

MAR 28 1911

53
3Subdivisional
BOOKS

2597

BOOK 2597

FIELD NOTES

AND RESURVEY
OF THE SURVEY OF THE

Subdivision lines of Township No. 29, North
of Range No. 16 East.

of the Gila and Salt River Basins and Meridian,
in the Territory of Arizona

EXECUTED
AS SURVEYED BYSidney E. Black, United States Surveyor

Deputy Surveyor

Special instructions from the Commissioner of the General Land Office
Under this Contract No., date October 2nd 1907 and May 10th 1908and Resurvey Survey commenced April 11th 1909and Resurvey Survey completed April 23rd 1909

(A)

BOOK 2597

NAMES AND DUTIES OF ASSISTANTS.

Van S. WhiteComptrollerLafayette JenningsChairmanCharles ShumwayChairmanFred L. WarnerWardenArthur A. BeardAssessorJay E. FellickFlagmanStarved Lake NayFlagman

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BOOK 2597

Book No. 2597

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BOOK 2591

PRELIMINARY OATHS OF ASSISTANTS.

See Subdivisional Book "M"

WE, _____ and _____

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

_____, Chainman.

_____, Chainman.

Subscribed and sworn to before me this _____
day of _____, 190 }



WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

_____, Moundman.

_____, Moundman.

Subscribed and sworn to before me this _____
day of _____, 190 }



WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

_____, Axman.

_____, Axman.

Subscribed and sworn to before me this _____
day of _____, 190 }



I, _____, 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 _____

_____, Flagman.

Subscribed and sworn to before me this _____
day of _____, 190 }



Chains

(1)

Survey commenced April 11th 1909, and executed with a Wad L. E. Gurley engineer transit - No. 76 with a Burd Solar attachment. The horizontal limb is 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.

Determine 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 located near the cor. of sec. 16, 17, 20 and 21, Twp. 29 N., R16E. Latitude $35^{\circ}54'41''$.

Longitude $110^{\circ}38\frac{1}{2}'$ W.; Decl. off. $35^{\circ}54'41''$ N. on the lat. arc $8^{\circ}31\frac{1}{2}'$ N. on the decl. arc. and at $8^{\text{h}}00^{\text{m}}47^{\text{s}}$ 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 chs. N. of my instruments. At 6^h 03^m p.m. l.m.t. observe Polaris at western elongation in accordance with instructions in the manual and mark the direction thus determined by a tack driven in a stake set firmly in the ground 5 chs. N. of my station.

April 11th 1909

April 12th 1909 10th 6^h 30^m a.m. Lay off the azimuth of Polaris, 127' to the east and mark the meridian thus determined by a tack driven in the stake already set 5 chs. N. of my instruments on which the meridian falls, 0.4 in. east of the point determined by the solar.

At 7^h 00^m a.m. lay off. $35^{\circ}54'41''$ N. on the lat. arc $8^{\circ}37'$ N. on the decl. arc and determine a meridian with the solar, and mark a point thereof by a nail driven in the stake already set 5 chs. N. of my instruments; this point falls 0.3 in. east of the meridian determined by the Polaris observation.

The solar apparatus by p.m. and a.m. observations

Survey and Resurvey of the
Subdivision of Twp. 29 N. R16 E.

Chains

Lines

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defined positions for meridians respectively about $0^{\circ}21'$ west and $0^{\circ}16'$ east of the meridians established by the Polaris observation, therefore I conclude that the adjustments of the instrument are satisfactory.

I began at the Stand Cor. of sec 35 and 36 T 29 N. R 16 E., which ^{was} established Dec. 15th 1908, ^{and described in Standard Book "C"} Latitude $35^{\circ}51'28''$ N. Longitude $110^{\circ}35'1''$ W. At this cor. I set off $35^{\circ}51\frac{1}{2}'$ N. on the lat. arc. $8^{\circ}37\frac{1}{2}'$ N. on the decl. arc. and at 8^h 30^m am, l.m.t. determine a meridian with the Solar, Three Drums, resurveying

$NW^{\circ}01'W.$ L.S. sec 35 and 36.

descend N.W. slope over hilly sandy and adobe land through scattering sage and greasewood brush and bunch grass.

17.00 Dry ravine course N.W. asc.

17.50 Poth of sand ridge bears N.W. and S.E. desc.

20.00 No trace of old ^{re-established} ~~1/16 sec.~~ cor. can be found.

39.00 Road to ^{No trace of orig. cor. can be found.} Oraibi Ariz bears E. and W.

39.50 Poth of desert. Cross hilly land bears E. and W.
Enter level land bears E. and W.

40.00 Set an iron post 3 ft. long 1 in. in diam 26 ins. in the ground. ^{re-established} cor. marked on brass cap.
 $1/4 S 85$ on W. half. and $S 36$ on E. half.

Dig pits $18 \times 18 \times 12$ ins. N. and S. of post. 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. tall. $1\frac{1}{2}$ ft. high W. of cor. ^{No trace of orig. $1/4$ sec. cor. can be found.}

56.00 Dry sand wash. 100 ft. wide. banked $1\frac{1}{2}$ ft. high

Course W. ascend gradually over S.W. slope.

60.00 No trace of old ^{re-established} ~~1/16 sec.~~ cor. can be found.

62.00 Road from Plaza Ariz to Oraibi Ariz bears E. and W.

80.00 Set an iron post. 3 ft. long 2 ins. in diam 24 ins. in the ground for ^{pre-established} cor. of sec. 25, 26, 35 and 36. marked on brass cap. $T 29 N$ $S 26$ in N.W. R 16 E. $S 25$ in N.E. $S 36$ in S.E. and $S 35$ in S.W. quadrants.

Dig pits $18 \times 18 \times 12$ ins. in each sec. $5\frac{1}{2}$ ft. dist. and raise a mound of earth 4 ft. tall. 2 ft. high W. of cor. No trace of orig. cor. can be found.

Land level, rolling and hilly.

Soil sandy and adobe 2^{nd} and 3^{rd} rate.

No timber.

Chains

	East on a random line bet. sec. 25 and 36.
40.00	Seth temp & sec. cor.
80.08	Intersect the 4 th Grade Meridian East. at the cor. of sec. 25 30, 31 and 36, recently re-estab. by me and described in Standard Book "B" Three Drives, resurveying West. on a true line bet. sec. 25 and 36. Descent S.W. slope over rolling sandy land through scattering sage brush undergrowth and bunch grass.
1.50	Dry ravine course S.W. asc.
7.00	Road to Quartz Ariz. head N.E. and S.W.
9.00	Mt. of sand ridge head N.E. and S.W. desc. gradually over N.W. slope.
17.00	Dry ravine course S.W. asc.
18.50	Mt. of sand ridge head N.E. and S.W. desc.
20.02	No trace of old 1/16 sec. cor. can be found.
31.00	Dry ravine course South asc.
37.50	Mt. of ridge head N. and S. desc.
40.04	Seth an iron post 3 ft. long, 1 in. in diam. 26 in. in the ground for ^{re-established} sec. cor. marked on base cap 4 825 on N. half and 3 36 on S. half. Dig pits 18x18x12 ins. E and W of post 3 ft. dust, and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. N. of cor. No trace of orig. 1/4 sec. cor. can be found.
52.00	Pooh of debris in depression bears N. and S. chains South. asc. E slope.
60.06	No trace of old 1/16 sec. cor. can be found.
61.00	1/16 of a stony ridge head N.E. and S.W. desc. gradually over N.W. slope
80.08	Pre-empted by Cor. of sec. 25, 26, 35 and 36, described. Land hilly and rolling. Soil sandy and stony ^{3rd} and ^{4th} rate. No timber.
	hereinbefore
	W ^o 0° 0' W. bet. sec. 25 and 26, resurveying.
	Ascend S. slope over rolling sandy land through scattering sage brush undergrowth and bunch grass.
2.00	Mt. of low sand ridge head E. and W. desc. gradually over N. slope.
20.00	No trace of old 1/16 sec. cor. found at this point.
40.00	Seth an iron post 2 ft. long 1 in. in diam. 26 ins. in the ground for ^{re-established} sec. cor. marked on base cap 4 826

Survey and Resurvey of the
Subdivision of Twp 29 M. R 16 E.

Claims

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on W half and S 25 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. low, $1\frac{1}{2}$ ft. high
W. of cor. No trace of orig. $\frac{1}{4}$ sec. cor. can be found.

NOTE At this cor. I set off $8^{\circ}40'47''$ on the decl. arc and
at 12^h 01 p.m. I mt. observed the sun on the meridian

60.00 To trace of old $\frac{1}{4}$ sec. cor. can be found
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, which
are brass cap T 29 N S 23 in N.W. R 16 E S 24 in N.E.
S 25 in S.E. and S 26 in S.W. quadrant.

Dig pits 18x18x12 ins in each sec. 5 $\frac{1}{2}$ ft. dist. and
raise a mound of earth 4 ft. low 2 ft. high W. of
cor. No trace of orig. cor. can be found.
Land rolling.

Soil sandy 3rd rate.

No timber.

Each on a random line bet. sec. 24 and 25.

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

80.02 Surveyed the 4th Grade Meadow Cor. at the
Cor. of sec. 19, 24, 25 and 30, recently estab. by me & described
in Standard Book "B"
Hence Drive

West. on a true line bet. sec. 24 and 25.

Descend steep rocky N.W. slope over hilly land through
scattering sage brush undergrowth and bunch grass.

5.00 Dry ravine course N. asc.

12.00 Top of rocky ridge betw N.W. and S.E. decl. Steeply.

27.00 Rock descends in very narrow course N. asc.

30.00 Top of rocky ridge betw N. and S. decl.

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
 $\frac{1}{4}$ S 24 on N. half. and S 25 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. low $1\frac{1}{2}$ ft. high
W. of cor.

52.00 Dry ravine course S.W. asc.

55.00 Top of sand ridge betw N.E. and S.W. decl. N.W.
slope.

80.02 The Cor. of sec. 23, 24, 25 and 26, hereinbefore described.
Ravel hilly.

Chains

Soil sandy and stony 3rd and 4th rate.
No timber.

No 01 W. sec. 23 and 24.

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

5.00 Land rolling land bear N.E. and S.W., enter level land bear N.E. and S.W.

40.00 Set an iron post 3 ft. long 1 in. diam. 26 ins. in the ground for 1/4 sec cor. marked on brass cap 1/4 S 23 on W. half and S 24 on E. half.
Dig pits 18x18x12 ins. and S. of post 3 ft. dist. and raised mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.

45.50 Left bank of the Oracle Wash. 25 ft. high. Bear N.E. and S.W.

47.00 Center of wash (dry) course S.W.

49.00 Left. bank of the Oracle Wash. bear N.W. and S.E..

56.75 Dry wash. 25 lbs sand course S.W.

80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of secs. 13, 14, 23 and 24 marked on brass cap. T29 N. S14 in N.E. R16 E.
S 13 in N.E. S 24 in S.E. and S 23 in S.W. quadrants.
Dig pits 18x18x12 ins. in each sec. 5 1/2 ft. dist.
and raised mound of earth 4 ft. base 2 ft.
high W. of cor.

Land level and rolling.

Soil sandy and adobe 3rd rate.

No timber.

Earth on a random line bet. sec. 13 and 24

40.00 Set temp. 1/4 sec. cor.

80.06 Dater each the 4th Guide Meridian Earth. 12 lbs.
N. of the cor. of sec 13, 18, 19 and 24 recently estab.
by me and described in Standard Book "B"
Thence direct

W 89° 55' W on a true line bet. sec 13 and 24
descend abrupt rocky N.W. slope over mountainous
land.

15.50 Dry ravine course N.E. are abruptly.

21.00 Top of ascent on E. edge of Mule Head Mts

Survey and Recurvey of the
Subdivision of Mt. 29 M. R. 16 E.

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Chains

Lines

- Leave mountainous land bear N. and S. Enter rolling land bear N. and S.
 25.80 With edge of mesa bear N and S. leave rolling land bear N and S. descend abruptly over stony mountainous land bear N and S.
 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 14S 13m 31s half and 324 on S half.
 Dig pits 18x18x12 ins. E and W. of post. 3 ft. dist. and raise a mound of earth 3 1/2 ft. high 1 1/2 ft. high N. of cor.
 48.00 Pool of descent bear mountainous land bear N and S. enter level adobe land. covered with sage and greasewood brush undergrowth bear N and S.
 80.06 The cor. of secs. 13 14. 23 and 24, heretofore described. Land level rolling and mountainous.
 Soil sandy, adobe, and stony 3rd and 4th state.
 No timber.
 Mountainous land 43.20 ch.

April 12th 1909

1909

l.m.t.

April 13th A.M. 7th 30^m a.m. set off 35° 54' N. on the lat arc 8° 59' N. on the decl. arc and determine a meridian with the solar ab the cor. of secs. 13, 14, 23 and 24, heretofore described.

Then run

W 80° 01' W th. secs. 13 and 14.

- Low level sandy and adobe bottom land, through sage and greasewood brush undergrowth and bunch grass
 36.50 Road to Oraibi Ariz. bear N.E. and SW.
 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 3 1/4 on W. half and 3 1/3 on E half.
 Dig pits 18x18x12 ins. N and S. of post. 3 ft. dist. and raise a mound of earth 3 1/2 ft. high 1 1/2 ft. high W. of cor.
 42.50 Left bank of the Oraibi Wash. 25 ft. high. bear N.E. and SW.
 50.50 Right bank of the Oraibi Wash. 20 ft. high bear N.E. and SW.
 80.00 Set an iron post 3 ft. long 2 ins. in diam. 24 inches in the ground for cor. of secs. 11, 12, 13 and 14, marked on

Chambers

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brown cap T 29 N. S 11 in N.W. R16 E S 12 in N.E. S 13 in S.E. and S 14 in S.W. quadrants.

Dig pits 18x18x12 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 level.

Soil sandy and adobe 3rd rate.

No timber.

N 89° 55' E on a random line betw. secs. 12 and 13

40.00 Set temp. 1/4 sec. cor.

80.02 Distinguishes the 4th Guide Meridian East. on the cor. of secs. 7, 12, 13 and 18 recently estab. by me & described in Standard Book "B".
Then end drawn

N 89° 55' W. on a true line betw. secs. 12 and 13,

over level cultivated land.

15.00 Road/ Cultivated land, bears N and S. outer sage and greasewood brush undergrowth bears N and S.

40.01 Set an iron post. 3 ft. long 1 mi. in draw 26 ins. in the ground for 1/4 sec. cor. marked out brown cap 1/4 S 12 on N half and S 13 on S. half.

Dig pits 18x18x12 ins. E and W. of post. 3 ft. dist. and raise a mound of earth 8 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.

44.00 Road to Orabi Ariz bears N.E. and S.W.

51.50 Left bank of the Orabi Wash. 25 ft. high bears N.E. and S.W.

52.25 Center of Orabi Wash (dry) course S.W.

53.00 Right bank of the Orabi Wash 25 ft. high bears N.E. and S.W.

59.00 Road undergrowth bears N and S. outer cultivated land bears N. 4 clvs. and S. 6 clvs. dist.

66.00 Road cultivated land bears N. 5 clvs. and S. 7 clvs. outer sage brush and greasewood undergrowth.

80.02 The cor. of secs. 11, 12, 13 and 14, hereinbefore described.
Land level.

Soil sandy and adobe 3rd and 4th rate.

No timber.

No 01 W 1/4 sec. 11 and 12.

Over level sandy and adobe bottom land. through sage

- and greasewood brush under growth and bunch grass
 6.00 Road to Oraibi Ariz bears N.E. and S.W. enter cultivated land 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 base Cap. $\frac{1}{4}$ S
 11 on W. half and 312 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.
 46.00 Leaves Cultivated land bears N.E. & S.W. 10 chds dist
 54.00 Leaves level. Land bears N.W. and S.E., enter rolling sandy
 land. bears N.W. and S.E. ascend gradually over S.W. slope.
 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 base
 Cap. T 29 N 3. 2 in N.W. R16 E. S 1 in N.E. S 12 in S.E. and
 S 11 in S.W. quadrant
 Dig pits 18x18x12 ins. in each. sec. 5 ft. dist. and
 raise a mound of earth 4 ft. base 2 ft. high. W. of cor.
 Land level and rolling
 Soil sandy and adobe 3rd rate.
 No timber.

NOTE At this Cor. I struck off. 9°02' N. on the decl. arc
 and at 12 h 00 m 39^{sec} p.m. left - observed the sun on the
 meridian the resulting latitude being 35°56' 41".

- $89^{\circ}55'$ E on a random line betw. sec. 1 and 12.
 40.00 Set temp $\frac{1}{4}$ sec. cor.
 80.18 Intersect the 4th Grade Meridian East. 5 lbs. N. of
 the cor. of secs 1, 6, 7 and 12, recently estab. by me and described
 in Standard Book "B"
 Then one D run
 $N 89^{\circ}53' W.$ on a tree line betw. secs 1 and 12
 Over level cultivated land.
 7.00 Leaves Cultivated land bears N.E. and S.W.
 13.75 Road to Oraibi Ariz bears N.E. and S.W.
 24.00 Leaves level sandy and adobe land bears N.E. and S.W.
 enter stony mountainous land bears N.E. and S.W.
 30.00 Begin abrupt rocky ascent on S.E. slope of mesa
 40.09 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in the
 ground for $\frac{1}{4}$ sec. cor. marked on base Cap $\frac{1}{4}$ S 1. on
 W. half and 312 on E. half.
 Raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high W. of
 cor. Pits impracticable.

Claimed

lines

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- 53.40 Top of abrupt descent on E. edge of mesa bears N.E. and S.W. -
- 58.70 Wall edge of mesa bears N.W. and S.E. desc. abruptly over W. slope.
- 62.50 Floor of abrupt descent. leave mountainous land bears N. and S. enter hilly land bears N. and S.
- 80.18 The cor. of sects. 1, 2, 11 and 12 heretofore described.
Land level hilly and mountainous,
Soil sandy and stony $\frac{2}{3}$ rd $\frac{3}{4}$ th and $\frac{4}{5}$ th rate.
No timber
mountainous land 38.50 chs.

 $80^{\circ}0'W.$ on a random line bet. sect 1 and 2.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.88 Dated 28th of Apr. 1909 N. 89 $^{\circ}59'W.$ of the cor. of sects. 1, 2, 35, and 36, recently estab. by me & described in Exterior Book "V"
Then I run

- $80^{\circ}11'W.$ on a true line bet. sects. 1 and 2.
Ascend N.E. slope over hilly sandy and stony land.
through scattering cedar timber and sage brush undergrowth.
- 2.00 Top of sand ridge bears N.E. and S.W. desc. gradually.
- 27.85 South edge of mesa. leave hilly land bears N.E. and S.W. descend abruptly S. slope over stony mountainous land bears N.E. and S.W.
- 34.50 Floor of abrupt descent. leave stony mountainous land and timber bears N.E. and S.W., enter hilly land bears N.E. and S.W. desc. gradually.
- 38.75 Dry ravine at foot of descent course S.W. asc.
- 39.88 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 20 W. half and S 1 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.

- 67.25 Top of high sand ridge bears N.E. and S.W. desc.
- 74.25 Dry ravine course S.W. asc. N.W. slope.
- 77.00 Top of sand ridge bears N.E. and S.W. desc.
- 79.88 The cor. of sects. 1, 2, 11 and 12, heretofore described.
Land hilly and mountainous.
Soil sandy and stony $\frac{3}{4}$ th and $\frac{4}{5}$ th rate.
Timber pine and cedar.
mountainous land 6.65 chs.

April 13th 1909

- April 14th, 1909 At 8^{a.m.} l.m.c.-D set - ff. 35° 51' 21".
 on the lat. arc. 9° 20' N. on the dec. arc. and determine
 a meridian with the solar ab. the stand. cor. of sec.
 recently re-established in me and described in Standard Book "C"
 34 and 35 on the Survey of Mt. 1/4 Thereupon resurveying
 NO° 01 W. sec. cor. 34 and 35-
- Over rolling sandy land through sage and greasewood
 brush undergrowth.
- 2.00 Leave undergrowth bears N.E. and S.W.; enter cultivated
 land bears N.E. and S.W.
- 18.50 Leave cultivated land bears N.E. and S.W.
- 19.00 Dry land wash. 100 lvs. wide banks 10 ft. high course S.W.
 20.00 No trace of old 1/16 sec. cor. can be found
 40.00 Set an iron post. 3 ft. long 1 in. in diameter, 26 ins. in the
 ground for 1/16 sec. cor. marked out brass cap T 29 N. S 27 in N.W. R 16 E S 26
 half and S 35 on E half.
 Dig pits 18x18x12 ins. N and S. of post. 3 ft. dist. and raise
 a mound of earth 3 1/2 ft. base. 1 1/2 ft. high. W. of cor.
 No trace of original 1/16 sec. cor. can be found.
- 42.25 - Road from Glaceca Ariz to Oraibi Ariz bears E and W.
- 42.50 Wire fence bears E. and W. leave undergrowth bears E and W
 enter cultivated field bears E and W.
- 48.00 A point from which a stone house 30x15 ft. bears S 80° W
 275 lvs. dist.
- The S.E. cor. of Preyi dwelling house bears N 66° 43' W
 133 lvs. dist.
- The S.W. cor. of an adobe house bears N 20° 20' W 127 lvs.
 dist.
- The S.E. cor. of an adobe granary bears N 30° 50' W 192
 lvs. dist.
- 50.75 - A point 2 lvs. E. of the S.E. cor. of Preyi Barn
 60.00 No trace of old 1/16 sec. cor. can be found.
 64.00 The Oraibi Wash. 125 lvs. wide. no water. Course
 S 80° W.
- 67.75 - Wire fence bears E and W. leave cultivated field.
 bears E. and W. enter sage and greasewood brush
 undergrowth bears E. and W. begin gentle ascent on S. slope
- 78.00 Pts. of low sand ridge bears N.E. and S.W. descend gently.
- 80.00 Set an iron post. 3 ft. long 2 ins. in d. am. 2 1/4 ins;
 in the ground for Cor. of Sec. 26, 27, 34 and 35
 re-established marked out brass cap. T 29 N. S 27 in N.W. R 16 E S 26
 in N.E. S 35 in S.E. and S 34 in S.W. quadrants.
- 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. No trace of original cor. can be found.
- Land rolling.

Chains

lines

11

Soil sandy 3rd rate.

No timber.

Cast out a random line bch. sec. 26 and 35-

40.00 Set temp. $\frac{1}{4}$ sec. cor.79.96 Dated each N. and S. line at the ^{re-established} Cor. of sec. 25-26.

35 and 36, hereinbefore described,

Thence W. run, resurveying,

West on a true line bch. sec. 26 and 35.

Over rolling sandy land through scattering sage and

greenwood brush undergrowth.

19.99 No trace of old $\frac{1}{16}$ sec. cor. can be found.39.98 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in
the ground for $\frac{1}{4}$ sec. cor. marked on brass Cap $\frac{1}{4}$ 326
on N. half and 335 on S. half.Dig pits 18x18x12 ins. E. and W. of post 8 ft. dist. and
raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of
cor. No trace of orig. $\frac{1}{4}$ sec. cor. can be found.

58.00 The Oraibi Wash. 100 lbs. sand banks 10 ft. high.

Course S.W.

No trace of old $\frac{1}{16}$ sec. cor. can be found.79.96 The cor. of sec. 26, 27, 34 and 35, hereinbefore described.
^{re-established}

Land rolling.

Soil sandy 3rd rate.

No timber.

No. 01 W. bch. secs. 26 and 27, resurveying,

Over rolling sandy land through scattering sage and
greenwood brush undergrowth.

0.26 Land rolling land bears N.E. and S.W. enter level land.

Bear N.E. and S.W.

20.00 No trace of old $\frac{1}{16}$ sec. cor. can be found.37.00 Level land bears N.E. and S.W. enter rolling
sandy land bears N.E. and S.W. ascend gently over
S.E. slope.40.00 Set an iron post 3 ft. long 1 in. in diam. 26 ins. in
^{re-established} the ground for $\frac{1}{4}$ sec. cor. marked on brass Cap $\frac{1}{4}$ 3
27 on W. half and 326 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 E.
of cor. No trace of original $\frac{1}{4}$ sec. cor. can be found.

53.00 Road to Oraibi Ariz bears N.E. and S.W.

60.00 No trace of old $\frac{1}{16}$ sec. cor. can be found.80.00 Set an iron post 3 ft. long 1 in. in diam. 24 ins.
^{re-established} in the ground for cor. of secs. 22, 23, 26 and 27

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marked on brass Cap T 29 N, S 22 in N.W. 1/4 sec. S 23 in N.E. S 26 in S.E. and S 27 in S.W. quadrants.

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. No trace of original cor. can be found.
Land rolling.

Soil sandy and adobe 3rd rate.

No timber.

NOTE: At this cor. I set up 9° 20' N. on the decl. arc and at 12° 00' 23" from Lmt. observed the sun on the meridian and obtain on the lat. arc. a reading of 35° 53' N.

Each on a random line bet. sect. 23 and 26.

40.00 Set temp. to sec. cor.

80.00 Intersect N. and S. line 5 lbs. S. of the cor. of sec. 23, 24, 25 and 26, hereinbefore described,

Then I drove, resurveying,

889° 58' W. of a true line bet. sect. 23 and 26.

Over level sandy and adobe land, covered with scattering sage and greasewood brush undergrowth.

8.25 The Oraibi Wash. 100 lbs. wide banks, 20 ft. high.

20.00 Opp. SW. of old 1/16 sec. cor. can be found.

40.00 Set an iron post 3 ft. long 1 in. mid diam. 26 ins. in the ground for 1/4 sec. cor. marked on brass Cap. 1/4 S 23 on N half and S 26 on S 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. N. of cor. No trace of original 1/4 sec. cor. can be found.

59.25 Road to Oraibi Ariz. bears N.E. and S.W.

60.00 No trace of old 1/16 sec. cor. can be found.

80.00 The cor. of sec. 22, 23, 26 and 27, hereinbefore described. Land level.

Soil sandy and adobe 2nd and 3rd rate.

No timber.

W 0° 01' W. bet. sect. 22 and 23.

Over level sandy land through scattering sage and greasewood brush undergrowth and bunch grass.

32.00 Land level land bears N.E. and S.W. enter low rolling sand hills bear N.E. and S.W. Ascend S.E. slope.

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

Claims

S. 22 on W. half and S 23 on E half.

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

67.50 Road to Oraibi Ariz bears N.E. and S.W.

74.00 Top of land ridge bears N.W. and S.E. desc.

77.25 Dry ravine course S.E. asc.

80.00 Set out iron post 3 ft. long 2 ins. in diam 24 ins.
in the ground for cor. of sec. 14, 15, 22 and 23
marked on brass cap T 29 M. S 15 mi N.W. R 16 E
S 14 in N.E., S 23 in S.E. and S 22 in S.W. quadrant.
Dig pits 18x18x12 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 level and hilly.

Soil sandy and adobe 2nd and 3rd rate.

No timber.

W 89° 58' E. on a random line bet. sec. 14 and 23.

40.00 Set temp. to sec. cor.

80.00 Intersect N. and S. line 5 lbs. N. of the cor. of sec. 13
14, 23, and 24, heretofore described,
Then 2 runs

With out a true line bet. sec. 14 and 23.

Over level sandy and adobe land, through sage and
greasewood brush undergrowth.91.50 The Oraibi Wash 126 lbs. wide banked 25 ft. high.
Course S.W.

27.00 Road to Oraibi Arizona bears N. and S.

40.00 Set. out iron post 3 ft. long 1 in. in diam. 26 ins.
in the ground for 4 sec. cor. marked on brass
cap $\frac{1}{4}$ S 14 on N. half and S 23 on S. half.

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

42.00 Level land bears N.E. and S.W., enter rolling
sand hills bears N.E. and S.W. ascend gradually
over S.E. slope.

69.50 Road to Oraibi Ariz bears N.E. and S.W.

80.00 The cor. of sec. 14, 15, 22 and 23, heretofore described.

Land level and hilly.

Soil sandy and adobe 3rd rate.

No timber.

April 14th 1909

April 15th, 1909 A.M. 7 h. 30 m a.m. S set off 35° 54' N.
on the lat. arc .9442' N. of the decl. arc and determine
a meridian with the solar at the cor. of sec., 14, 15,
22 and 23, heretofore described,

Thence down

W 001' W. bet. sec. 14 and 15-

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

1.00 Top of sand ridge bears N.W. and S.E. desc N.E. slope.

8.25 Dry ravine Course E. arc.

12.50 Top of sand hill bears E. and W. decl.

18.00 Dry ravine. Course S.E. arc. S.W. slope.

23.00 Top of sand ridge bears N.W. and S.E. desc.

28.50 Dry ravine Course E. arc.

35.00 Top of sand ridge bears E. and W. decl.

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 15' on W. half. and S. 14 on E. half.

Dig pits 18x18x12 ins N. and S. of post. 3 ft. dist. and.
raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of
cor.

51.25 Dry ravine Course S.E. arc

59.00 Top of sand ridge bears N.W. and S.E. desc.

65.00 Dry ravine Course S.E. arc.

68.00 Top of sand ridge bears N.W. and S.E. desc.

70.50 Dry ravine Course E. arc.

75.50 Top of sand ridge bears N.W. and S.E. desc.

77.50 Dry ravine Course S.E. bears hilly land bears N.W.
and S.E. Ascend abrupt rocky S.W. slope of mesa
over mountainous land bears N.W. and S.E.

80.00 Set an iron post. 3 ft. long 2 ins. in diam. 24 ins.
in the ground for cor of sec. 10, 11, 14 and 15 marked
on brass cap T 29 N. S 10 in N.W. R 16 E S 11 in N.E.
S 14 in S.E. and S 15 in S.W. quadrants.

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

Pits impracticable

Land hilly and mountainous.

Soil sandy and stony 3rd and 4th rate.

No timber.

Chains

Mountainous land 2.50 chs.

Cash on a random line bet. sec. 11 and 14.

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

80.06 Intersect N and S. line at the cor. of sect. 11, 12, 13 and 14,
Thence D. run.

West on a true line bet. sec. 11 and 12.

Over level sandy and adobe bottom land, through
scattering sage and greasewood brush undergrowth
and bunch grass.

5.50 Road to Oracle Ariz. bears N.E. and S.W.

12.50 Road to Oracle Ariz. bears N and S.

14.00 Leaves level land bears N.E. and S.W., enters hilly
land bears N.E. and S.W. ascend gradually over
S.E. slope.

140.03 Sets an iron post 3 ft. long 1 in in drain. 26 in. in
the ground for $\frac{1}{4}$ sec. cor. marked on base cap.
N & S on N. half and S & N on S half.

Dig pits 18 x 18 x 12 in. 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.

50.50 Leaves hilly land bears N.E. and S.W., enters stony
mountainous land bears N.E. and S.W. ascends
abruptly over S.E. slope of mesa.

80.06 The cor. of sect. 10, 11, 14 and 15, heretofore described.
Land level hilly and mountainous.

Soil sandy, adobe and stony 2nd, 3rd and 4th rate.
No timber.

Mountainous land 29.50 chs.

W 0° 01' W. bet. sec. 10 and 11,

Ascend abrupt rocky S.E. slope of mesa over
mountainous land.

3.00 Top of abrupt rocky ascent on S. edge of mesa
100 ft. above cor. Leaves mountainous land bears
E and W., enters rolling sandy land bears E. and W.

3.25 Enter scattering pine, spruce and cedar timber
bears E. and W.

11.75 North edge of mesa, leaves rolling sandy land,
bears N.W. and S.E., descend abrupt rocky N.E.
slope over stony mountainous land bears N.W.
and S.E.

12.00 Leaves timber bears N.W. and S.E.

Survey and Resurvey of the
Subdivision of Twp. 29 N., R. 16 E.

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Chains

lines

- 27.25 Dry ravine course N.E. asc.
 34.00 Mtn of sand ridge bears N.E. and S.W. decl.
 39.00 Dry ravine course N.E. asc.
 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.
 $\frac{1}{4} S 10$ on W. half and S 11 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.
 41.50 Mtn of sand ridge bears N.E. and S.W. decl.
 70.75 Dry ravine course S.E. asc. S.E. slope of mesa.
 79.00 Mtn of abrupt ascent on S. edge of point of mesa
 Bears N.W. and S.E., leave mountainous land bears
 N.W. and S.E., enter rolling land tract N.W. 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. 2, 3, 10 and 11 marked
 on brass cap T 29 N. S 3 in N.W. T 29 E. S 2 in N.E. S 11
 in S.E. and S 10 in S.W. quadrant.
 Raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
 Pits impracticable.

Land rolling and mountainous.

Soil sandy and stony 3^{rd} and 4^{th} rate.

Pinon pine and cedar

Mountainous land. 70.25 elev.

NOTE

At this cor. D set off $9^{\circ} 45' 47''$ N. on the decl. arc and at
 $12^{\text{th}} 00^{\text{m}} 08^{\text{s}}$ pm. Unit. observe the sun on the meridian
 and obtain on the lat. arc a reading of $35^{\circ} 56' 47''$.

- 40.00 Cast on a random line betw. secs. 2 and 11.
 79.94 Set temp $\frac{1}{4}$ sec. cor.
 11.75 Intersect N and S. line 22 lbs. S. of the cor. of secs.
 1, 2, 11 and 12, hereinbefore described,
 Then cast
 $889^{\circ} 51' W.$ on a true line betw. secs 2 and 11.
 Over rolling sandy land through sage and greasewood
 fresh undergrowth and bunch grass.
 37.00 Road to Oracle Ariz bears N. and S.
 39.97 Dry sand wash 60 lbs. wide 4 ft. deep. Course S.E.
 ascend N.E. slope.
 39.97 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.

Chainstitles

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1/4 sec 2 on N. half and 3 1/2 on S. half.

Dig pits 18x18x12 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.

78.50 Leave rolling land bears N.E. and S.W. enter stony
mountainous land bears N.E. and S.W. ascend abruptly over
S.E. slope.

79.70 Top of abrupt rocky ascent on E. edge of mera, leave
stony mountainous land bears N.E. and S.W., enter
rolling land bears N.E. and S.W.

79.94 The cor. of secs. 2, 3, 10 and 11, hereinbefore described.
Land. rolling and mountainous,
Soil sandy and stony 3rd and 4th rate.
No timber
mountainous land 1,200 elev.

W^o 01' W. on a random line bet. secs. 2 and 3

40.00 Set temp 1/4 sec. cor.

80.08 Dated est. N. bdry of Mt. 18 like N^o 59⁵⁹ W. of the cor. of secs. 2
3, 34, and 35, recently estab. by me & described in Exterior
Thence down Book "V"

80°07' W. on a true line bet. secs. 2 and 3.

Over rolling sandy land. through scattering sage
and greasewood brush under growth and bunch grass.

1.50 Begin descend over S.W. slopes over hilly land bears N.W. and S.E.

36.00 Dry ravine course E. asc.

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

40.08 Below iron post. 3 ft. long 1 in. wide and 26 ins. in
the ground for 1/4 sec cor. marked on bear Cap 1/4 S 3 on
W. half. and S 2 on E. half.

Dig pits 18x18x12 ins. N and S. of post. 3 ft. dist. and
raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high.
W. of cor.

42.00 Dry ravine course N.E. asc.

54.00 Top of sand ridge bears N.E. and S.W.

59.75 Depression bears E. and W. drains E. asc.

66.25 Top of sand ridge bears N.W. and S.E. desc. abruptly.

71.00 Rock formation in rocky ravine course N.E. leaves
hilly land bears N.W. and S.E. enter stony
mountainous land bears N.W. and S.E. asc. abruptly

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BOOK 2597

Chains

Survey and Resurvey of the
Subdivision of M. & P. N. R. R. E.

lines

79.50	Top of abrupt rocky ascent on N. edge of mesa Leave mountainous land bears N.W. and S.E. Enter rolling land bears N.W. and S.E.
80.08	The cor. of sec. 2, 3, 10 and 11, hereinbefore described. Leave rolling hilly and mountainous. Soil sandy and strong 3" and 4" " rate. No timber. Mountainous land 8.50 chs.
	April 16 th 1909
	April 16 th , 1909 Lmt. 7:00 a.m., D. sch. off. 35° 51' 31" N. lat. the lat. are. 10° 03' 31" N. on the decl. are. and determine a meridian with the solar at the Stand. Cor. of sec. 33 and 34 on the S. bdry. of the Pp., recently re-estab. by Thence down, resurveying, me and described in Standard Book C" N 0° 02' W. lat. sec. 33 and 34
	Ascend S.E. slope over rolling sandy land through scattering sage and greasewood brush undergrowth and bunch grass.
20.00	No trace of old 1/16 sec. cor. can be found.
34.50	Old road bears N.W. and S.E. leads to Oraibi Ariz.
40.00	See an iron post 3 ft. long 1 in. in diam. 26 ins. in the ground for 1/4 sec. cor. marked on base cap 1/4 3 3 on W. half and 3 3 4 on E. half. Dig pits 18x18x12 ins. and 3 ft. post 3 ft. deep and raise a mound of earth 3 1/2 ft. base. 1 1/2 ft. high. W of cor. No. trace of original 1/4 sec. cor. can be found.
	From this cor. the school buildings in the town of Oraibi Ariz bears W. 15 chs. dist.
43.75	Road to Oraibi Ariz bears E. and W.
45.50	Road to Oraibi Ariz bears N.W. and S.E.
47.00	Road undergrowth, enter cultivated land bears E. and W.
50.00	A rock house bears west 2.00 chs. dist.
51.50	Road cultivated land bears E. and W. enter sage and greasewood brush undergrowth bears E. and W.
53.75	Road to Oraibi Ariz bears N.E. and S.W.
57.00	Top of sand ridge bears N.E. and S.W. descend gradually over N.W. slope.
58.50	Road undergrowth, bears N.E. and S.W. enter cultivated land bears N.E. and S.W.
60.00	No trace of old 1/16 sec. cor. can be found.
60.50	Top of descent in depression bears N.W. and S.E. drains S.E.

Chains.

like

- ascend gradually over S.E. slope.
 67.00 Dens Cultivated land bears N.E. and S.W. enter
 sage and greasewood brush undergrowth bears
 N.E. and S.W.
 80.00 Det an iron post. 3 ft. long 2 ins. in diam. 24
 ins. in the ground for ^{re-established} Cor. of secs. 27, 28, 33 and 34
 marked on brass Cap. T 29 N 328 in N.W. R 16 E S 27
 in N.E. & 34 in S.E. and 333 in S.W. quadrants.
 Dig pits 18x18x12 ins in each. see. 5 $\frac{1}{2}$ ft. dist. and
 raise a mound of earth 4 ft. base 2 ft. high W.
 of cor. No trace of original cor. can be found.
 Land rolling.
 Soil sandy 3rd rate.
 No timber

- Earth on a random line bet. secs 27 and 34
 40.00 Det temp $\frac{1}{4}$ sec. cor.
 80.02 Intersects N and S. line abt. the Cor. of secs. 26, 27, 34
 and 35 ^{hereinbefore described} ^{re-established} hence I run, resurveying
 West. on a true line bet. secs. 27 and 34
 Over rolling sandy land through scattering sage
 and greasewood brush undergrowth and bunches.
 Hard.
 20.00 ^{No trace of old $\frac{1}{16}$ sec cor. can be found.}
 20.75 Road to Oracle Ariz bears N.W. and S.E.
 40.01 Det an iron post. 3 ft. long 1 in. in diam. 26 ins.
 in the ground for ^{re-established} ⁴ sec. cor. marked on brass
 Cap $\frac{1}{4}$ S 27 in N. half and 334 or 3. 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. No trace of old $\frac{1}{16}$ sec. cor. can be found.
 48.75 Road to Oracle Ariz bears N.E. and S.W.
 60.00 ^{No trace of old $\frac{1}{16}$ sec. cor. can be found.}
 80.02 The Cor. of secs. 27, 28, 33, and 34, hereinbefore described
^{re-established}
 Land rolling.
 Soil sandy 3rd rate.
 No timber.

- W 0° 0' 27" bet. secs. 27 and 28; resurveying to 20.00
 Descend gradually N. slope over rolling sandy land.
 through sage and greasewood brush undergrowth
 14.00 Dry ravine comes E. of sec. S.W. slope.
 17.50 Hard rolling sandy land bears E. and W. enter slope

Survey and Resurvey of the
Subdivision of Twp 29 N., R16 E.

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Clears

lines

mountainous land bears E and W. ascend abrupt

20.00 S. slope of mesa No trace of old $\frac{1}{16}$ sec. cor. can be found.

33.50 Top of abrupt ascent on S. edge of mesa, bears
Stony mountainous land bears E and W., enter
rolling sandy land 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. 14 S.
28 on W. half. and 27 on E half.

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

51.00 North edge of mesa bears rolling land bears E and W.
enter stony hilly land bears E. and W. descend
abruptly over N. slope of mesa.

51.25 Enter peach orchard bears E and W.

55.00 Leaves orchard bears E and W.

57.50 Root of steep descent. cross road to Indian village
at Craibi. ariz bears N.E. and S.W. - desc gradually

75.25 Wood road 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. 21, 22, 27 and 28
marked on brass cap T 29 N. S 21 in N.W. R16 E. S 22
in N.E. S 27 in S.E. and S 28 in S.W. quadrants.

Dig pits $18 \times 18 \times 12$ 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 mountainous.

Soil sandy and stony $3^{\frac{1}{2}}$ and $4^{\frac{1}{2}}$ rate.

No timber. Mountainous land. 16.00 obs.

At this cor. I set off $10^{\circ} 06' \frac{1}{2}$ N. on the decl. arc
and at $11^{\text{h}} 59^{\text{m}} 53^{\text{s}}$ a.m. L.M.T. observed the sun on the
meridian, the resulting latitude being $35^{\circ} 58' \frac{1}{2}$ N.

East on a random line bet. secs. 22 and 27.

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

80.00 Intersect N and S. line 8 fms. S of the cor. of secs. 22
hereinafter described
23, 26. and 27, hence name

$889^{\circ} 57'$ W. on a true line bet. secs. 22 and 27

Over rolling sandy land. through sage and greasewood. brush undergrowth.

96.00 Leaves rolling sandy land bears N.W. and S.E. ascend.
N.E. slope over hilly sandy land bears N.W. and S.E.

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

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Claims

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- the ground for $\frac{1}{4}$ sec. cor. marked out trans cap. $\frac{1}{4}$ s.
 22 on W. half and 327 on E. 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.
 53.75 Road to Oraibi Indian Village bears N.W. and S.E.
 74.00 Road to Oraibi Indian Village bears N.E. and S.W.
 80.00 The cor. of secs. 21, 22, 27 and 28, heretofore described.
 Land rolling and hilly
 Soil sandy 3rd rate.
 No timber

- No 02 W. between secs 21 and 22
 Descend gradually N.E. slope on. hilly sandy
 land, through sage and greasewood bush under-
 growth and bunch grass
 23.25 Road bears N.W. and S.E. leads from Hotavella
 Village to Oraibi Ariz
 37.00 Dry sand wash 150 lbs. wide 3 ft. deep courses
 S.E. ascend S.W. slopes of sand ridge.
 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 trans cap $\frac{1}{4}$ s.
 321 on W. half and 322 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.
 Dry ravine 50 lbs. wide courses S.W.
 The same ravine courses S.E.
 The same ravine courses S.W.
 80.00 Set an iron post 3 ft. long 2 ins. in diam 24 ins.
 in the ground for cor. of secs. 15, 16, 21 and 22
 marked out trans cap T 29 N 316 in N.W. R16 E 315
 in N.E. 322 in S.E. and 321 in S.W. quadrants.
 Dig pits 18x18x12 ins. in each sec. 5 ft. dist.
 and raise a mound of earth 4 ft. base, 2 ft. high.
 W. of cor.
 Land hilly.
 Soil sandy 3rd rate.
 No timber.

- W $89^{\circ}57' E$ on a random line betw. sec. 15 and 22
40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.10 Intersect N. and S. line 2 thkr. N. of the cor. of sec.
14, 15, 22 and 23 hereinbefore described,
Thence down
S $89^{\circ}58' W$. on a true line betw. sec. 15 and 22.
Descend S.W. slope over hilly land through sage
and greasewood brush and bunch grass.
- 4.25 Dry ravine roller wide 4 ft. deep course S.E.
- 12.00 Pass hilly land bear N.E. and S.W., enter
stony mountainous land bear N.E. and S.W., ascend
abruptly on E. slope of mesa.
- 31.70 Top of abrupt rocky ascent on E. edge of mesa,
leave mountainous land bear N.E. and S.W., enter
rolling land bear N.E. and S.W.
- 40.05 Set an iron post 3 ft. long buried in drain, 26
ins. in the ground for $\frac{1}{4}$ sec. cor. marked out base
cop 4815 on 77, half and 822 on 8 half.
Raise a mound of stone 2 ft. base 1 $\frac{1}{2}$ ft. high.
N. of cor. Post impracticable.
- 47.00 West edge of mesa leave rolling land bear N.W.
and S.E. enter stony mountainous land bear
N.W. and S.E. descend abruptly on S.W. slope
of mesa.
- 61.50 Top of abrupt rocky descent is at ravine base
N.W. leave mountainous land bear N.W. and
S.E. enter hilly land bear N.W. and S.E. ascend
N.E. slope of sand ridge.
- 65.75 Top of sand ridge bear N.W. and S.E. desc. S.W. slope.
- 78.60 Dry ravine course S.W. asc.
- 80.10 The cor. of sec. 15, 16, 21 and 22, hereinbefore described.
Land rolling hilly and mountainous.
Soil sandy and stony 3rd and 4th rate.
No timber.
- Mountainous land 34.20 ch.

April 16th 1909

April 17th, 1909, at 7 a.m., set off 35° 54' N.
on the lat. arc 10° 24' N. on the decl. arc and
determine a meridian with the solar at the
cor. of sec. 15, 16, 21 and 22, hereinbefore described,
Thence down

W $89^{\circ}02' W$. betw. sec. 15 and 16.

Chains

lines

	Ascend S.E. slope over hilly sandy land through sage and greasewood bush undergrowth and bunch grass.
37.60	Mop of sand ridge bears N.E. and S.W. sec. 10 W.W. slope.
39.75	Dry ravine course S.W. and S.E. slopes.
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 14 S 16 on W half and 815 on E half. Dig pit 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.
40.26	Top of mesa bears hilly sandy land bears N.W. and S.E. ascend a brush rocky S.W. slope. over mountainous land bears N.W. and S.E.
65.00	Top of brush rocky ascent on S. edge of mesa bear mountainous land bears N.W. and S.E. Enter rolling sandy land and scattering pinion pine and cedar timber bears N.W. 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 29 N S 9 in N.W. R16 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 S $71\frac{3}{4}^{\circ}$ E 136 lbs. dist. marked T 29 N R16 E S 15 B.T. A cedar 4 ins. in diam. bears S $50\frac{3}{4}^{\circ}$ W 187 lbs. dist. marked T 29 N R16 E S 16 B.T. A cedar 8 ins. in diam. bears N $22\frac{1}{2}^{\circ}$ W. 250 lbs. dist. marked T 29 N R16 E S 9 B.T. No other trees available. Dig pit 36x36x12 ins. in sec. 10 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 mountainous. Soil sandy and stony $\frac{3}{4}$ and $\frac{4}{5}$ part. Timber pinion pine and cedar. mountainous land. 24,75 chs)
	W $89^{\circ} 58' E$ on a random line bet. secs. 10 and 15 -
140.00	Set temp. $\frac{1}{4}$ sec. cor.

BOOK 2591

- 80.02 Intersect N. and S. line 5 ltrs. N. of the cor. of sec.
10, 11, 14 and 15, heretofore described,
Thence down
W. of a true line betw. sec. 10 and 15 -
Ascend abrupt rocky S.E. slope of mesa on w.,
mountainous land.
- 13.00 Top of abrupt rocky areath on E. edge of mesa
Leave mountainous land bear N.E. and S.W., enter
rolling sandy land, and scattering piñon pine and
cedar timber bear N.E. and S.W. ascend gradually.
- 33.00 Top of mesa, bear N.E. and S.W. descend gradually
over N.W. slope
- 40.01 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. 10 on N. half and S. 15 on S. half, from which
A cedar 8 in. in diam. bears $116\frac{1}{4}^{\circ}$ E 201 lbs. dist.
marked $\frac{1}{4}$ S. 10 B.T.
A cedar 6 in. in diam. bears 81° E 120 lbs. dist.
marked $\frac{1}{4}$ S. 15 B.T.
- 80.02 The cor. of sec. 9, 10, 15 and 16, heretofore described.
Land rolling and mountainous.
Soil sandy and stony $3\frac{1}{4}$ and $4\frac{1}{2}$ in. rate.
Timber piñon pine and cedar.
Mountainous land. 13.00 Chs.

W. 02 W. lat. sec. 9 and 10

Over rolling sandy mesa land through scattering
piñon pine and cedar timber and bunch grass

1.00 Top of sand ridge bear E and W. desc. N. slope.

13.25 Dry ravine cross N.E. sec.

18.00 Top of sand ridge bear N.E. and S.W. desc.

28.00 Rock & debris in depression bear N.E. and S.W. drains
to the N.E. ascend S.E. slope.30.50 Leave sandy land bear N.E. and S.W. enter. stony
land bear N.E. and S.W.

36.00 Top of ridge bear N.E. and S.W. desc. gradually

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 $\frac{1}{4}$ S. 9
on W. half and S. 10 on E. half. from which
A cedar 4 in. in diam. bears $113\frac{3}{4}^{\circ}$ E 102 lbs. dist.
marked $\frac{1}{4}$ S. 10 B.T.

Chains

lines

	A cedar 4 ins. in diam. bears $819\frac{1}{2}^{\circ}$ W. 114 l.h.v. dist. marked $\frac{1}{4}$ S. 9 B.T.
42.25-	North edge of mesa low rolling land bear sand W. enter stony mountainous land bear sand W. descend abruptly over N. slope of mesa.
52.00	Dry ravine course N.E. bear timber bear N.E. and S.W. ascend steep S.E. slope.
55.00	Hop of sand spur bear N.E. and S.W. desc.
57.00	Dry ravine course E. asc.
68.50	Hop of sand spur bear N.E. and S.W. desc. N.W. slope.
72.00	Dry ravine course N.E. asc. steeply.
76.00	Hop of spur bear N.E. and S.W. descend abruptly.
80.00	Set an iron post 3 ft. long 2 ins. in diam 24 ins. in the ground for cor. of rec. 3, 4, 9 and 10 marked on bear cap T 29 N 84 in N.W. R 16 E 33 in N.E. 310 in S.E. and 39 in S.W. quadrant. Dig pits 18x18x12 ins. in each. sec. 5 ft. dist., and raise a mound of earth 4 ft. base 2 ft. high. W. of cor.
	Sand rolling and mountainous. Soil sandy and stony 3rd and 4th rate. Timber pinon pine and cedar. Mountainous land. 37.75 ch.
NOTE	At this cor. drop off $10^{\circ} 28'$ N on the decl. asc and at $11^{\circ} 59' 40''$ am. l.m.t. observe the sun on the meridian the resulting latitude being $35^{\circ} 56' N$

Each on a random line betw. recs. Sand 10.

40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.14	Untericht Naud S. line 14 l.h.v. N. of the cor. of recs. 2, 3, 10 and 11, heretofore described, Thence down N $89^{\circ} 54'$ W. on a true line betw. recs. 3 and 10
	Around E. slope over stony land
1.50	Hop of rocky spur bear N. and S., descend abrupt rocky S.W. slope over mountainous land bear N. and S.
3.00	Hop of sand stone ledge 25 ft. high. bear N.W. and S.E.
14.00	Rocky stony land bear N.W. and S.E. enter sandy land bear N.W. and S.E.
20.00	Hop of descent in depression bear N.W. and S.E. drains to the S.E. ascend N.E. slope of spur.

BOOK 2597

- 26.50 Top of sand spur head N.W. and S.E. desc.
 34.00 Rock of desert in depression head N.W. and S.E.
 drains to the S.E. Ascend N.E. slope.
 40.07 Sebastian post. 3ft. long runs in drain. 20 ins. in
 the ground for $\frac{1}{4}$ sec cor marked on base cap $\frac{1}{4}$ S 3 on
 N. half and 3.0 on S half.
 Dig pits $18 \times 18 \times 12$ ins. E and W. of post. 3ft. dist.
 and raise a mound of earth $3\frac{1}{2}$ ft. base $11\frac{1}{2}$ ft. high.
 M. of cor.
 41.50 Top of spur head N and S desc.
 50.75 Dry ravine course S.E. asc.
 56.25 Top of sand ridge head N.W. and S.E. desc.
 62.00 Dry ravine course N.E. asc.
 80.14 The cor. of recs. 3, 4, 9 and 10, heretofore described.
 Land mountainous and rolling
 Soil sandy and stony $3\frac{1}{2}$ and $4\frac{1}{2}$ in. ratio.
 No timber -
 Mountainous land. 78.64 Chrs.

- No° 02 W. on a random line bet. recs 3 and 4
 40.00 Sub temp $\frac{1}{4}$ sec. cor.
 79.96 Intersect M. bdry. of Mt. 32 Chrs $N. 89^{\circ} 59' W.$
 of recs 3, 4, 33 and 34, recently estab. by me & described in
 Exterior Book "V"
 Name Driv.
 80° 12' W. on a true line bet. recs 3 and 4
 Over rolling sandy mesa land. through scattering
 pinyon pine and cedar timber.
 34.75 South edge of mesa land rolling land and timber
 bears E and W., enter stony mountainous land
 bears E. and W. descend abrupt S. slope of mesa over
 cliffs and ledges.
 39.96 Sebastian post. 3ft. long runs in drain. 20 ins. in the
 ground for $\frac{1}{4}$ sec. cor. marked on base cap $\frac{1}{4}$ S 4 on
 W half and 3.0 on E half.
 Raised mound of stone 2ft. base $1\frac{1}{2}$ ft. high. W.
 of cor., Pits unpracticable.
 54.75 Rock of abrupt rocky desert in dry ravine course
 S.E. ascend N.E. slope of spur.
 65.00 Top of spur head E and W. desc.
 67.50 Dry ravine course E. asc.
 75.25 Top of spur head N.W. and S.E. desc. SW slope.
 78.25 Dry ravine course E. asc.

Clearins

27

- 79.96 The cor. of sect. 3, 4, 9 and 10, hereinbefore described.
Land rolling and mountainous.
Soil sandy and stony $3\frac{1}{2}$ and $4\frac{1}{2}$ rods.
Bamboo, Juniperus and cedar
Mountainous land. 45.21 ch.

April 17th, 1909

¹⁹⁰⁹
April 19th, Ah. 7, 30^m am. I met Dist off. 35° 51 $\frac{1}{2}$ ' m.,
on the lat. arc. 11° 06 $\frac{1}{2}$ ' m. on the decl. arc. and
determine a meridian with the solar ah. the
Stand. Cor. of sect 32 and 33 over the 3rd day of
^{recently estab. by me & described in Standard Book "C"}
the ^{W.M."} ~~W.M."~~ ^{Whence from}
No° 03' W. Between 32 and 33.

- ascend abruptly rocky S.E. slope of mesa over hilly land.
16.00 Old road to Oracle Ariz bears East and W.
26.00 Top of rocky ridge bears East and W. dec.
34.75 Dry ravine course N.E. arc.
38.00 Top of sand ridge bears E. and W. dec. steeply.
40.00 The fourth for the $\frac{1}{4}$ sec. cor. falls in the bottom of
dry ravine course N.E., unsuitable for the establishment
of a permanent cor. therefore I continue my line
ascend S slope of ridge.
41.00 Set an iron post 3ft. long 1 in. in diam. 26 ins.
in the ground for vertices cor. to the $\frac{1}{4}$ sec.
cor. marked on brass Cap T 29 N R 16 E S 32 m
W half. S 33 m E half and W.C. $\frac{1}{4}$ on S. half.
Dig pits 18x18x12 ins. and S. of post 3ft. dist.
and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft.
high W. of cor.
46.00 Top of sand ridge bears N.E. and S.W. dec gently
over N.E. slope.
46.40 Road. from the town of Oracle Ariz to the
Indian Village bears East and W.
71.00 Dry ravine course S.E. Land hilly land bears N.W.
and S.E., enter stony mountainous land bear
N.W. and S.E. ascend abruptly over S. slope of mesa
80.00 Set an iron post 3ft. long 2 ins. in diam. 24 ins.
in the ground for cor. of sect. 28, 29, 32 and 33
marked on brass Cap T 29 N S 29 m N.W. R 16 E
S 28 m N.E. S 33 m S.E. and S 32 m S.W. quadrant.
Raise a mound of stone 2ft. base. $1\frac{1}{2}$ ft. high.
W. of cor. Pits impracticable.

BOOK 2581

From this cor. the N.E. cor. of a house in the Craibi Indian Village bears $527^{\circ}30'W.$
Land hilly and mountainous.
Soil sandy and stony 3rd and 4th rate.
No timber.
Mountainous land. 9.00 ch.

- Earth on a random line bet. recd 28 and 33.
Set temp $\frac{1}{4}$ rec. cor.
80.08 Ditches 7 and 8. Line 5 lbs. M. g. the cor. of recd. re-established
27, 28, 33 and 34, hereinbefore described,
Thence down; resurveying to 20.02,
 $W89^{\circ}58'W.$ on a true line bet. recd 28 and 33.
Ascend N.E. slope over hilly sandy land through
scattering sage and greasewood bush, undergrowth
and bunch grass.
No trace of old 1/4 sec. cor. can be found
Set an iron post. 3 ft. long 1 in. in diam. 26 ins. in
the ground for 4 sec. cor. marked on base cap $\frac{1}{4}$ S.
28 on N. half. and 333 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 ft. high
N. of cor.
42.50 Leave hilly land bear N.W. and S.E. enter stony
mountainous land bear N.W. and S.E. ascend
E slope of mesa.
45.00 Top of ascent. on mesa bear N.W. and S.E.
48.00 Walk edge of mesa bear N. and S. descend
abruptly over cliffs and ledges.
56.00 Top of abrupt rocky descent, rocky ravine
course S.E., ascend abruptly on S.E. face of mesa
80.08 The cor. of recd. 28, 29, 32 and 33, hereinbefore described.
Land hilly and mountainous.
Soil sandy and stony 3rd and 4th rate.
No timber.
Mountainous land. 37.58 ch.

- $W0^{\circ}03'W.$ bet. recd 28 and 29
Ascend abrupt rocky S. slope of mesa over mountainous
land.
3.00 Top of abrupt rocky ascent on S. edge of mesa
Leave mountainous land bear E and W, enter

Chains

- rolling sandy and stony land bears E and W.
ascend gradually.
- 10.20 Road to the Oraibi-Dudson Village bears
N.E. and S.W.
- 20.00 Road to the Oraibi-Dudson Village bears
N.E. and S.W.
- 21.50 Enter Peach orchard bears N.E. and S.W.
- 30.25 Leaves orchard bears N.E. and S.W.
- 30.30 Road to the Oraibi-Dudson Village bears
N.E. and S.W.
- 34.50 Top of sand ridge bears N.E. and S.W., enter
Peach orchard bears N.E. and S.W., desc. N.W.
slope of ridge.
- 40.00 Set out iron post. 3 ft. long 1 mi. in diam. 26
in. in the ground for 1/4 sec. cor. marked on brass
Cap. T 29 N S 20 in N.W.
S 24 in W.Half and S 28 in E.Half.
Dig pits 18x18x12 in. N and S. of post. 3 ft.
diam. and raise a mound of earth 3 ft. base,
1 1/2 ft. high W. of cor.
- 62.25 Leaves orchard bears N.E. and S.W.
- 70.25 North edge of mesa bears N.E. and S.W. leave
rolling land bears N.E. and S.W. enter broken
and hilly land bears N.E. and S.W., desc. steep
N.W. slope of mesa.
- 72.50 Dry ravine course N.E., enter Peach orchard
bears N.E. and S.W. are. S.E. slope of sand ridge
- 75.00 Top of sand ridge bears N.E. and S.W. leave
orchard bears N.E. and S.W. desc. N.W. slope.
- 80.00 Set out iron post. 3 ft. long 2 in. in diam. 24
in. in the ground for cor. of sect. 20, 21 28 and
29, marked on brass Cap T 29 N S 20 in N.W.
R16 E. S 21 in N.E. S. 28 in S.E. and S 29 in S.W.
quadranth.
- Dig pits 18x18x12 in. in each. sec 5 1/2 ft.
diam. and raise a mound of earth 4 ft. base
2 ft. high. W. of cor.
- Land rolling hilly and mountainous
Soil sandy and stony 3rd and 4th rate
Pruiner peach.
- Mountaneous land 3.00 Chrs.
- NOTE On this cor. decl. of 11° 10' M. on the decl. are
and at 11° 59' 13" sec. L. n. l. observed the sun

Survey and Resurvey of the
Subdivision of Rd 29 N., R16 E.
line

BOOK 2591

on the meridian and obtain on the bar a reading of $35^{\circ}58' \text{ N.}$

	$889^{\circ}58'E$ on a random line bet. sec. 21 and 28.
40.00	Set true $\frac{1}{4}$ sec. cor.
79.98	Intersect N. and S line 16 lbs. S. of the cor. of sec. 21, 22, 27 and 28, hereinbefore described, Three Drivs
	$889^{\circ}55'W.$ on a true line bet. sec. 21 and 28.
	Over rolling sandy land through scattering sage and greasewood brush and bunch grass.
16.50	Dry ravine 5 lbs. wide 2 ft. deep base N.E. arched W.E. slope.
37.25	Top of sand ridge bears N.E. and S.W. desc.
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 $\frac{1}{4} 821$ on N half and 328 on S half. Dig pits $18 \times 18 \times 12$ ins. East W.E. post. 3 ft. deep and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high. N. of cor.
45.00	Flood. of desert in depression bears N.E. and S.W. drains to the N.E. sec.
68.50	Top of sand ridge bears N. and S. desc. W. slope.
78.25	Dry ravine course N.E. sec.
79.98	The cor. of sec. 20, 21 28 and 29, hereinbefore described. Land rolling and hilly. Soil sandy 3^{rd} rate. No timber.

No $^{\circ}03'W.$ bet. sec. 20 and 21

	Second N.E. slope of sand ridge over hilly sandy land through scattering sage and greasewood brush undergrowth.
4.20	Dry ravine course N.E. sec. and gradually.
10.00	Top of sand ridge bears N.E. and S.W. desc.
12.00	Leaves undergrowth bears N.E. and S.W., enter cultivated land bears N.E. and S.W.
13.50	Dry sand wash 40 lbs wide course N.E. sec. S. slope.
14.25	Sand cultivated land bears N.E. and S.W.
32.00	Top of rocky spur bears N.E. and S.W. desc.
40.00	Set an iron post 3 ft. long 1 in. in diam 26 ins. in the

Station

- ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ 8 20m W half
and 8 21 on E half.
Dig pits 18x18x12 ins. N. and S. of post. 3 ft. dist. and raise
a mound of earth $\frac{3}{4}$ ft. base, $\frac{1}{2}$ ft. high. W of cor.
61.75 Dry ravine course N.E. asc. S slope of ridge.
66.25 Top of ridge bears N.E. and S.W. desc. gradually over N. slope
Set an iron post. 3 ft. long 2 ins. in sand 20 ins in the
ground for cor. of secs. 16, 17, 20 and 21. marked on
brass cap T 29 N 8 17 m N.W. R16 E 8 16 m N.E. S 21 m S.E.
and S 20 m S.W. quadrants.
Dig pits, 18x18x12 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 hilly.
Soil sandy 3rd rate.
Timber scattering peach trees W. of line

- IV 89° 55' E. on a random line bet. secs. 16 and 21
Set temp. $\frac{1}{4}$ sec. cor.
80.02 Intersect N. and S. line 18 lbs. m. of the cor. of secs. 15, 16,
21 and 22 ^{hereinbefore described}. Then on D run
IV 89° 57' W. on a true line bet. secs 16 and 21
Ascend N.E. slopes of sand ridge through scattering
 sage and greasewood brush undergrowth and bunch
 grass.
7.50 Top of sand ridge bears N.W. and S.E. desc over S.W. slope
15.50 Dry sand wash 50 lbs. wide course S.E. asc.
19.75 Road from Hot Springs Indian Village to Castle Rock
 bears N.W. and S.E.
20.00 Top of sand ridge bears N.W. and S.E.
40.01 Set an iron post. 3 ft. long 1 in. in sand. 26 ins. in the
ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ 8 16 on N.
half and 8 21 on S half.
Dig pits 18x18x12 ins E and W. of post. 3 ft. dist. and
raise a mound of earth $\frac{3}{4}$ ft. base, $\frac{1}{2}$ ft. high. N
of cor.
40.60 Dry sand wash. 40 lbs wide course S.E. ascend N.E.
slope of sand ridge.
80.02 The cor. of secs. 16, 17, 20 and 21, hereinbefore described.
Land hilly.
Soil sandy 3rd rate.
Washburn.

April 19th 1909

BOOK 259

	lines
	1909 April 21 st A.M. 10 th 00 m a.m. Dred off. 35° 54' N. orw the lat. arc. 11° 49' M. orw the decl. arc. and determine a meridian with the solar at the cor. of sec. 16, 17, 20 and 21, ^{hereinbefore described} hence Dr. run N 0° 03' W beth. sec. 16 and 17.
	Ascend S.E. Slope over hilly sandy land through scattering sage and greasewood brush undergrowth and bunch grass.
7.00	Mops of sand ridge bears E. and W. decl.
27.50	Dry sand wash 30 lbs. wide course E. ascend S slope. over stony land,
34.00	Mops of rocky spur bears E. and W. decl.
35.00	Land stony land bears N.W. and S.E.
40.00	Set aw iron post. 3 ft long in. diam. 26 in. in the ground. for $\frac{1}{4}$ sec. cor. marked out brass cap $\frac{1}{4}$ 817 or W half and 3 16 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.
49.75	Dry ravine course S.E. are.
54.00	Mops of sand ridge bears N.W. and S.E. decl.
59.00	Dry ravine course S.E. asc.
73.25	Mops of sand ridge bears N.W. and S.E. decl.
78.75	Dry ravine course S.E. are.
80.00	Set aw iron post. 3 ft. long 2 ins. in diam. 24 ins. in the ground for cor. of sec. 8, 9, 16 and 17. marked out brass cap. T 29 N. S 8 ins N.W. R 16 E S 9 ins N.E. S 16 ins S.E. and S 17 in S.W. quadrant. Dig pits 18x18x12 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 hilly.
	Silt sandy and rocky $\frac{3}{4}$ and $\frac{4}{7}$ rate. No timber.

S 89° 57' E on a random line bet. secs. 9 and 16.

40.00	Set temp $\frac{1}{4}$ sec. cor.
80.20	Intersect N and S. line 3 lbs. S. of the cor. of sec. 9, 10, 15 and 16, hereinbefore described; hence Dr. run
	N 89° 58' W on a true line bet. secs 9 and 16.
	Ascend E. slope over rolling sandy land. through scattering cedar and pinon pine timber.

Chains

- 2.00 Slope of low sand ridge bears N.E. and S.W. descend gradually over N.W. slope.
- 15.10 West edge of mesa, level rolling land bears N.W. and S.E. enter stony mountainous land bears N.W. and S.E. descend abrupt W. slope of mesa.
- 21.00 Level stony land and timber bears N.W. and S.E.
- 36.75 Floor of abrupt descent in dry ravine course S.W. leave mountainous land bears N.W. and S.E., enter hilly land bears N.W. and S.E. - ascend S.E. slope of sand ridge.
- 39.00 Slope of sand ridge bears N.W. and S. desc.
- 40.10 Below iron post 3 ft long 1 in. in draw, 26 in. in the ground for 1/4 sec. cor. marked on board Cop 148900 N. half and 816 on S. half.
Dig pits 18x18x12 in 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.
- 42.50 Dry ravine course South asc.
- 45.00 Slope of sand ridge bears N.W. and S. desc.
- 45.75 Dry ravine course South asc.
- 52.50 Slope of sand ridge bears N.W. and S.E. desc.
- 58.00 Road from Hotanville Indian Village to Drakes Ariz. bears N.W. and S.E..
- 58.50 Dry ravine course South ascend E. slope.
- 75.75 Slope of sand ridge bears N.W. and S.E. desc.
- 80.20 The cor. of sec. 8, 9, 16 and 17, heretofore described.
Level rolling hilly and mountainous.
Soil sandy and stony 3^{1/2} and 4^{1/2} in. rate.
Pinon pinon pine and cedar
Mountainous land. 21.65 Chs.

NW 1/4 sec. 11. bot. sec. 8 and 9.

Ascend E. slope of sand ridge over hilly land through scattering sage and greasewood bush undergrowth and bunch grass.

- 6.00 Slope of sand ridge bears N.W. and S.E. - desc.
- 17.70 Deep dry ravine course S.E. asc.
- 21.00 Slope of high sand ridge bears N.W. and S.E.
- 35.00 Road from Hotanville Indian Village to Drakes Ariz. bears N.W. and S.E.
- 35.05 Dry ravine course S.E. asc.
- 35.20 Slope of ridge bears E. and W. desc. steep N. slope

Survey and Resurvey of the
Subdivisions of Twp 29 N., R16 E.

- 39.50 Enter scattering piñon pine and cedar timber
trees E. and W.
- 40.00 Set an iron post 3 ft. long 1 in. in draw. 26 in. in
the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4} S$
89° W half and 39, on E half, from which.
A cedar 10 ins. in draw, bears $89\frac{3}{4}^{\circ} E$ 95 lbs. dist. marked
 $\frac{1}{4} S 9$ B.T.
A cedar 8 ins. in draw bears $78^{\circ} W$ 124 lbs. dist.
marked $\frac{1}{4} S 8$ B.T.
- 42.50 Dry ravine course E., leave hilly land bears E. and W.
enter stony mountainous land bears E. and W. ascend
abrupt rocky S. slope of mesa.
- 53.50 Top of abrupt rocky ascent on S. edge of mesa leave
mountainous land bears E. and W. enter rolling
sandy mesa land bears E. and W.
- 80.00 Set an iron post 3 ft. long 2 ins. in draw. 24 ins.
in the ground for cor. of secs. 4, 5, 8 and 9, marked
on brass cap T 29 N S 5 in N.W. R16 E S 4 in N.E. S 9 in
S.E. and S 8 in S.W. quadrants. from which.
A cedar 8 ins. in draw bears $75\frac{1}{2}^{\circ} E$ 256 lbs. dist. marked
T 29 N R16 E S 4 B.T.
A cedar 5 ins. in draw bears $55\frac{1}{4}^{\circ} E$ 120 lbs. dist. marked
T 29 N R16 E S 9 B.T.
A cedar 16 ins. in draw bears $31\frac{1}{2}^{\circ} W$ 239 lbs. dist. marked
T 29 N R16 E S 8 B.T. and
A cedar 24 ins. in draw bears $132\frac{1}{2}^{\circ} W$ 152 lbs. dist. marked
T 29 N R16 E S 5 B.T.
Land rolling hilly and mountainous.
Soil sandy and stony $3\frac{1}{4}$ and $4\frac{1}{2}$ ft. rate.
Piñon pine and cedar
Mountainous land 11,000 chrs.

S 89⁵⁸' 8"

- at random line bet. sec. 4 and 9.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.98 Daterich N. and S. line 16 lbs. N. of the cor. of secs. 3, 4,
9 and 10 herebefore described
A spuce tree
- $N 89^{\circ} 51'$ W. at true line bet. sec. 4 and 9,
- Ascend N.E. slopes of spur over mountainous land; through
scattering sage brush undergrowth and bunch grass
- 7.00 Top of spur bears N.E. and S.W. des.
- 10.75 Dry ravine course N. sec.

Chains

22.00	Enter stony land and scattering pinon pine and cedar timber bears N.W. and S.
29.25	Dry ravine course N. asc.
31.00	Slope of spur bears N.W. and S. desc.
35.00	Dry ravine course N. asc.
37.00	Slope of rocky spur bears N.W. and S. desc.
39.99	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 4° W half and 34 on E half from which. A pinon pine 4 in. in diam. bears $812^{\circ}W$ 107 lks. dist. marked $\frac{1}{4}$ S 9 B.T.
	Two other trees available /
	Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high. N. of cor. Pits impracticable.
41.00	Dry ravine course N. asc.
58.00	Slope of abrupt ascents on E. edge of mesal. leave mountainous land bears N.W. and S.E. enter rolling sandy land bears N.W. and S.E.
79.98	The cor. of recs. 4, 5, 8 and 9, heretofore described. Land rolling and mountainous. Soil sandy and stony 3 rd and 4 th rate. Number pinon pine and cedar. Mountainous land. 58.00 chw.

 $IV^{\circ}03'W$. on a random line bet. recs. 4 and 5.

40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.72	Divide N. side of Mf. 12 lks. N. $89^{\circ}59'W$. of the cor. of recs. 4, 5, 32 and 33 ^{Recently estab. by me and described in Exterior Book "V"} Threee Draw $80^{\circ}02'W$. on a true line bet. recs 4 and 5 - About N.E. slope on stony land, through scattering pinon pine and cedar timber
23.00	Leave stony land bears N.W. and S.E. enter sandy land bears N.W. and S.E.
29.75	Slope of. sand ridge bears N.W. and S.E. descend gradually on S.W. slope.
39.72	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 5° W half and 34 on E half from which. A pinon pine 4 in. in diam. bears $7156\frac{3}{4}^{\circ}E$ 74 lks. dist. marked $\frac{1}{4}$ S 4 B.T. A pinon pine 6 in. in diam. bears $727\frac{1}{4}^{\circ}W$ 107 lks.

dist. marked $\frac{1}{4}$ S. 6 BT.

7972 The cor. of secs 4, 5, 8 and 9, hereinbefore described.

Land rolling

Soil sandy and stony 3rd and 4th rede.

Timber pinon pine and cedar.

NOTE Clouds obscure the sun at noon today rendering an observation for latitude impossible.

April 21st 1909

April 20th, 1909
 Ah. 7^a 30^m AM, S set off 35° 51' N. of
 the latarc. 11° 27' N. of the decl. arc. and determine
 a meridian with the solar ah. the Stand. Cor. of.
 Secs. 31 and 32. on the 3^d dy. of the Mts, recently estab. by
 thence down

Exterior Book "C"

N 0° 03' W. bet. secs 31 and 32

Over low rolling sand hills through scattering sage
 and greasewood bush undergrowth, and bunch grass.

33.25 Road from Pinal Ariz to Oracle Ariz bears N.E. and S.W.

38.75 Road from Pinal Ariz to Oracle Ariz bears E and W.

40.00 Set out iron post 3ft. long 1in. in diam. 26 in. in the ground
 for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 81 on W half and S 82
 on E half.Dig pits 18x18x12 ins. N. and S. of post. 3ft. dist. and raise
 a mound of earth 3 $\frac{1}{2}$ ft. base 1 $\frac{1}{2}$ ft. high. W. of cor.

48.00 Top of sand ridge bears N.E. and S.W. desc.

50.20 Dry ravine course S.W. asc. S.E. slope.

50.25 Enter Peach orchard bears N.E. and S.W.

57.00 Top of sand ridge bears N.E. and S.W. desc.

60.30 Dry ravine course S.W. asc.

63.50 Leave Peach orchard bears E and W.

67.50 Top of sand ridge bears N.E. and S.W. desc.

72.50 Dry ravine course S.W. asc.

75.60 Top of sand ridge bears N.E. and S.W. desc. N.W. slope.

Enter cultivated land bears N.E. and S.W.

78.75 Dry ravine course S.W. asc.

80.00 Set out iron post 3ft. long 2ins. in diam. 24 ins. in the
 ground for cor. of secs. 29, 30, 31 and 32. marked on
 brass cap T 29 N 8.30 in N.W. R16 E. S 29 in N.E. S 32 in
 S.E. and S 31 in S.W. quadrant.Raise a mound of stone 2ft base, 1 $\frac{1}{2}$ ft. high. W. of cor.

Pits impracticable

Sand hills

Chains

links

37

Soil sandy 3rd and 4th rate.

Number peach.

- East on a random line bet. secs 29 and 32
Sth temp. $\frac{1}{4}$ sec. cor.
79.96 Intersects 7 and 8 line 5 lbs. N. of the cor. of recs.
^{hereinbefore described}
28, 29, 32 and 33 $\frac{1}{4}$ M. from Draw
DV 89° 58' W. on a true line bet. secs 29 and 32.
Ascend abruptly over steep rocky S. slope of mesa
over mountainous land.
- 20.50 Tops of abrupt rocky ascent on edge of mesa
leave stony mountainous land bearing 1180° E. and
310° W., enter rolling mesa land bearing 1180° E. and
310° W., ascend gradually on S.E. slopes.
- 29.75 Road to the Peabody Indian Village bears N.E. and 300°.
Enter peach orchard bears N.E. and 3.W.
39.98 Set an iron post 3 ft. long in a drain, 26 ins. in
the ground for $\frac{1}{4}$ sec. cor. marked on board cap $\frac{1}{4}$ S 29 m
W. half and S 32 on S half.
Dig pit 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 11 $\frac{1}{2}$ ft. high. N. of cor.
From this cor. the N.E. cor. of same house, to which a
bearing was taken from cor. recs. 28, 29, 32 and 33 -
bears S 29° 30' E.
- 47.75 Leave orchard bears N. and S.
60.00 Leave mesa land N.W. and S.E. desc. S.W. slope.
61.50 Wood road bears N.W. and S.E.
71.80 West edge of mesa leave rolling land bears 110° W
and 340° E., enter mountainous land bears 110° W
and 310° E., descend abruptly over cliff and ledges
76.00 Root of abrupt rocky descent. leave mountainous
land bears 110° W and S.E., enter hilly sandy land
bears N.W. and S.E.
79.96 The cor. of recs 29, 30, 31 and 32, hereinbefore described.
Land rolling hilly and mountainous.
Soil sandy and stony 3rd and 4th rate.
Number peach.
Mountainous land 24.70 chs.
West on a random line bet. secs. 30 and 31
40.00 Sth temp. $\frac{1}{4}$ sec. cor.
80.06 Intersects W. bdry. of P.P. 5 lbs. S. of the cor. of recs. 25

Survey and Resurvey of the
Subdivision of Pts of 29 N, R16 E,

Collected

like

recently established by me & described in Exterior Book "W"
30, 31 and 32, Thence down

$85^{\circ}58'6''$ S. of true line betw. sec. 30 and 31

Descent S.E. slope over hilly sandy land through scattering
sage and greasewood brush undergrowth and bunch grass.

13.00 Dry sand wash 25 lbs. wide course South. asc.

19.00 Slope of sand ridge bears N. and S. desc.

25.50 Dry sand wash 100 lbs. wide course South. asc.

31.00 Slope of sand ridge bears N. and S. desc.

36.25 Dry ravine course S.W. asc.

40.06 Below iron post. 3 ft. long, 1 in. in diam. - 26 in. in
the ground for 2 sec. cor. marked on base Cap $\frac{1}{4}$ x 8 3/8
on N. half and 3 31 on S. half.

Dig pit 18x18x12 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.

NOTE At this cor. deb off $11^{\circ}30'\frac{1}{2}$ N. of the decl. asc. and
at $11^{\circ}59'$ S. of the decl. observe the sun over the mounds
the resulting latitude being $35^{\circ}52'\frac{1}{2}$.

42.50 Slope of sand ridge bears N.E. and S.W. desc.

45.00 Dry ravine course S.W. asc.

59.00 Slope of sand ridge bears N.E. and S.W. enter peach
orchard bears N.E. and S.W. desc. S.E. slope of ridge

60.00 Leaf orchard bears N.E. and S.W.

62.50 Dry ravine course S.W. asc.

71.00 Slope of sand ridge bears N.E. and S.W. enter peach orchard
bears N.E. and S.W. desc. S.E. slope of ridge.

74.00 Dry ravine course S.W. asc.

77.00 Leaf peach orchard bears N.E. and S.W.

80.06 The cor. of sec. 29, 30, 31 and 32, heretofore described.

Sand hilly.

Soil sandy 3rd rate;

Timber peach.

W^o 03 W. betw. sec. 29 and 30

Ascend S.W. slope of ridge over hilly sandy land.

10.00 Leaf hilly land bears N.W. and S.E. enter stony
mountainous land bears N.W. and S.E., ascend abruptly
over S.W. slope of mesa -

16.80 Slope of arid hill over edge of mesa, leaf mountainous
land bears N.W. and S.E., enter rolling land bears
N.W. and S.E.

40.00 Below iron post. 3 ft. long, 1 in. in diam. - 26 ins. in the

Claims

line

39

- ground for $\frac{1}{4}$ sec. cor. marked on base cap $\frac{1}{4} \times 820$ on
W. half and 329 on E. half.
- Raised a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high. W. of cor.
Pits impracticable.
- 48.25 Wood road bears N.W. and S.E.
- 62.00 Begin steep ascent on S.E. slope of ridge.
- 64.00 Tops of steep rocky ascent. ascend gradually.
- 80.00 Below 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 base Cap T 29 M 319 in. N.W. R16 E 320
in N.E. 329 in S.E. and 330 in S.W. quadrant
- Raised a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high. W. of cor.
Pits impracticable.
- Land rolling hilly and mountainous.
Soil sandy and stony 3^{rd} and 4^{th} rate.
No timber
- Mountainous land - 6.80 class.
- S $89^{\circ}58' E$ on a random line bet. sec. 20 and 29
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.12 Intersect N. and S. line 5 lbs. N. of the cor. of sec. 20
hereinbefore described
21, 28 and 29 of Section Line
- N $89^{\circ}56' W$. on a true line bet. sec. 20 and 29.
- Ascend S.E. slope of sand ridge over hilly land through
sage and greasewood brush undergrowth and bunch grass.
- 6.00 Tops of sand ridge bears N.E. and S.W. dirs.
- 9.00 Leave undergrowth, enter cultivated land bears N.E.
and S.W.
- 10.00 Roof of ditch in depression bears N.E. and S.W. drains
to N.E. side.
- 16.00 Leave cultivated land bears N.E. and S.W., enter sage
brush undergrowth bears N.E. and S.W.
- 20.50 Tops of sand ridge bears N.E. and S.W. dirs.
- 23.50 Leave undergrowth bears N.E. and S.W., enter cultivated
land bears N.E. and S.W.
- 24.00 Enter peach orchard bears N.E. and S.W.
- 27.00 Depression bears N.E. and S.W. drains to the N.E. side.
- 33.00 Leave cultivated land and orchard bears N.E. and
S.W. enter sage brush undergrowth bears N.E. and S.W.
- 40.06 Below iron post. 3 ft. long 1 in. mid diam. 26 ins. in the
ground for $\frac{1}{4}$ sec. cor. marked on base caps $\frac{1}{4} \times 820$ on
W. half and 329 on E. half.
- Dig pits 18x18x12 ins. East W. of post. 3 ft. dist. and.

BOOK 2597

- raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 45.00 Leaves hilly sandy land at foot of mesa bears N.E. and S.W., ascend abrupt rocky S.E. slope of mesa over mountainous land bears N.E. and S.W.
 50.00 Top of abrupt rocky ascent, leave mountainous land bears N.E. and S.W., enter rolling land bears N.E. and S.W.
 50.50 Enter peach orchard bears N.E. and S.W.
 71.25 Leave peach orchard bears N.E. and S.W.
 77.00 Leave sandy land bears N.E. and S.W., enter stony land bears N.E. and S.W.
 80.12 The cor. of secs. 19, 20, 29 and 30; heretofore described.
 Land rolling hilly and mountainous.
 Soil sandy and stony 3^{rd} and 4^{th} rate.
 Miner peach.
 Mountainous land. 5.00 Chs

- W $89^{\circ}58'$ W. of a random line bet. secs. 19 and 30
 40.00 Set temp. to rec. cor.
 80.06 Datered W. bdry. of Mt. 8 lbs. 71. of the cor. of secs. 19 recently estab. by me and described in Exterior Book "W" 24, 25, and 30. Hence I run
 W $89^{\circ}59'$ E. of a true line bet. secs. 19 and 30.
 Ascend S.W. slope of ridge over hilly sandy land through scattering sage and greasewood bush and bunch grass.
 47.00 Top of sand ridge bears N.E. and S.W. desc. N.E. slope.
 8.50 Dry ravine at foot of mesa bears S.W., leave hilly land bears N.W. and S.E., enter stony mountainous land bears N.W. and S.E. Ascend abruptly over cliff and ledges.
 22.50 Top of abrupt ascent on W. edge of mesa, leave mountainous land bears N.W. and S.E., enter rolling land bears N.W. and S.E. ascend gradually.
 27.50 Wood road bears N. and S.
 40.06 Set an iron post 3 ft. long in mud. 26 in in the ground for 4 rec. cor. marked on bear cap $\frac{1}{4}$ 819 on N half and 830 on S half.
 Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high. N. of cor.
 Bits unpracticable
 41.00 Leave rolling land bears N.W. and S.E. enter hilly stony land bears N.W. and S.E. ascend steep N.W. slope.
 42.00 Top of steep rocky ascent, leave hilly land bears N.E. and S.W. enter rolling land bears N.E. and S.W.

Chains

- 60.00 Leave rolling land bears N.W. and S.E. desc. N.E. slope over broken stone land bears N.W. and S.E.
 80.06 The cor. of secs. 19, 20, 29 and 30, hereinbefore described.
 Land rolling hilly broken and mountainous.
 Soil sandy and stony 3rd and 4th rate.
 No timber.

Mountainous land 14 acres. April 20th 1909

¹⁹⁰⁹ April 21st, A.M. 7th 00^m a.m. ^{L.M.T.} Dist off. 35' 58" N,
 on the lat. are. 11° 47' 11" N. Now the decl. are. and determine
 a meridian with the solar ob. the cor. of secs. 19, 20,
 29 and 30, ^{hereinbefore described} Then draw

N 8° 03' W. Lat. secs. 19 and 20.

Descend steep rocky N.E. slope over broken stony land.

- 3.00 Leave broken stony land bears N.W. and S.E. enter hilly
 sandy land bears N.W. and S.E.
 29.00 Dry ravine course N.E. ascend steeply.
 35.00 Top of sand ridge bears N.E. and S.W. desc. steeply
 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 base Cap. 1/4 3 19 on W half and
 320 on E half.

Dig pits 18x18x12 ins. N and S of post. 3 ft. dist. and raise
 a mound of earth 3 1/2 ft. base, 1 1/2 ft. high. W. of cor.

- 50.00 Dry ravine course N.E. are steeply.
 52.00 Top. of sand hill bears N.E. and S.W. desc.
 53.50 Dry ravine at foot. of mesa. Course E. leave hilly
 land bears E and W., enter stony mountainous land
 bears E and W. ascend abruptly over S. slope of mesa.
 73.00 Top of abrupt ascent on edge of mesa. leave stony
 mountainous land bears E and W. enter rolling sandy
 mesa land bears E and W. desc. N.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 base
 Cap T 29 N. S 18 in N.W. R 16 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.
 Pits impracticable

Land. rolling hilly and mountainous.

Soil sandy and stony 3rd and 4th rate.

No timber.

Mountainous land 19.50 chs

Survey and Resurvey of the
Subdivision of Mt. 29 M. 816 E

BOOK 2597

Claims

lines

- $889^{\circ}56' E$ on a random line bet. sec. 17 and 20.
 40.00 Sph temp. $\frac{1}{4}$ sec. cor.
 80.20 Intersect N and S. line 16 ths. S. of the cor. of sec. 16.
 17.20 ^{hereinbefore described} Thence Drawn
 $889^{\circ}57' W.$ on a true line bet. sec. 17 and 20.
 Ascend E. slope over rolling sandy land through
 sage and greasewood brush undergrowth and bunch grass.
 40.10 Set an iron post. 3 ft. long, 1 in. midiam. 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor. marked on brass cap. $\frac{1}{4} S 17$
 on N half and S 20 on S half.
 Dig pit 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.
 63.00 Foot of mesa. Land rolling land bears N.W. and S.E.
 under mountainous land bears N.W. and S.E., ascend
 abruptly.
 80.20 The cor. of sec. 17, 18, 19 and 20, hereinbefore described.
 Land rolling and mountainous.
 Soil sandy moderate.
 No timber.
 Mountainous land. 17.20 che.

April 21st 1909

- 1909
 April 22nd A.M. 8th 00^m am, Sph. off. $35^{\circ}54' N.$
 by the lat. arc $12^{\circ}08'$ N. or decl. arc. and determine
 a meridian with the solar ah. the cor. of sec. 17, 18
 19 and 20, ^{hereinbefore described} Thence Drawn
 $889^{\circ}59' W.$ on a random line bet. sec. 18 and 19.
 40.00 Sph temp. $\frac{1}{4}$ sec. cor.
 79.96 Intersect W. bdry. of Mt. 16 ths. N. of the cor. of sec.
 recently estab. by me and described in exterior Book "W"
 13, 18, 19 and 24, Thence Drawn
 $889^{\circ}52' E$ on a true line bet. sec. 18 and 19
 Over rolling sandy mesa land. through scattering
 sage brush undergrowth.
 10.00 Enter scattering cedar timber bears N.E. and S.W.
 30.00 Cedar timber bears N and S.
 39.96 Set an iron post. 3 ft. long, 1 in. midiam. 26 ins. 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.
 Dig pit 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.
 79.50 East edge of mesa. Land rolling land bears N.W. and

Chains

- 1 S.E., enter mountainous land bears N.W. and S.E.
descend abruptly over N.E. slope.
79.96 The cor. of sects. 17, 18, 19 and 20, hereinbefore described.
Land rolling and mountainous.
Soil sandy 3rd and 4th rate.
Pinyon Cedar.
Mountainous land. 0.46 chs.
-
- W 0° 03' W. Sub-sect 17 and 18.
Descend abruptly N.E. slope over mountainous land, through
Sage brush undergrowth and bunch grass.
8.00 Enter peach orchard bears E and W.
12.00 Bear peach orchard bears E and W.
17.00 Dry ravine course N.E. asc. steeply.
19.00 Slope of spur bears N.E. and S.W. desc.
34.00 Mtn of descent in dry ravine course N.E. ascend, steeply
39.00 Slope of sand spur bears N.E. and S.W. desc.
40.00 Set an iron post 3 ft. long 1 m. in draw. 26 m. in the
ground for 1/4 sec. cor. marked on base cap. 1/4 S 18 m. W.
half and S 17 on E half.
Dig pits 18x18x12 in. and 3. of post. 3 ft. dist. and
raise a mound of earth 3rd ft. base, 1^{1/2} ft. high. W. of
cor..
42.50 Dry ravine at foot of mesa, course East, ascend abruptly
50.00 Enter scattering pinyon pine and cedar timber, bears.
E and W.
61.40 Mtn of abrupt rocky ascent on S. edge of mesa, bears
Stony mountainous land bears E and W., enter
rolling sandy mesal land, bears E and W.
80.00 Set an iron post 3 ft. long 2 m. in draw. 24 m.
in the ground for cor. of sects. 7, 8, 17 and 18, marked
on base cap T 29 N. S 7 in N.W. R 16 E S 8 in N.E. S 17 in
S.E. and S 18 in S.W. quadrants, from which,
A cedar 4 in. in draw. bears N 53^{1/4}° E 64 lkh. dist. marked
T 29 N. R 16 E S 8 B.T.
A cedar 6 in. in draw. bears S 68^{1/2}° E 126 lkh. dist. marked
T 29 N. R 16 E S 17 B.T.
A cedar 8 in. in draw. bears S 33^{1/2}° W. 71 lkh. dist. marked
T 29 N. R 16 E S. 18 B.T. and
A cedar 4 in. in draw. bears N 29^{1/2}° W. 104 lkh. dist.
marked T 29 N. R 16 E. S. 7 B.T.

Survey and Resurvey of the
Subdivisions of Mp 29 N. R 16 E
lines

BOOK 2597

		Land rolling and mountainous. Soil sandy and stony 3 rd and 4 th rate. Number piñon pine, peach, and cedar. Mountainous land. 61.40 chas.
		W 89° 57' E on a random line bet. sec. 8 and 17
40.00	Set temp. $\frac{1}{4}$ sec. cor.	
79.96	Intersect N. and S. line 14 lks. S. of the cor. of sec. 8, 9, <small>hereinbefore described</small> 16 and 17, Then $\frac{1}{4}$ mile S. of cor.	
		889° 51' W. on a true line bet. sec. 8 and 17,
		Ascend steep E. slope of mesa over mountainous land.
18.00	Top of steep ascent on E. edge of mesa. 150 ft. above cor., leave mountainous land bear N. and S., enter rolling sandy mesa land and scattering piñon pine and cedar timber bear N. and S.	
39.98	Leave iron post 3 ft. long 1 in. in diam. 26 min. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4}$ S 8 on N half and S 17 on S half. From which A cedar 4 in. in diam bear N 48 $\frac{1}{2}$ ° W 260 lks. dist. marked $\frac{1}{4}$ S 8 B.T.	
		A cedar 6 in. in diam bear S 34 $\frac{1}{2}$ ° W. 94 lks. dist. marked $\frac{1}{4}$ S 17 B.T.
NOTE		At this cor. I set off 12° 11' N. on the decl. arc and at 11 h 58 $\frac{1}{2}$ m 35 $\frac{1}{2}$ sec. a.m. L.M.C. observe the sun on the meridian and obtain on the lat. arc a reading of 35° 56' M.
46.50	Top of low sand ridge bear N.W. and S.E. decl. gently	
79.96	The cor. of secs. 7, 8, 17 and 18, hereinbefore described. Land rolling and mountainous. Soil sandy 3 rd and 4 th rate. Number piñon pine and cedar. Mountainous land 18.00 chas.	

		W 89° 52' W. on a random line bet. sec. 7 and 18*
40.00	Set temp. $\frac{1}{4}$ sec. cor.	
79.80	Intersect W. side, of M. 10 lks. S. of the cor. of sec. 7, 12, <small>recently estab. by me and described in Exterior Book "W"</small> 13 and 18, Then $\frac{1}{4}$ mile S. of cor.	
		W 89° 56' E on a true line bet. sec. 7 and 18.
		Over rolling sandy land in cultivated field.
15.00	Bare cultivated land bear N.E. and S.W. enter scattering piñon pine and cedar timber bear	

Chains

	N.E. and S.W.
15.25	Dry ravine course N. sec. are.
20.50	Slope of sand ridge bears N.E. and S.W. desc. gently.
30.00	Road from Holerville Indian Village to Oraibi. Az. bears N.W. and S.E.
39.80	Set an iron post 3 ft. long 1 mi. in draw. 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4} 87$ on N. Half and S. 18 on S. half from which. A cedar 4 ins. in diam. bears $73\frac{1}{4}^{\circ}$ E 103 lkh. dist. marked $\frac{1}{4} 3.18$ B.T.
	A cedar 4 ins. in diam. bears $813\frac{1}{4}^{\circ}$ E 136 lkh. dist. marked $\frac{1}{4} 3.18$ B.T.
51.00	Bottom of decent wadepression bears N.E. and S.W. drains to the S.W. around gently.
56.00	Slope of sand ridge bears N.E. and S.W. desc. gently.
77.00	Road from Holerville Indian Village to Oraibi. Az. bears N.E. and S.W.
79.80	The cor. of secs. 7, 8, 17 and 18, heretofore described. Land rolling. Soil sandy 3rd rate. Pinon pinyon pine and cedar.

No° 03 W. sec. 7 and 8.

Over rolling sandy meadow land through scattering
pinon pinyon and cedar timber.

2.50	Road from the Holerville Indian Village to Oraibi. Az. bears N.E. and S.W.
18.00	Slope of low sand ridge bears N.E. and S.W. desc.
40.00	Set an iron post 3 ft. long 1 mi. in draw. 26 ins. in the ground for $\frac{1}{4}$ sec. cor. marked on brass cap $\frac{1}{4} 87$ on W. half and S. 8 on E. half, from which. A pinon pinyon pine 8 ins. in diam. bears $819\frac{3}{4}^{\circ}$ E 51 lkh. dist. marked $\frac{1}{4} 88$ B.T.
	A pinon pinyon pine 4 ins. in diam. bears $71.66\frac{1}{2}^{\circ}$ W. 166 lkh. dist. marked $\frac{1}{4} 8.7$ B.T.
43.25	Dry ravined course N.W. are.
56.00	Slope of ridge bears N.E. and S.W. desc. N.W. slope.
80.00	Set an iron post 3 ft. long 2 ins. in draw. 24 ins. in the ground for cor. of secs. 5, 6, 7 and 8. marked on brass cap. T 29 N. 36 mi. N.W. R 16 E. S. 6 mi. N.E. 8 mi. S.E. and 87 mi. S.W. quadrants. from which.

Survey and Resurvey of the
Subdivision of Mts 29 M, R.R. E.

46

Claims

Lodes

BOOK 2597

A piñon pine 8 ins. in diam. bears $7141\frac{1}{4}^{\circ}E$ 153 lks. dist.
marked T 29 M. R 16 E S 5 B.T.

A cedar 6 ins. in diam. bears $874^{\circ}E$ 206 lks. dist.
marked T 29 M. R 16 E. S 8 B.T.

A cedar 6 ins. in diam. bears $841^{\circ}W$. 54 lks. dist.
marked T 29 M. R 16 E. S. 7 B.T.

A piñon pine 8 ins. in diam. bears $718\frac{3}{4}^{\circ}W$ 50 lks.
dist. marked T 29 M. R 16 E. S. 6 B.T.

Land rolling.

Soil sandy 3rd rate.

Number piñon pine and cedar

April 22 1909

April 23rd ¹⁹⁰⁹ abt. 7^h 45^m am. Set off 35^{ft} 56^f m. on
the lat. arc 12° 28' N. on the decl. arc. and determine
a meridian with the solar at the cor. of sec. 5, 6,
^{heretofore described}
7 and 8. Three tree

at $88.9^{\circ}51' E$ on a random line bet. sec. 5 and 8.

40.00 Set temp. to rec. cor.

79.88 Intersect N. and S. line 3 lks. S. of the cor. of sec. 4, 5, 7 and
^{heretofore described}
9. ^{Three} tree

at $88.9^{\circ}50' W$. on a true line bet. sec. 5 and 8.

Descend W. slope over rolling sandy mesa land through
scattering piñon pine and cedar timber.

22.00 Post of recent in depression bears N. and S., drain south
ascend gradually over E. slope.

22.50 Leave sandy land bears N. and S., enter stony land
bears N. and S.

26.00 Leave stony land bears N. and S., enter sandy land
bears N. and S.

39.94 Set an iron post. 3 ft long, 1 in. in diam., 26 ins.
in the ground for $\frac{1}{4}$ sec. cor. marked at brass cap.
 $\frac{1}{4}$ S. 5 m. half and 38 on S. half, from which
A cedar 5 ins. in diam. bears $7144^{\circ}W$ 20 lks. dist.
marked $\frac{1}{4}$ S 5 B.T.

A cedar 6 ins. in diam. bears $821\frac{1}{4}^{\circ}E$ 71 lks. dist.
marked $\frac{1}{4}$ S. 8 B.T.

46.00 Top of sand ridge bears N.E. and S.W. descend gradually
over N.W. slope.

79.88 The cor. of sec. 5, 6, 7 and 8; heretofore described.
Land rolling.

Soil sandy and stony 3rd and 4th rate.

Collected

Timber pinon pine and cedar.

- 889°56' W., on a random line bet. sec. 6 and 7,
40.00 Set. temp. $\frac{1}{4}$ sec. cor.
79.70 Intersect N. bdry. of P.M. 8 lks. S. of the cor. of sec.
recently estab. by me and described in Exterior Book "W"
1.6.7 and 12₁, Thence down
N 89°59' E on a true line bet. sec. 6 and 7
Ascend N.W. slope over hilly sandy land through
scattering pinon pine and cedar timber and sage
brush undergrowth
2.50 Top of sand ridge bears N.E. and S.W. decl.
6.00 Dry ravine course North asc.
8.00 Top of sand ridge bears N and S. decl.
23.00 Dry ravine 100 ft. wide 4 ft. deep course N.W.
asc.
39.70 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 6 m. half. and 37, on 3 half. from which
A cedar 4 in. in diam. bears N 48 $\frac{1}{4}$ ° E 84 lks. dist.,
marked $\frac{1}{4}$ S 6 B.T.
A cedar 4 in. in diam. bears S 2 $\frac{1}{2}$ ° E 73 lks. dist.
marked $\frac{1}{4}$ S 7 B.T.
62.00 Leave hilly sandy land bears N.W. and S.E., enter
stony mountainous land bears N.W. and S.E., ascend
abruptly over cliffs and ledges
66.00 Top of abrupt rocky ascent on W. edge of mesa
Leave mountainous land bears N.W. and S.E., enter
rolling sandy mesa land bears N.W. and S.E.
79.70 The cor. of sec. 5, 6, 7 and 8, hereinbefore described.
Land rolling hilly and mountainous.
Soil sandy and stony 3rd and 4th late.
Timber pinon pine and cedar.
mountainous land 4.00 o'clock

N 0°03' W., on a random line bet. sec. 5 and 6.

- 40.00 Set. temp. $\frac{1}{4}$ sec. cor.
79.94 Intersect N. bdry. of P.M. 18 lks. N 89°59' W.
recently estab. by me and described in Exterior Book "V"
sec. 5, 6, 31 and 32, Thence down

	80° 05' W. on a true line bet. sec. 5 and 6. Ascend abrupt rocky N.E. Slope over mountainous land. through scattering piñon pine and cedar timber Leave mountainous land bears N.W. and S.E., enter rolling sandy mesa land bears N.W. and S.E.
10.00	Top of ridge bears N.E. and S.W. decl. S.E. slope.
38.50	Below iron post. 3 ft. long 1 in. in diam., 26 ins in the ground for $\frac{1}{4}$ sec. cor. marked on base Cap $\frac{1}{4}$ 86 on W half and 85 on E half. from which. A piñon pine 4 ins. in diam. bears S49° E 161 lkh. dih. marked $\frac{1}{4}$ S. 5 B.T.
39.94	A cedar 5 ins. in diam. bears S55 $\frac{3}{4}$ ° W 101 lkh. dist. marked $\frac{1}{4}$ S. 6 B.T.
67.00	Dry ravine course W. ascend $\frac{1}{2}$ slope. The cor. of sec. 5, 6, 7 and 8, heretofore described. Land rolling and mountainous. Soil sandy and stony 3 rd and 4 th rate. Timber piñon pine and cedar. mountainous land 10.00 ch.
NOTE	At this cor. I set off 12° 31' N. on the decl. arc and at 11 h 58 ^m 28 ^s sec. am, observed the sun on the meridian the resulting latitude being 35° 56' N.

April 23rd 1909

General Description

This township contains every variety of land from level to mountainous, the soil ranging from stony to sandy and adobe loam. The soil of the bottom land along the Oraibi Wash which flows in a southerly direction through the eastern part of the township is good agricultural land and is being farmed to a limited extent at the present time by the Indians living in the Village of Oraibi, without the aid of irrigation. The soil of the remaining portion of the township is either stony or loose sand and can nearly all be classed as 3rd or 4th rate, is covered with a scanty growth of sage and greasewood brush and bunch grass. The greater portion of this land excepting the stony portion will produce light crops of different kinds which mature quickly, without irrigation in fact many acres of the mesa land in the

vicinity of the Village of Oraibi is planted to peaches which produce abundantly, and of fine quality, and doubtless other kinds of fruit especially apples could be raised if planted. Pinon pines and scrub cedar are found on and along the slopes of the mesa particularly on the south side. The trees however are small and unfit for any purpose other than wood for fire.

The sand stone which underlies all of the mesa portion of the township is too soft to be of any value as a building stone. No mineral was found in the township yet it is probable that coal beds at a greater depth than found in the adjoining townships underlie this one also.

The township is poorly watered, the only living water being small springs, which in very dry years cease to flow.

There is a fine spring in sec 18, and the "Sacred Spring" which furnished all of the water used by the Indians in the Village of Oraibi in sec 30. Several wells have been dug along the Oraibi Wash., and it is quite probable that much water could be developed in this valley from this source.

The Indian Village of Oraibi which is situated on the mesa in sec 32, contains a church and about 200 houses, and has a population at the present time of about 500.

The town of Oraibi situated at the foot of the Mesa in sec. 33, contains a day school, a post office three stores and about 15 dwelling houses. Its population is about 50.

There is one settler in sec. 33.

Sidney E. Blouch

U.S. Examiner of Surveys

NOTE

Initial affidavits in book - of. Subd 10 sec 20.

Apr. 23 - 1909

U.S. EXAMINER OF SURVEYS
FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Sidney E. Blouh

Examiner of Surveys

, 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 Rd. No. 29 N. R 16 E. of the Gila and Salt River Basins and Moundman with
Territory of Arizona.

showing the respective capacities in which they acted:

Var L. White

George Johnson

, Chainman.

Lafayette Jennings

, Chainman.

Chas L. Shumway

, Moundman.

Fred L. Warner

, Moundman.

Arthur A Beard

, Axman.

, Axman.

Jay E. Bellrich and Harry Lake Young

, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

, United States Deputy Surveyor, in surveying all

those parts or portions of the

of the

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

General for

, Chainman.

, Chainman.

, Moundman.

, Moundman.

, Axman.

, Axman.

, Flagman.

Subscribed and sworn to before me this }

day of , 190 }



**FINAL OATH OF UNITED STATES EXAMINER OF SURVEYS
DEPUTY SURVEYOR.**

EXAMINER OF SURVEYS

BOOK

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 190_____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

Surveyed to scale

of the _____

meridian, in the _____ of _____, 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 General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me _____
this _____ day of _____, 190_____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona APR 25 1, 1944

The foregoing field notes of the survey ~~and resurvey~~ of the

Subdivision lines of Township 29 North, Range 16 East of the
Gila and Salt River Base and Meridian, Arizona.

executed by Sidney E. Blout, U.S. Examiner of Survey
~~Special Instructions from the Commissioner of the General Land Office~~
under ~~the command of~~, dated Oct. 2, 1907 and May 15, 1908, ~~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 Singal
~~United States Senator~~

United States Chemical Animal

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.~~