marked $\frac{1}{4}$ S 4 B.T. No other trees available.

Dig pits 18x18x12 ins N. and S. of post 3 ft. dish. and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W.
of cor.

79.92 The cor. of sec. 3, 4, 9 and 10, hereinbefore described.

Land rolling and hilly.

Soil sandy and stony 3rd and 4th rate.

Timber Cedar

December 31st 1910.

December 27th 1910, Ab. 8^h 32^m a.m. L.M. L. & D. bet.
off $36^{\circ} 02' N$. on the lat. arc. $23^{\circ} 18\frac{1}{2}' S$. on the decl.
arc. and determine a meridian with the solar
at the cor. of sec. 4, 5, 32, and 33 on S. bdy. of Twp.

Subdivision of Twp 31 N., R 15 E.

Chain

estab. by Sidney E. Blout, May 13, 1909, as described in Exterior Book "X,"
thence Drun,

N 0° 03' W., bet. sec. 32 and 33,

Descend N.W. slope over rolling sandy land through scattering cedar, timber and sage and greasewood brush undergrowth and bunch grass.

- 9.05 Road to Tubac, Arizona bears E and W.
- 40.00 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 1/4 S 32 on W. half and S 33 on E. half. from which. A cedar 7 ins. in diam. bears N 14 1/2° E 76 lbs. dish, marked 1/4 S 33 B.T. and A cedar 10 ins. in diam. bears N 8° W 173 lbs. dish, marked 1/4 S 32 B.T.

- 43.00 Leave timber bears N.E. and S.W.
- 80.00 Set an iron post 3 ft. long 2 ins. in diam., 24 ins. in the ground for cor. of sec. 28, 29, 32, and 33. marked on brass cap T 31 N S 29 in N.W., R 15 E S 28 in N.E., S 33 in S.E. and S 32 in S.W. quadrant. Dig pits 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dish and raise a mound of earth 4 ft. base, 2 ft. high W. of cor.

Land rolling,
Soil sandy 3rd rate.
Timber Cedars.

N. 89° 59' E. on a random line bet. sec. 28 and 33.

- 40.00 Set temp 1/4 sec. cor.
- 80.14 Intersect N. and S. line, 3 lbs. S. of the cor. of sec. 27, 28, 33. and 34, hereinbefore described, thence 1 run, S 89° 58' W., on a true line bet. sec. 28 and 33, - Over N.W. slope, through scattering sage and greasewood brush undergrowth and bunch grass.
- 40.07 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 1/4 S 28 on N. half and S 33. on S. half. Dig pits 18 x 18 x 12 ins. E and W. of post 3 ft. dish. and raise a mound of earth 3 1/2 ft. base 1/2 ft. high N. of cor
- 80.14 The cor. of sec. 28, 29, 32. and 33, hereinbefore described. Land rolling.
Soil sandy 3rd rate.

BOOK 2621

No timber

Note: At this cor. Dsch off. $23^{\circ}19\frac{1}{2}'$ S. on the decl. arc and at noon observed the sun on the meridian the resulting latitude being $36^{\circ}02\frac{1}{2}'$ N.

No 03' W., bet. sees 28 and 29,

Descend N. slope over rolling sandy land through scattering sage and greasewood brush undergrowth and bunch grass.

34.00 Enter scattering cedar timber bears $N45^{\circ}E$ and $S45^{\circ}W$.

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 $S\frac{1}{4}S$ 29 on W. half and $S28$ on E. half. From which. A cedar 8 ins. in diam. bears $N73\frac{1}{2}^{\circ}W$. 228 lbs. dia. marked $\frac{1}{4}S29$ B.T. and A cedar 10 ins. in diam. bears $S59\frac{3}{4}^{\circ}E$ 128 lbs. dia. marked $\frac{1}{4}S28$ B.T.

47.60 Dry rocky ravine 15 lbs. wide course $N70^{\circ}W$. arc. Leads rolling land bears $N70^{\circ}W$. and $S70^{\circ}E$. Enter stony hilly land.

49.00 Top of rocky ridge bears E. and W. decl.

55.55 Dry ravine course N.E. asc.

61.50 Top of sand ridge bears N.E. and S.W. decl.

62.75 A point from which an Dundas Stogran bears East. 100 lbs. dia.

80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of sees 20, 21, 28 and 29, marked on brass cap T 31 N S 20 in N.W., R 15 E S 21 in N.E., S 28 in S.E. and S 29 in S.W. quadrant, from which.

A cedar 18 ins. in diam. bears $N47\frac{1}{2}^{\circ}E$ 15 lbs. dia. marked T 31 N. R 15 E. S 21 B.T. and

A cedar 16 ins. in diam. bears $N49^{\circ}W$. 52 lbs. dia. marked T 31 N., R 15 E. S 20 B.T. No other trees suitable for bearing trees available.

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

Land rolling and hilly.

Soil sandy and stony (3rd and 4th rate).

Timber Cedar

Chain

- 40.00 N. 89° 58' E., on a random line, bet. sec. 21 and 28.
Sth temp. 1/4 sec. cor.
- 80.12 Intersect. N. and S. line, 8 lks. N. of the cor. of
secs. 21, 22, 27, and 28, hereinbefore described, thence I run,
N. 89° 59' W., on a true line, bet. sec. 21 and 28,
Over rolling sandy land through scattering cedar
timber, and dogel and greasewood bush undergrowth
and bunch grass.
- 19.00 Begun across over N.W. slope, near rolling land
between N.E. and S.W. Corner hilly stony land
- 31.60 Dry rocky ravine course North side.
- 40.06 Sth and Iron post 3 ft. long, 1 in. in diam. 26 in. in
the ground for 1/4 sec. cor. marked on brass cap 1/4 S
200 N. half and S 28 on S. half. from which.
A cedar 10 in. in diam. bears N 73/4° W 103 lks.
dih. marked 1/4 S 21 B.T. and
A cedar 6 in. in diam. bears S 46 1/2° W 105 lks. dih.
marked 1/4 S 28 B.T.
- This cor. is situated on top of ridge, bears N. and S
desc. W. slope
- 48.60 Dry ravine course North side.
- 49.80 Top of stony ridge bears N. and S. desc.
- 53.90 Dry rocky ravine 30 ft. below top of ridge course
N 20° E. side.
- 69.00 Top of rocky ridge bears N. and S. desc.
- 77.90 Dry ravine course N.W. side.
- 80.12 The cor. of sec. 20, 21, 28, and 29, hereinbefore described.
Land rolling and hilly.
Soil sandy and stony 3rd and 4th rate.
Number Cedar.

December 27th 1910.

This twenty seventh day of Dec. 1910. I employ
Richard W. Shumway to perform the duties of
Chainman., No officer authorized to administer
oaths, other than myself being available without
great inconvenience delay, and expense, I administer
the required preliminary oaths.

Van L White

U.S. Draftsman

January 2nd 1911. At 8^h 34^m a.m. l.m. l-d bet off 36° 32' N.

BOOK 2621

- on the lat. arc. $22^{\circ}56'3$. on the decl. arc. and determine a meridian with the polar as the cor. of sec. 20, 21, 28 and ^{hereinbefore described} 29, thence Drum, $N.0^{\circ}3'W$, to cor. sec. 20 and 21,
 Descend N.E. slope over stony hilly land through sage and greasewood brush undergrowth and bunch grass.
- .60 Dry ravine 8 ft. below cor. course N.W. and steep rocky S.W. slope.
- 16.50 Top of rocky ridge bears E. and W. desc.
- 26.00 South edge of canyon 50 ft. deep bears E. and W. descend abruptly.
- 28.50 Foot of steep descent in canyon cross ravine course with arc. 3. 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. $N45^{\circ}20'$ on W. half and $S21^{\circ}00'$ on E. half.
 Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high. W. of cor. Pits impracticable
- 41.15 Top of steep ascent on north edge of canyon bears N.W. and S.E. desc. N. slope.
- 43.20 South edge of box canyon 50 ft. deep bears N.E. and S.W. desc. abruptly over cliffs and ledges into canyon.
- 49.50 Bottom of canyon course S.W. and abruptly
- 54.00 Top of abrupt ascent on north edge of canyon bears N.W. and S.E. asc. gradually.
- 69.00 Top of sand ridge bears E. and W. desc. N. slope
- 70.00 Enter scattering cedar timber bears E. and W.
- 78.20 Dry ravine 10 lks. wide course N.W. and
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of sec. 16, 17, 20, and 21, marked on brass cap T₃₁N., S₁₇ in N.W., R₁₅E. S₁₆ in N.E. S₂₁ in S.E. and S₂₀ in S.W. quadrant. from which.
 A cedar 10 ins. in diam. bears $N47^{\circ}E$ 134 lks. dist. marked T₃₁N., R₁₅E., S₁₆ B.T.
 A cedar 12 ins. in diam. bears $S62^{\circ}E$ 206 lks. dist. marked T₃₁N., R₁₅E. S₂₁ B.T.
 A cedar 12 ins. in diam. bears $S49\frac{1}{4}^{\circ}W$ 186 lks. dist. marked T₃₁N., R₁₅E. S₂₀ B.T. and
 A cedar 10 ins. in diam. bears $N13\frac{3}{4}^{\circ}W$ 238 lks. dist. marked T₃₁N., R₁₅E. S₁₇ B.T.
 Sand hilly and broken

Subdivision of Twp 31 N, R 15 E

Chains

- Soil sandy and stony 3rd and 4th rate.
Timber Cedar
- 40.00 Set lamp, $\frac{1}{4}$ sec. cor.
80.12 Intersect N. and S. line 21. lkw. S. of the cor. of
secs. 15, 16, 21 and 22, hereinbefore described, thence I run,
S 89° 52' W., on a true line, bch. secs. 16 and 21,
ascend W. slope over rolling sandy land through
scattering sage and greasewood bush undergrowth
and bunch grass
- 40.06 Set an iron post 3 ft. long 1 in. in diam. 20 ins.
in the ground for $\frac{1}{4}$ sec. cor. marked on brass
cap $\frac{1}{4}$ S 16 on N. half and 321 on S. half
Dig pits 18 x 18 x 12 ins. East W. of post 3 ft. diam.
and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft.
high N. of cor.
- 63.25 Enter scattering cedar timber trees N. and S.
69.00 Dry ravine 10 lks. wide course N 30° W., leave
rolling land toward N.W. and S.E., enter broken
steep hilly land.
- 70.90 Top of ridge bears N.W. and S.E. desc.
75.55 Dry ravine 10 lks. wide course north asc.
77.85 Top of ridge bears N. and S. desc.
80.12 The cor. of secs. 16, 17, 20, and 21, hereinbefore described.
Land rolling, broken, and hilly.
Soil sandy and stony 3rd and 4th rate.
Timber Cedar.
- Note: At this cor I set off $22^{\circ} 56\frac{1}{2}'$ S. on the decl. arc and
at noon observe the sun on the meridian and
obtain a reading of $36^{\circ} 04\frac{1}{2}'$ N. on the lab. arc.
- N. 0° 03' W., bch. secs. 16 and 17,
ascend S.W. slope over broken stony hilly land
through scattering cedar timber and sage and
greasewood bush undergrowth
- 4.50 Top of ridge bears East W. desc steeply
6.65 Dry rocky ravine 15 lks. wide 30 ft. below top
of ridge course S 35° W. asc. steeply.
27.00 Top of steep ascent leaves broken stony hilly

Subdivision of T₁P₃₁N, R₁₅E.

Chain

BOOK 2621

Land bears E. and W. Ascend gradually over rolling sandy land
27.50 Leave timber bears E. and W.

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 out brass cap $\frac{1}{4}$
S 17 on W. half and S 16 on E. half.

Dig pits 18 x 18 x 12 ins. N. and S. of post. 3 ft. dist.
and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
high W. of cor.

80.00 Set an iron post 3 ft. long ^{in diam. 2 1/2 ins.} 2 ins. in the ground
for cor. of secs. 8, 9, 16 and 17, marked out brass
cap T 31 N, S 8 in N.W. R 15 E S 9 in N.E. S 16 in S.E.
and S 17 in S.W. quadrants

Dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. dist. and
raise a mound of earth 4 ft. base, 2 ft. high W.
of cor

Land rolling, hilly, and broken
Soil sandy and stony 3rd and 4th rate.
Timber Cedar

N 89° 52' E on a random line bet. secs 9 and 16.
40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.08 Intersect N. and S. line 3 lks. S of the cor of secs.
9, 10, 15, and 16, hereinbefore described, thence I run,
S 89° 51' W. on a true line bet. secs. 9 and 16.

Descend W. slope over rolling sandy land through
scattering cedar timber and sage and greasewood
brush undergrowth and bunch grass

9.20 Dry ravine 20 lks. wide course north and

11.00 Leave timber bears N. and S.

18.50 Prof. of sand ridge bears N. and S. desc.

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 out brass
cap $\frac{1}{4}$ S 9, on N. half and S 16 on S. half.

Dig pits 18 x 18 x 12 ins. E and W. of post. 3 ft. dist.
and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high.
N. of cor.

80.08 The cor. of secs. 8, 9, 16 and 17, hereinbefore described.

Land rolling.
Soil sandy 3rd rate.
Timber Cedar.

January 2nd 1911

January 3rd 1911; Ab. 10^h 04^m a.m. l.m. l. I reb off
 $36^{\circ} 54' N.$ on the lat. arc. $22^{\circ} 51\frac{1}{2}' S.$ on the decl. arc
 and determine a meridian with the solar ab
 the cor. of secs. 8, 9, 16 and 17, ^{hereinbefore described} thence I run,

$N. 0^{\circ} 03' W.$, bet. secs. 8 and 9,

Over rolling sandy land, through scattering sage
 and greasewood brush undergrowth with bunch
 grass.

26.00 Begin descent over N.W. 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 $N. 8^{\circ} 0' W.$ half and $S. 9^{\circ} 0' E.$ half.

Dig pits 18 x 18 x 12 ins. N and S. of post 3 ft. deep
 and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$
 ft. high. W. of cor.

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 T 31 N. S. 5 in N.W., R 15 E.
 S 4 in N.E., S 9 in S.E. and S 8 in S.W. quadrants
 Dig pits 18 x 18 x 12 ins. in each sec. $5\frac{1}{2}$ ft. deep and
 raise a mound of earth 4 ft. base, 2 ft. high W.
 of cor.

Land rolling.
 Soil sandy & brackish.
 No timber

$N. 89^{\circ} 51' E.$ on a random line bet. secs. 4 and 9

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

80.16 Intersect N. and S. line 5 lks. N. of the cor. of secs.
 3, 4, 9, and 10, hereinbefore described, thence I run,

$S. 89^{\circ} 53' W.$, on a true line, bet. secs. 4 and 9,

Descend N.W. slope over rolling sandy land, through
 scattering cedar, timber and sage and greasewood
 brush undergrowth.

.50 Lean timber bars N.E. and S.W.

7.75 - Drayman's 20 lks. wide course $N. 25^{\circ} W.$ and gently.

40.08 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 $N. 54^{\circ} 0' W.$ half and $S. 9^{\circ} 0' E.$ half.

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

BOOK 2621

80.16 The cor. of secs. 4, 5, 8, and 9, hereinbefore described.
Land rolling
Soil sandy 3rd rate.
Timber Cedar.

Note: At this cor. I set off $22^{\circ}51'3''$ S. on the decl. arc and at noon observed the sun on the meridian and obtain a reading of $36^{\circ}06'$ N. on the lab. arc.

40.00 No $0^{\circ}03'$ W, on a random line, bet. sec. 4 and 5
Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect N. Stry of Twp; 18 lks. W. of the cor. of secs. 4, 5, 32, and 33, recently estab. by me as described in Exterior Book "AT,"
thence 1 run,
 $50^{\circ}05'$ W, on a true line, bet. sec. 4 and 5.

Descend West slope over broken hilly land through sage and greasewood brush undergrowth and bunchgrass.

11.00 North edge of canyon. Leave Camp. W. descend abruptly into canyon

18.20 Mouth of abrupt descent in canyon 100 ft. deep. Cross dry ravine course west. asc. abruptly.

18.25 A point from which a spring bears East. 5.00 ch. dist.

31.80 Top of abrupt ascent. on South edge of canyon bears E. and W. Leave broken stony hilly land bears East W. Asc. gradually over rolling sandy land.

40.10 Set an iron post 3 ft. long 1 in. in diam. 2 6 in. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 5 on W. half and 3 4 on E. half. Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high. W. of cor. Pits impracticable

80.10 The cor. of secs. 4, 5, 8, and 9, hereinbefore described.
Land rolling, hilly, and broken.
Soil sandy and stony 3rd and 4th rate.
No timber

January 3rd 1911

December 28th 1910: At 8^h 01^m am. level I set off $36^{\circ}02'$ N. on the lab. arc. $23^{\circ}14\frac{1}{2}'$ S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 5, 6, 31 and 32. on S Stry. of Twp; estab. by Sidney E. Blout, May 13, 1909 as described in

Chain

31

- Exterior Book "X", thence I run,
 N. 0° 03' W., 31 and 32,
- Descend N.E. slope over rolling sandy land through scattering sage and greasewood brush undergrowth and bunch grass.
- 20.70 Road to Tuba, Arizona bears E and W.
- 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 $\frac{1}{4}$ S 31 on W. half and S 32 on E. half.
 Dig pits 18 x 18 x 12 ins. N and S. of post 3 ft. deep. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high. W. of cor.
- 52.50 Enter scattering cedar timber bears E and W
- 77.80 Sand stone ledge 10 ft. high. bears rolling land bears E and W. Enter stony hilly land. desc steep N slope.
- 80.00 Set an iron post 3 ft. long, 2 ins. in diam. 24 ins in the ground for cor. of sec. 29, 30, 31 and 32. marked on brass cap T 31 N. S 30 in NW, R 15 E. S 29 in N.E. S 32 in S.E. and S 31 in S.W. quadrants. from which.
 A pinon pine 8 ins. in diam. bears N 54 $\frac{1}{2}$ ° E 34 lbs. dish, marked T 31 N, R 15 E. S 29 B.T.
 A cedar 14 ins. in diam. bears S 19 $\frac{1}{2}$ ° E 116 lbs. dish, marked T 31 N, R 15 E S 32 B.T.
 A cedar 10 ins. in diam. bears S 54° W 34 lbs. dish, marked T 31 N, R 15 E, S 31 B.T. and
 A cedar 12 ins. in diam. bears N 55 $\frac{3}{4}$ ° W 138 lbs. dish, marked T 31 N, R 15 E. S 30 B.T.
 Land rolling and hilly.
 Soil sandy and stony 6th and 4th rates.
 Main trees pinon pine and cedar

- N. 89° 59' E, on a random line, 31 and 32,
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.16 Intersect N. and S. line, 3 lks. S. of the cor. of sec. 28, 29, 32 and 33, hereinbefore described, thence I run, S 89° 58' W, on a true line, 31 and 32,
 Descend N.W. slope over rolling sandy land through scattering cedar, and pinon pine timber, and sage and greasewood brush undergrowth.
- 40.08 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 $\frac{1}{4}$ S 29

BOOK 2621

- on n. half and S 32. on S. half. from which.
 A cedar 6 ins. in diam bears $N 48 \frac{1}{2}^{\circ} W$ 151 lks. dist.
 marked $\frac{1}{4}$ 329 B.T. and
 A cedar 10 ins. in diam. bears $S 51 \frac{3}{4}^{\circ} W$ 258 lks.
 dist. marked $\frac{1}{4}$ 332 B.T.
 45.20 Sand stone ledge 10 ft. high. bears N and S . bears
 rolling sandy land bears N . and S . Enter stony hilly
 land, due abruptly over W . slope
 58.15 Dry ravine 30 lks. wide course north. asc. steeply
 70.25 Top of sand ridge bears N and S . desc.
 80.16 The cor. of sees. 29, 30, 31 and 32, hereinbefore described.
 Land rolling, and hilly.
 Soil sandy and stony 3^{rd} and 4^{th} rate.
 Timber pinon pine and cedar

- $S 89^{\circ} 59' W$. on a run down line, bet. sees. 30 and 31,
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 78.40 Intersect W . ldy. of N .; 7 lks. S . of the cor. of
 sees. 25, 30, 31, and 36 recently estab. by line as described in
 Exterior Book "AS"; thence I run,
 $S 89^{\circ} 58' E$, on a true line, bet. sees. 30 and 31
 ascend W . slope over hilly sandy and stony land
 through scattering cedar and pinon pine timber
 and greasewood brush undergrowth.
 300 Top of sand ridge bears N and S . desc.
 11.90 Road to Tuba, Arizona bears $N 715^{\circ} W$. and $S 15^{\circ} E$.
 38.40 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 $\frac{1}{4}$
 $S 30$ on N . half and $S 31$ on S . half from which.
 A cedar 7 ins. in diam. bears $N 4^{\circ} E$ 106 lks. dist.
 marked $\frac{1}{4}$ S. 30 B.T. and
 A cedar 8 ins. in diam. bears $S 20 \frac{1}{4}^{\circ} W$ 52 lks.
 dist. marked $\frac{1}{4}$ S 31 B.T.
 Note: At this cor. I set off. $23^{\circ} 17' S$. on the decl. arc
 and at noon observed the sun on the meridian
 and obtain a reading of $36^{\circ} 03' N$. on the lab. arc
 52.55 Dry ravine 25 lks. wide course $N.E.$ asc.
 61.00 Top of ridge bears N . and S . desc.
 66.20 Dry ravine 20 lks. wide course north asc.
 78.40 The cor. of sees. 29, 30, 31 and 32, hereinbefore described.
 Land hilly and broken.
 Soil sandy and stony 3^{rd} and 4^{th} rate.

Subdivision of T₃₁N, R₁₅E.

Chain

Pioneer cedar and juniper pine

- N. 0° 03' W., Feb. sec. 29 and 30,
 descend North slope over broken, stony hilly land through
 scattering cedar and juniper pine timber and greasewood
 brush undergrowth and bunch grass.
- 17.00 Dry ravine 30 lbs. wide course N.W. arc.
- 18.75 Top of rocky spur 40 ft. above ravine bears E and W,
 desc.
- 28.15 Dry ravine course West arc.
- 40.00 Set an iron post 8 ft. long 1 in. in diam. 26 ins. in the
 ground for 14 sec. cor. marked on brass cap 14 S 30 W
 W. half and S 29 W E. half. from which.
 A cedar 12 ins. in diam. bears N 72° E 62 lbs. dist.
 marked 14 S 29 B.T. and
 A cedar 8 ins. in diam. bears N 58 1/4 W. 74 lbs. dist.
 marked 14 S 30 B.T.
- 41.10 Top of rocky spur bears E and W, desc.
- 45.35 Dry rocky ravine 20 lbs. wide course west arc.
- 51.00 Top of sand ridge bears E and W, desc.
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins.
 in the ground for cor. of sec. 19, 20, 29, and 30
 marked on brass cap T 31 N. S 19 in N.W., R 15 E S 20
 in N.E. S 29 in S.E. and S 30 in S.W. quadrants.
 from which.
 A cedar 18 ins. in diam. bears N 15 3/4° E 91 lbs. dist.
 marked T 31 N, R 15 E, S 20 B.T.
 A cedar 12 ins. in diam. bears S 3 3/4° E 30 lbs. dist.
 marked T 31 N, R 15 E S 29 B.T.
 A cedar 7 ins. in diam. bears S 38° W 109 lbs. dist.
 marked T 31 N, R 15 E, S 30 B.T. and
 A cedar 6 ins. in diam. bears N 37 3/4° W 123 lbs.
 dist. marked T 31 N, R 15 E, S 19 B.T.
- Land broken and hilly.
 Soil sandy and stony 3rd and 4th rate.
 Pioneer juniper pine and cedar

December 28th 1910.

January 4th 1911; Ab. 9^h 05^m a.m. Int. & set off.
 36° 03 1/2' N. on the lat. arc., 22° 45 1/2' S. on the decl.
 arc. and determine a meridian with the solar ab.

BOOK 2621

- the cor. of sec. 19, 20, 29, and 30, ^{above described} thence I run,
 N. 89° 58' E., on a random line, bet. sec. 20 and 29,
 40.00 Set temp. 1/4 sec. cor.
- 80.28 Intersect N. and S. line, 5 lks. N. of the cor. of
 sec. 20, 21, 28 and 29, hereinbefore described, thence I run
 W. 1/2 N., on a true line, bet. sec. 20 and 29,
 ascend steep rocky East. slope over hilly land through
 scattering cedar and pinion pine timber and sage brush
 undergrowth.
- 5.00 Top of ridge bears N. and S. desc.
- 9.40 Dry ravine 10 lks. wide 30 ft. below top of ridge bears N. W.
 desc.
- 14.00 Top of ridge bears N. and S. desc.
- 20.60 Dry rocky ravine course north asc.
- 40.14 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. 1/4 S 20
 on N. half and S 29 on S. half. from which.
 A cedar 20 ins. in diam. bears N 21° E 436 lks. dist.
 marked 1/4 S 20 B.T. and
 A cedar 18 ins. in diam. bears S 85 1/2° E 301 lks. dist.
 marked 1/4 S 29. B.T.
- 48.00 Top of sand ridge bears N.E. and S.W. desc.
- 59.30 Dry ravine course N 25° W. asc.
- 77.00 Top of sand ridge bears N and S. desc.
- 80.28 The cor. of sec. 19, 20, 29, and 30, hereinbefore described.
 Land hilly, and broken
 Soil sandy and stony, 3rd and 4th rate.
 Timber cedar and pinion pine.

- N. 89° 58' W., on a random line, bet. sec. 19 and 30,
 40.00 Set temp. 1/4 sec. cor.
- 78.40 Intersect W. ldy. of Np; 19 lks. S. of the cor. of
 sec. 19, 24, 25 and 30, ^{recently estab. by me as described in} Exterior Book "A5", thence I run,
 S 89° 50' E., on a true line, bet. sec. 19 and 30,
 descend S. E. slope over stony hilly land, through
 scattering cedar timber and greasewood brush
 undergrowth and bunch grass.
- 30.75 Dry rocky ravine 20 lks. wide course N 35° E
 asc.
- 32.00 Top of rocky ridge bears N 30° E and S 30° W. desc.
- 38.40 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in

Subdivision of T_{1/4} S₁ N₁ R₁₅ E.

Chain

the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S₁₉ on N. half and S₃₀ on S. half. from which,
 A cedar 6 ins. in diam. bears N $1\frac{1}{2}$ °W 167 lks. dist. marked $\frac{1}{4}$ S₁₉ B.T. and
 A cedar 10 ins. in diam. bears S₂₃°E 78 lks. dist. marked $\frac{1}{4}$ S₃₀ B.T.

- 44.10 Dry prairie 35 ft. below $\frac{1}{4}$ sec. cor. course N₃₀°E. and
- 48.00 Top of sand ridge bears N.E. and S.W. desc.
- 73.55 Dry rocky ravine 100 lks. wide course North arc.
- 78.40 The cor. of secs. 19, 20, 29 and 30, hereinbefore described. Sand broken and hilly. Soil sandy and stony 3rd and 4th rate. Pin bet Cedar.

Note:- At this cor. set off 22°45'2" S on the decl. arc and at noon observe the sun on the meridian and obtain a reading of 36°0'3" N on the lab. arc.

N₀°03' W, bet. secs. 19 and 20, descend N.W. slope over stony hilly land through scattering cedar timber and greasewood brush undergrowth.

- 8.60 Dry rocky ravine course W. arc.
- 16.00 Top of sand ridge bears N.E. and S.W. desc.
- 22.40 Beg in abrupt descent over sand stone ledge 30 ft high. bears N₂₅°E and S₂₅°W
- 25.00 Foot of abrupt descent in dry ravine 70 ft. below top of ledge course N.E. arc steeply.
- 34.55 Top of rocky spur bears N.E. and S.W. desc.
- 40.00 Set an iron post 3 ft. long 1 1/2 in. in diam. 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S₁₉ on W. half and S₂₀ on E. half. from which.
 A cedar 7 ins. in diam. bears N₄₈°E 140 lks. dist. marked $\frac{1}{4}$ S₂₀ B.T. and
 A cedar 8 ins. in diam. bears S₆₅^{3/4}°W 239 lks. dist. marked $\frac{1}{4}$ S₁₉ B.T.
- 40.30 Begin abrupt descent over sand stone ledge 30 ft. high. bears N₃₀°E. and S₃₀°W. Leave timber bears course W.
- 42.85 Foot of abrupt descent in dry ravine 25 lks. wide 75 ft. below top of ledge course N.E. arc.
- 54.00 Top of sand ridge bears E and W. Extends 3 lks. E of line desc.
- 60.00 Dry prairie 40 lks. wide 50 ft. below top of ridge

BOOK 2621

- Course N.E. asc.
- 72.00 Top of rocky spur bears E and W. desc.
- 74.75 Dry ravine 25 lbs. wide Course East. asc. S.E. slope
- 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of secs. 17, 18, 19, and 20, marked on brass cap T 31 N. S 18 in N.W., R 15 E S 17 in N.E. S 20 in S.E. and S 19 in S.W. quadrant.
 Raise a mound of stone 2 ft. base 1 1/2 ft. high. W. of cor.
 Pts impracticable
 Land broken and hilly.
 Soil sandy and stony 3rd and 4th rates.
 Timber Cedar

January 4th 1911

- January 5th 1911, Ab. 8^h 35^m a.m. Com. D. reb off. 36° 04' 1/2"
 N. on the lat. arc. 22° 39' S. on the decl. arc. and determine a meridian with the solar ab. the cor. of secs. 17, 18, 19, and 20, ^{above described} thence run, East, on a random line, bet. secs. 17 and 20,
 40.00 Set trap, 1/4 sec. cor.
- 80.30 Intersect N. and S. line, 10 lbs. S. of the cor. of secs. 16, 17, 20 and 21, hereinbefore described, thence I run, S 89° 56' W., on a true line, bet. secs. 17 and 20, Descend W. slopes over hilly, sandy and stony land through scattering cedar timber and greasewood brush, undergrowth.
- 80 Dry ravine 20 lbs. wide course N.W. asc.
- 2.25 Top of sand ridge bears N and S. desc.
- 6.70 Pyramus 30 ft. below top of ridge Course North asc.
- 20.85 Top of rocky ridge bears N and S. desc.
- 32.35 East edge of Canyon bears N 20° W. and S 20° E. descend abruptly over cliffs and ledges, Leave timber bears N.W. and S.E.
- 35.75 Foot of abrupt descent in Canyon cross dry ravine Course N 35° W. asc.
- 40.15 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 1/4 S 19 on N. half and S 20 on S. half.
 Raise a mound of stone 2 ft. base 1 1/2 ft. high. N. of cor.
 Pts impracticable
- 45.00 Top of abrupt ascent on spur, bears N. and S. desc.
- 54.90 Descend abruptly over sand stone bluff 40 ft. high.

Chains

- 68.25 Foot of abrupt descent in dry ravine 40 lks. wide course $N20^{\circ}E$. asc. abruptly.
- 80.30 The cor. of sec. 17, 18, 19, and 20, hereinbefore described. Land broken and hilly. Soil sandy and stony 3rd and 4th rate. Timber Cedar and pinon pine.
-
- 40.00 $N89^{\circ}50'W$, on a taut line, bet. sec. 18 and 19. Set temp. $\frac{1}{4}$ sec. cor.
- 78.20 Intersect. W. ldy. of $N\frac{1}{2}$, at the cor. of sec. 13, 18, 19 and 24, recently estab. by me as described in Exterior Book "AS", thence I run, $S89^{\circ}50'E$, on a true line, bet. sec. 18 and 19, over broken stony hilly land through scattering cedar timber and greasewood bush undergrowth
- 10.70 Top of rocky ridge bears N and S . desc.
- 25.20 Top of rocky ravine 40 lks. wide course $N50^{\circ}E$. asc.
- 27.70 Top of rocky ridge bears $N.E.$ and $S.W.$ desc.
- 38.20 Set an iron fork 3 ft. long 1 in. in diam. 2 in. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 18 on N . half and S 19 on S . half, from which. A cedar 4 ins. in diam. bears $N80^{\circ}\frac{3}{4}E$ 203 lks. dist. marked $\frac{1}{4}$ S 18 B.T. and A cedar 5 ins. in diam. bears $S72^{\circ}\frac{1}{2}E$ 67 lks. dist. marked $\frac{1}{4}$ S 19 B.T.
- Note: - At this cor. I set off $.22^{\circ}39'S$ on the decl. arc and at noon observed the sun on the meridian and obtain a reading of $.36^{\circ}04\frac{1}{2}'N$ on the lat. arc
- 46.00 Leave timber bears N . and S .
- 77.80 West edge of Canyon on cliff 50 ft. high. bears $N.E.$ and $S.W.$ descend abruptly.
- 78.20 The cor. of sec. 17, 18, 19, and 20, hereinbefore described. Land broken and hilly. Soil sandy and stony 3rd and 4th rate. Timber Cedar and pinon pine
-
- $N10^{\circ}03'W$, bet. sec. 17 and 18, ascend abruptly over sand stone ledge, 35 ft. high. bears $N.E.$ and $S.W.$
- 2.75 Top of ledge 35 ft. above cor. thence ascend gradually

BOOK 2021

- over S.E. slope of sand ridge through sage and greasewood brush undergrowth
- 13.10 Top of sand ridge bears E and W. desc.
- 36.15 South edge of canyon bears N.W. and S.E. descend abruptly over cliffs and ledges.
- 40.00 Set an iron post 3 ft. long in. in diam. 26 in. in the ground for $\frac{1}{4}$ sec. cor. marked out bears Eop N45°18' on W. half and S17° on E. half.
Dig pits 18x18x12 in. N. and S. of post, 3 ft. diam. and raise a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high. W. of cor.
- 43.00 Dry ravine 70 lbs. wide course N40°W. asc.
- 54.20 Top of rocky spur, bears E and W. desc.
- 57.90 Dry ravine 40 lbs. wide. course S60°W. ascend North Wall of canyon
- 74.20 Top of abrupt ascent on rim of canyon 100 ft. above ravine, bears E and W.

Enters rolling sandy land bears E and W.

- 80.00 Set an iron post 3 ft. long 2 in. in diam. 24 in. in the ground for cor. of secs. 7, 8, 17 and 18. marked on brass cap T 31 N. S 7 in N.W. R 15 E. S 8 in N.E., S 17 in S.E. and S 18 in S.W. quadrants. Raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high. W. of cor. Pits impracticable.
Land rolling, hilly, and broken.
Soil sandy and stony 3rd and 4th rates.
No timber

January 5th 1911

- January 6th 1911
At 8^h 05^m a.m. Lev. D set off 36° 05 $\frac{1}{2}$ ' N. on the lat. arc 32° 31' S. on the decl arc and determine a meridian with the solar at the cor. of secs. 7, 8, 17, and 18 ^{above described} thence D run, N. 89° 56' E., on a random line, bet. sec. 8 and 17,
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.14 Intersect N. and S. line 3 lbs. N. of the cor. of secs. 8, 9, 16, and 17, hereinbefore described, thence I run, S 89° 57' W., on a true line, bet. sec. 8 and 17,
Over rolling sandy land, through sage and greasewood brush undergrowth and bunch grass.

Subdivision of Tp 31 N., R 15 E.

Chairs

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 $\frac{1}{4}$ 38 on n. half, and 317 on S half. Dig pits 18x18x12 ins E and W. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

80.14 The cor. of sec. 7, 8, 17, and 18, hereinbefore described. Land rolling. Soil sandy 3rd rate. No timber

N. $89^{\circ} 50' W$, on a random line, bet. sec. 7 and 18;

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

78.08 Intersect W. bdy. of Tp. 7 lkw. 3. of the cor. of sec. 7, 12, 13, and 18, recently estab. by me as described in Exterior Book "AS"; thence I run, S. $89^{\circ} 47' E$, on a true line, bet. sec. 7 and 18.

Descend abrupt rocky E. slope over broken hilly land, through scattering sage and greasewood brush undergrowth and bunch grass

3.45 Foot of steep descent, desc gradually.

18.65 Dry ravine 15 lkw. wide, 50 ft. below cor. Course $N 20^{\circ} E$. asc.

36.00 A point from which a Spring. bears north 23.10 chs. dist.

36.15 Top of sand ridge bears N and S. desc.

38.08 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 $\frac{1}{4}$ 37 on n. half and 318 on S half. Dig pits 18x18x12 ins E and W. of post 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

47.40 Dry ravine 20 lkw. wide Course $N 45^{\circ} W$. asc. steeply.

63.60 Top of steep ascent on rim of Canyon bears $N 66^{\circ} W$. and $S 60^{\circ} E$. Leave hilly land bears $N 60^{\circ} W$. and $S 60^{\circ} E$. Enter rolling sandy land.

78.08 The cor. of sec. 7, 8, 17, and 18, hereinbefore described. Land rolling, hilly and broken. Soil sandy and stony 3rd and 4th rate. No timber

BOOK 2621

- W. $0^{\circ}03'W$, bet. sec. 7 and 8,
Over rolling sandy land, through scattering
sage and greasewood brush and growth and
brush grass.
- 40.00 Set an iron post 3 ft. long 1 in. in diam., 26 in.
in the ground for $\frac{1}{4}$ sec. cor. marked on
brass cap $14S$ on W. half and 38 on E. half
Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high. W.
of cor. Pits impracticable
- 49.75 Over rolling sandy land bears $N30^{\circ}E$, and $S30^{\circ}W$.
Enter stony hills land. descend abruptly over
sand stone ledge.
- 59.30 Dry rocky ravine 25 ft. deep. course west. asc.
- 68.70 Top of rock ledge 10 ft. high. bears NW and SE .
ascend abruptly
- 70.40 Top of abrupt descent on stony spur bears NW
and SE . descend abruptly over N slope into
canyon.
- 80.00 Set an iron post 3 ft. long 2 in. in diam., 24 in.
in the ground for cor. of sec. 5, 6, 7, and 8, marked
on brass cap $T31N36$ in NW , $R15E$, 35 in NE ,
 38 in SE , and 37 in SW quadrant.
Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high.
W. of cor. Pits impracticable.
Land rolling, hilly, and broken.
Soil sandy and stony 3rd and 4th rate.
No timber
- Note:— At this cor. set off $22^{\circ}32\frac{1}{2}'S$ on the decl. arc
and at noon observe the sun on the meridian
and obtain a reading of $36^{\circ}06\frac{1}{2}'N$ on the
lat. arc.

- W $89^{\circ}57'E$, on a random line, bet. sec. 5 and 8,
40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.12 Intersect N and S line, 10 lvs. S. of the cor. of
sec. 4, 5, 8 and 9, hereinbefore described, thence 1 run,
 $S89^{\circ}53'W$, on a true line, bet. sec. 5 and 8,
Ascend NE slope over rolling sandy land, through
sage and greasewood brush and growth and
brush grass.
- 40.06 Set an iron post 3 ft. long 1 in. in diam., 26 in.

Subdivision of Twp. 31 N., R15 E.

Chain

in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ 55 on N. half, and 38 on S. half.
 Ridge a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
 74.00 Leave rolling sandy land bears N.E. and S.W. Enter broken stony land. descend abruptly rocky W. slope into Canyon.
 80.12 The cor. of secs. 5, 6, 7, and 8, hereinbefore described. Land rolling and broken. Soil sandy and stony 3rd and 4th rate. No timber

N 89° 47' W., on a random line, bet. secs. 6 and 7,
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 77.96 Intersect W. bdy. of Twp., 7 lks. S. of the cor. of secs 1, 6, 7, and 12. ^{recently estab. by me as described in Exterior Book "AS", thence I run,}
 S 89° 44' E., on a true line, bet. secs. 6 and 7, ascend W. slope of ridge over hilly sandy and stony land through scattering cedar timber and sage brush undergrowth and bunch grass
 2.00 N.W. of sand ridge. 15 ft. above cor. bears N and S. desc.
 13.50 Dry rocky ravine 10 lks. wide course south. asc.
 17.00 N.W. of rocky ridge bears N and S. desc.
 19.00 Dry ravine course south asc.
 33.00 N.W. of sand ridge bears N and S. desc.
 37.96 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 $\frac{1}{4}$ 36 on N. half, and 37 on S. half from which.
 A cedar 7 ins. in diam. bears N 43 $\frac{1}{2}$ ° W 320 lks. dist. marked $\frac{1}{4}$ 36 B.T. and
 A cedar 4 ins. in diam. bears S 49° W 150 lks. dist. marked $\frac{1}{4}$ 37 B.T.
 53.35 West rim of canyon bears N and S., desc. abruptly. Leave timber bears N and S.
 61.00 Foot of abrupt descent in canyon, cross dry ravine 100 lks. wide course north. asc. gradually
 70.40 Begin abrupt ascent. over N.W. slope.
 77.96 The cor. of secs. 5, 6, 7, and 8, hereinbefore described. Land hilly and broken. Soil sandy and stony 3rd and 4th rate.

Subdivision of Tp. 31 N., R. 15 E.

42

Chains

BOOK 2621

Nimber Cedar.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.32 Intersect N. loby. of Np., 32 lbs. W. of the cor. of
 sec. 5, 6, 31, and 32. recently estab. by me as described in
 Exterior Book "AT", thence I run,
 S. $0^{\circ}11'$ W., on a true line, bet. sec. 5 and 6,
 Descend S.E. slope over broken stony land, through
 scattering sage and greasewood bush undergrowth
 and bunch grass
- 5.40 Dry ravine 100 lbs. wide 4 ft. deep. course N.E.
- 12.20 The same ravine course N.W. asc. ridge.
- 22.00 Top of sand ridge bears E and W. desc.
- 32.80 The same ravine 80 lbs. wide 4 ft. deep course
 N.E.
- 38.60 The same ravine 70 lbs. wide 5 ft. deep course
 N.W. asc.
- 40.32 Set an iron post 3 ft. long, 1 in. in diam. 26 in.
 in the ground for $\frac{1}{4}$ sec. cor. marked on brass
 cap $\frac{1}{4}$ S 6 on W. half, and S 5 on E. half.
 Dig pits 18 x 18 x 12 in. N. and S. of post. 3 ft. diam.
 and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft
 high. W. of cor.
- 43.50 The same ravine 50 lbs. wide 5 ft. deep course N.E.
- 54.00 Begin abrupt ascent. over N.W. slope.
- 80.32 The cor. of sec. 5, 6, 7, and 8, hereinbefore described.
- Soil broken
 Soil sandy and stony 3rd and 4th rate
 No tin bet.

January 6th 1912

General Description.

This township contains every variety of land
 from level to hilly and the soil ranges from
 clay to sandy loam. The soil of the narrow
 bottom land in the deep canyon in the western
 part of the township is a sandy loam capable
 of producing crops with the aid of irrigation
 The soil of the remaining portion of the township

can nearly all be classed as third and fourth rate, is covered with an abundant growth of bunch grass, but is not suitable for agricultural purposes on account of its sandy character.

Scattered groves of scrub cedar and pinon pine timber were found along the canyon in the western part of the township and near the southwest corner of the township.

No mineral was found in the township although I think that coal beds would be encountered at varying depths below the surface. The western portion of the township is underlain with beds of sand stone of a friable nature.

Two springs of fresh water were found in the township, one of which is located in sec. 7 and the other in sec. 4.

There is one Navajo Indian family living in sec. 28.

Jan. 6 - 1911

Jan L. White
U.S. Geologist

LIST OF NAMES.

A list of the names of the individuals employed by Van L. White

U.S. Transitman, ~~United States Deputy Surveyor~~, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the Subdivision

lines of Tp 31 N R 15 E. G. & S. R. B. & M. Arizona.

showing the respective capacities in which they acted:

T. Y. White, Chainman.

Richard L. Shumway and George B. Seig, Chainman.

Ralph C. Sampson, Moundman.

~~Moundman.~~

Nelson Polacca, Axman.

~~Axman.~~

William R. Carson, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Van L. White

U.S. Transitman, ~~United States Deputy Surveyor~~, in surveying all

those parts or portions of the Subdivision lines of Tp 31 N

R 15 E.

of the Gila and

Salt River Baseline Meridian, Territory of Arizona, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully ~~surveyed~~ ^{executed}

and the corner monuments established, according to the instructions furnished by the ~~United States Surveyor~~

~~General~~ Commissioner of the General Land Office

George B. Seig and T. Y. White, Chainmen.

Richard L. Shumway, Chainman.

Ralph C. Sampson, Moundman.

~~Moundman.~~

~~Axman.~~

Nelson Polacca, Axman.

William R. Carson, Flagman.

Subscribed and sworn to before me this 8th

day of January, 1911



Van L. White

U.S. Transitman

90
45
BOOK 2621

FINAL OATH OF ~~UNITED STATES DEPUTY SURVEYOR~~ ^{TRANSITMAN}

I, Van L. White, ^{Transitman} United States ~~Deputy Surveyor~~, do solemnly swear that, in pursuance of ~~contract~~ ^{Special Instructions} received from ~~the Commissioner of the United States Surveyor General for~~ ^{the Commissioner of the General Land Office}, bearing date of the ~~2nd day of Oct. 1907~~ ^{2nd day of Oct. 1907} and the ~~15th day of May, 1908~~ ^{15th day of May, 1908}, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the ~~United States Surveyor~~ ^{Commissioner} of the ~~General Land Office~~ ^{General Land Office}, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Subdivision lines of Township No. 31 North of Range No. 15 East

of the Gila and Salt River Base and Meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed 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 ~~United States Surveyor~~ ^{Commissioner} of the ~~General Land Office~~ ^{General Land Office} and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Van L. White
~~United States Deputy Surveyor~~
Transitman

Subscribed by said Van L. White, and sworn to before me }
this 27th day of December, 1912

Lynn R. Daylor
U.S. Commissioner
at Las Vegas, N.M.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Arizona **APR 25**, 1914

The foregoing field notes of the survey of the Subdivision lines of
Township No. 31 North, Range No. 15 East, of the
Gila and Salt River Base and Meridian, Arizona
executed by VAN L. WHITE, U.S. Transitman, under Special Instructions from
~~executed by~~ the Commissioner of the General Land Office
~~under his contract No.~~ October 2, 1907 and May 15, 1908, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank P. Ingalls
~~United States Surveyor General~~
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.~~

~~United States Surveyor General.~~