

"Book 2"

(1)

No. 461

Subdivision T23N.R7E

BOOK 461

BOOK 461

4-671

461

FIELD NOTES
GENERAL LAND OFFICE.

- ✓ draw inst
- ✓ Obs.
- ✓ Becl.
- ✓ Lat.

BOOK 461

Copied by C.M.T. 2/26/04

Comp. by G.M.T. & C.M.T. 2/26/04

These sheets copied by C.M.T. 4/19/04

" " Comp. by C.F.W. & C.M.T. 4/19/04

Charts checked 4/29/04 G.H.

Acct

No. 461.

BOOK 461

Field Notes
of the
Survey
of the
Subdivision Lines
of
T 23 N R 7 E
of the
Gila & Salt River Base & Meridian
as Surveyed
by
James A. Lamport
U.S. Deputy Surveyor
Under his Contract # 98
Dated June 30, 1902

Survey Commenced July 10, 1903
Survey Completed July 19, 1903

1A

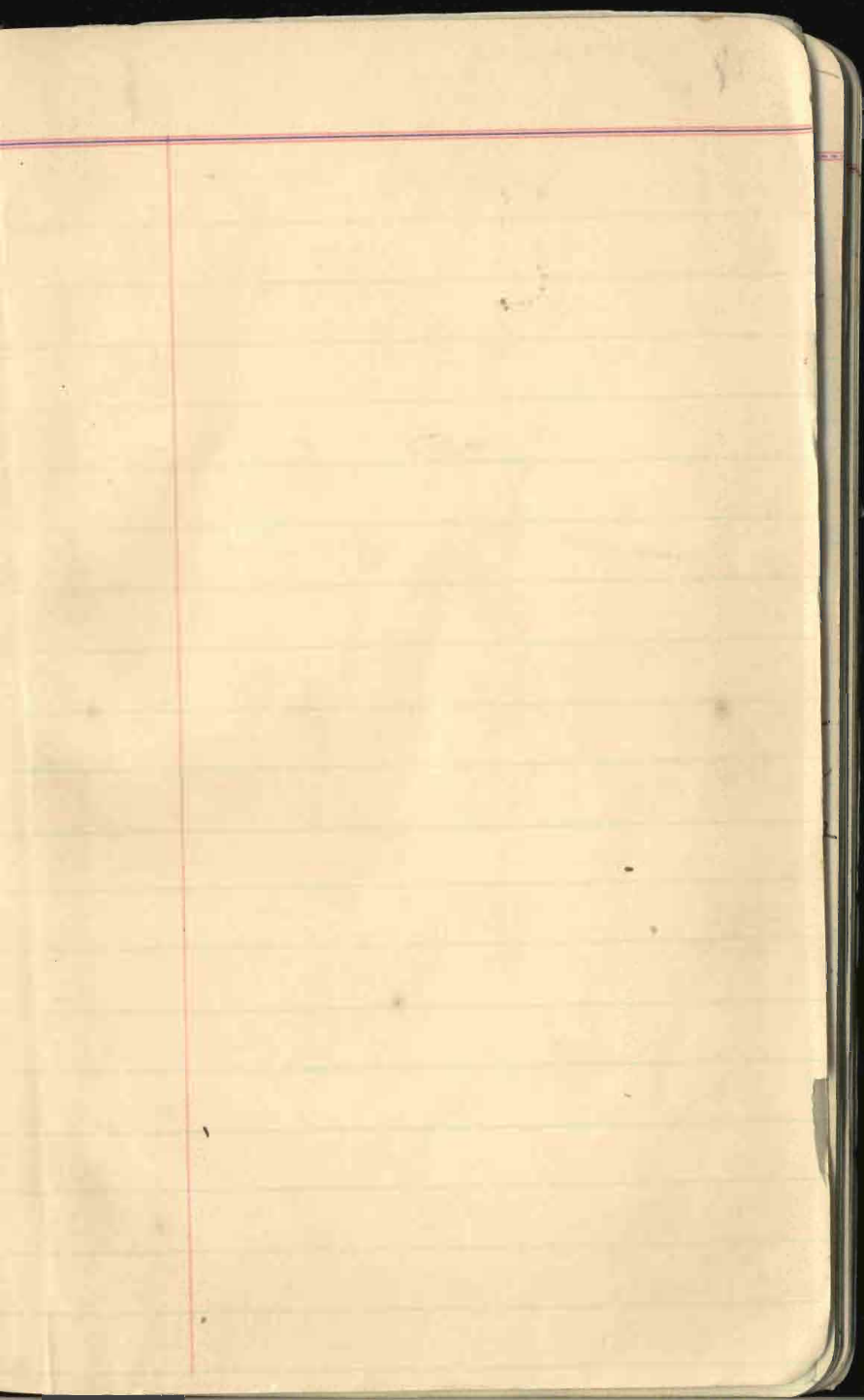
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BOOK 461

P 2 3 R
 R 7 E

R. Line
 belt Ps 6 & 7

| | | | | | | | | |
|----|----|----|----|----|----|----|----|----|
| | | | | 16 | 15 | | | |
| | | | | 40 | | | | |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
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Survey Commenced July
10, 1903 and executed with
a W. & L. E. Tinsley Transit
No 15. ^{with Solar attachment.} The horizontal limb
is provided with two
opposite Verniers reading to
1 min. of arc; which, also,
is the least count of the
lat. and decl. arcs.

I examine the adjust-
ments of the transit, and
correct the level and
collimation errors; then, to
test the Solar apparatus, by
comparing its indications
resulting from observations
taken during am and pm
hours, with a true merid-
ian determined by
observations on Polaris, I
proceed as follows;

at the corner of Secs
25, 30, 31, and 36, T 23
N R 7 E, Lat. $35^{\circ} 21' N$
Long. $111^{\circ} 34' W$. I set
off $35^{\circ} 21' N$ on lat. arc
and $22^{\circ} 19' N$ on decl.

arc; and at 4 pm Lmt
determine with the Solar a
true meridian, and mark a
point thereof on a stone
firmly set in the ground
5.00 chs N. of the Cor

July 10, 1903

July 11: at 12 h ⁰⁶/₂ m
am Lmt by my watch, which
is set Lmt. I observe Polaris
at Eastern Elongation, in
accordance with manual of
instructions and mark a
point in the line thus
determined, on a plug driven
in the ground 5.00 chs N.
of my station

at 6 h 4 m am Lmt. I
lay off the azimuth of Polaris
 $1^{\circ} 29'$ West and mark the
True Meridian thus determined
by cutting a small groove cut
in the stone set July 10, on
which the true meridian falls
0.3 ins. east of the mark

Subdivision of

determined by the Solar,
at 7 h 3 m am hnt.

I set off $35^{\circ} 21' N$
on the lat. arc, and

$22^{\circ} 15' N$ on decl arc,
and mark a point in the

true meridian determined
with the Solar, by a Cross

on the stone already set
5.00 chs N of my station

this mark falls 0.25 ins
east of the true meridian

established by Polaris
observation.

The Solar apparatus, by
pm and am observations,

defines positions for true
meridians respectively about

$16''$ West and $13''$ East of
the meridian established by

Polaris observation. I therefore
conclude that the adjustments of

the instrument are satisfactory
The magnetic bearing of
the True Meridian at

7 h 20 m am, is $N 14^{\circ} 34'$
W, which angle reduced by
the Table p. 100, gives the

mean Mag. decl $14^{\circ} 30' E$

BOOK 401

4A

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out
public.
weaver.

d
e
m
2

[1871]

4

Preliminary Oaths of Assistants.

We, *Wm. Lockridge*

and *Wm. L. Bradley*

do solemnly swear that we will well and faithfully execute the duties of Chain Carriers; 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 distance to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the

~~South and West Sdy.~~

T 21 N R 7 E T 22 N R 8 E T 22 N

R. 7 E T 23 N R 7 E and T 23 N

R. 8 E T 21 N R 8 E

of the Gila and Salt River Base and Meridian in the Territory of Arizona.

William Lockridge Chainman.

Wm L. Bradley Chainman.

Chainman.

Chainman.

Subscribed and sworn before me, this *7*

day of *May* 189 *1903*

James A. Lamport

Notary Public.

U. S. Deputy Surveyor.

[SEAL.]

We, Fred C. Roberts and

A. Mc Dermid

do solemnly swear that we will well and truly perform the duties of axman and

flagman

in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the

T. 21 N. R. 7 E. T. 22 N. R. 8 E. T. 22 N.

R. 7 E. T. 23 N. R. 7 E. and

T. 23 N. R. 8 E. T. 21 N. R. 8 E.

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

Fred C. Roberts

A. Mc Dermid

Subscribed and sworn to before me this 9

day of May 1891903

James A. Lamport
Notary Public.

U.S. Deputy Surveyor

R 7 E

July 11th 1903. at 7 h. 3 m
 am L.M.S.T. I set off $35^{\circ} 21' N$
 on the Latitude arc, and
 $22^{\circ} 15' N$ ~~44"~~ on the Declination
 arc; and determine a true
 meridian with the Solar
 at the cor of secs

25, 30, 31 and 36;

which is a ^{T 23 N. R. 6. and 7 E} sand stone
 $20 \times 18 \times 8$ ins. on stony
 ground in mound of stone,
 marked with 1 notch
 on S. and 5 notches on
 N. edges. as I find
 that fire has destroyed
 the bearing trees to this
 corner, I mark new
 bearing trees, as
 follows:

Chains

A spruce 24 ins diam.
 bears N. 24° E 18 lks dist.
 marked T 23 N R 7 E. S. 30 B.T.

An aspen 4 ins diam.
 bears S $37^{\circ} 30'$ E 45 lks dist.
 marked T 23 N R 7 E. S. 31 B.T.

A spruce 10 ins diam
 bears S 12° W 47 lks dist.
 marked T 23 N R 6 E S 36 B.T.

An aspen 4 ins diam
 bears N 85° W 38 lks dist.
 marked T 23 N R 6 E S 25 B.T.

Having found the S. Bdy of
 T. 23 N R 7 E defective in
 alignment and measurement
 and unfit for a base
 from which to complete
 the subdivision of
 fractional T 23 N R 7 E

Chains Therefore I run E. bet.

Sec 30 and 31 on a
random line. $\text{Ica. } 14^{\circ}30' E$

40.00 Set $\text{Temp } \frac{1}{4}$ Sec Cor.

80.00 Set Temp Sec. cor to Secs
29, 30, 31 and 32.

I then commence at the
Cor. of Secs 5, 6, 31 and
32, S Body T 23 $\text{N R } 7 E$
and run $10^{\circ}3' W$ on a random
line Bet. Sec's 31 and 32

40.00 Set $\text{Temp } \frac{1}{4}$ Sec. Cor.

79.90 Intersect E. and W. line
at Temp Cor.

Set lava stone $24 \times 10 \times 5$ ins
on stony ground in
mound of stone for Cor.
Secs 29, 30, 31 and 32,
marked with 1 notch on
south and 5 notches on

Chains

East edges, and raised a mound of stone 3 ft. base, $1\frac{1}{2}$ ft. high W. of Cor.; which I establish as an auxiliary base from which to complete the subdivision of fractional T. 23 N. R. 7 E. This cor. stands on West slope of Mountain, about 2000 ft above base, and 100 below top of divide.

West on true line Bet. Secs 30 and 31. $\text{Pa. } 14^{\circ} 40' \text{ E}$
 Descend steep, down West slope of San Francisco Mountains, over

No. 461

BOOK 461 8

- Chains large boulders.
- 25.00 Enter Spruce timber; bears
N, and S.
- 40.00 Set a lava stone, 25 x 20 x
20 ins on stony ground
in mound of stone for
1/4 Sec cor., marked 1/4 on
N. face. From which
a spruce 8 ins diam. bears
N. 1° W 47 lks dist.
Marked 1/4 30 BT
a spruce 18 ins diam.
bears S 6° W 75 lks dist.
Marked 1/4 31 BT
- 20.00 The cor. 25, 30, 31 and
36 already described.
- Land Mountainous
Soil Stony 4th rate
Timber Spruce and aspen
mountainous land 20.00 Chas
July 11th 1903

BOOK 461

July 12, 1903: At 7 am hmt ^{30'E}
 I set off $35^{\circ} 21'$ N on lat arc
 and $22^{\circ} 7'$ N on decl arc,
 and determine a true meridian
 with the Solar at the corner
 of Secs 29, 30, 31, 32

20.00 Enter Spruce and pine timber;
 bears E and W.

Descend into large canyon.

40.00 Set a lava stone $25 \times 15 \times$
 8 ins, 16 ins in the

ground, for $\frac{1}{4}$ sec
 cor., marked $\frac{1}{4}$ on

W. face; from which
 a fine 8 ins diam.

bears S 68° E 85 lks dist.

Marked $\frac{1}{4}$ S 32 B.T.

A spruce 12 ins diam

bears N 46° W 68 lks dist.

Mark $\frac{1}{4}$ S 31 B.T.

58.00 Wash 100 lks wide

course N. 60° W. 30 ft deep

Chains ascend steep through
Very heavy spruce
timber

79.90 Intersect the cor. of Secs
5, 6, 31, 32

Land mountainous
Soil stony; 4th rate
Timber spruce and pine
Mountainous land 79.90 chs

N. 0° 3' W Bet Secs 29 and 30 $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$

along W. slope of mountain
over large boulders

toward flag placed at cor. of Secs 19, 20, 29, and 30

15.00 Wash 50 lbs wide, 20 ft
deep course W.

Ascend

21.00 Top of spur; descend

35.00 Wash 25 lbs wide, 10 ft
deep course W. ascend

~~Chains~~

- 40.00 Set Lava Stone $18 \times 12 \times 4$ ins
 12 ins in ground for
 $\frac{1}{4}$ sec cor. marked $\frac{1}{4}$
 on W. face; from which
 a fine 15 ins diam bears
 $S. 60^\circ E.$ 18 lks dist
 marked $\frac{1}{4}$ sec 29 BT
 a fine 15 ins diam bears
 $N 84^\circ W$ 71 lks dist
 marked $\frac{1}{4}$ sec 30 BT.
- 48.00 Top of spur, bears $N.$
 $80^\circ W.$; descend.
- 65.00 Wash 75 lks wide
 course $N. 80^\circ W.$ 20 ft deep
- 79.00 Top of spur 1000 ft
 above $\frac{1}{4}$ cor.; bears
 $E.$ and $W.$
- 80.00 Intersect the cor of Secs
 19, 20, 29 and 30;

Chains

Which is a granite stone
 25 x 12 x 8 ins in mound of
 stone, properly marked.
 and witnessed, as
 described by the Surveyor
 General.

Land mountainous

Soil stony, 4th rate

Timber spruce and pine

Mountainous land 80.00 chs

From cor to Secs 29, 30-31 N 32 E. along
 E. on true line bet. Secs

29 and 32, ascend
 over large boulders.

7.00 top of divide bet.

Mt Agassiz and Mt.

Humphrey 200 ft above

Sec. Cor. ^{beats N and S} descend

steep down E. slope

- Chains of San Francisco Mountains
- 38.00 Enter pine timber; bears
N. and S.
- 40.00 A Spruce tree 7 ins diam
for $\frac{1}{4}$ sec cor. I mark
 $\frac{1}{4}$ 529 on N side 32. ^{on south side} from which
a spruce 8 ins diam
bears N. 50° E. 22 lks dist
marked $\frac{1}{4}$ sec. 29 B.T.
- a pine 33 ins diam
bears S. 20° W. 10 lks dist
marked $\frac{1}{4}$ sec 32 BT
- 68.00 Small spring 500 lks S.
of line course east.
- 80.00 Mark a lava stone in
place 4×3 ft $1\frac{1}{2}$ ft
above ground. with
1 notch on the S. and
4 notches on the E. edge
with a cross (+) at

chains

exact cor., from which
a spruce 6 ins. diam.

bears $S. 57^{\circ} E. 31$ lks dist.

marked T 23 N R 7 E. S 28 BT

a spruce 9 ins diam.

bears $S. 50^{\circ} E. 12$ lks dist

marked T 23 N R 7 E S 33 BT

a spruce 6 ins. diam.

bears $S. 47^{\circ} W. 24$ lks dist.

marked T 23 N R 7 E. S. 32 BT

a spruce 18 ins. diam

bears $N. 2^{\circ} 25' W. 15$ lks dist.

marked T 23 N R 7 E S 29 BT

This cor. stands about
2000 ft below top of
mountain.

Land mountainous

Soil Stony. 4th rate

Timber pine and spruce

Mountainous land 80.00 che

BOOK 461

July 13th At 7^h ^{am} in M.C. I set off
 $35^{\circ}21'$ ^{N.} on the lat. arc, $21^{\circ}59'$ on the elev.
 arc. and determine a true Meridian with
 the solar at the cor. of secs. 28, 29, 32 and 33.

70.00 Set Trip 1/4 Sec. cor

74.30 The Cor of Secs. 4, 5, 32
 and 33 on S. bdy of
 T.

Thence I run

N. $0^{\circ}3'$ W. on true line
 bet. Secs. 32 and ^{and $4^{\circ}30'E$} 33
 descend through dead
 Spruce timber

13.00 Enter green timber bears East

14.00 Wash 50 lks wide 15 ft
 deep Course N. 70° E.; ascend

29.00 Top of ridge 300 ft above
 bottom of Wash; bears
 E. and W. descend

34.30 Set lava stone $20 \times 15 \times$

chains

12 ins. 14 ins in ground
for $\frac{1}{4}$ sec cor., marked
 $\frac{1}{4}$ on W. face; from
which

A spruce 15 ins diam.,
bears N. 70° E 15 lks dist.
marked $\frac{1}{4}$ Sec 33 B.T.

A spruce 12 ins diam
bears S 40° W 30 lks dist.,
marked $\frac{1}{4}$ S. 32 B.T.

35.10 Wash, 25 lks wide, ^{10 ft deep} Course
N. 85° E.; begin ascent.

36.60 Flagstaff pipe line; bears
N. 85° E.

55.00 Top of spur of mountain
300 ft. above bottom of
Wash.

Begin steep descent.

71.60 Wash 20 lks wide, Course
N. 85° E. 10 ft deep.

Chains

72.10 Flagstaff pipe line
from "Little Bear-paw"
Spring; Bears R.
85° E and S 85° W.

74.30 The cor. of Secs. 28, 29,
32 and 33.

Land mountainous
Soil stony; 4th rate
Timber Spruce and pine.
Mountainous land ^{74.30} ~~75.10~~ chains.

July 13th 1903

July 14, 1903: at 7^h 1 m Am
Lmt. I set off, 35° 21' N on
lat arc, and 21° 50' N on
decl arc, and determine a true
meridian with the solar at the
corner of Secs 28, 29, 32, 33.

Spruce timber along
E. slope of mountain.

5.00 Begin steep ascent over
high granite dykes

hains
10.00 Top of ascent, about 300ft
above cor.

Begin steep descent

40.00 Falls on lava stone in place.
5 x 2 ft, 2 ft above
ground for $\frac{1}{4}$ sec cor.,
I mark

$\frac{1}{4}$ on $\frac{2}{4}$ face, with a
cross (+) at exact
cor. point; from which
a fine 18 in. diam.

bears $N. 86^{\circ} E 27$ lke dist.
marked $\frac{1}{4} S 28 BT$

A fine 28 in. diam

bears $S. 79^{\circ} W. 35$ lke dist
marked $\frac{1}{4} S. 29 BT$

41.00 Foot of descent, bears
 $E.$ and $W.$, thence begin
steep ascent along
 $S.$ spur of mountain.

Chambers

63.00 Top of mountain, 1000 ft
above $\frac{1}{4}$ Sec Cor., bears
E. and W.

Begin steep descent.

80.00 Set lava Stone $28 \times 10 \times$
5 ins. 18 ins in ground.
for cor. Secs. 20, 21,
28, and 29, marked
with 2 notches on
S. and 4 notches on
E. edges; from which
a pit 14 ins. diam.

bears N. $57^{\circ} 50'$ E. 74 lks dist.

Marked T 23 NR 7E S 21 BT

a spruce 13 ins. diam.

bears S. $52^{\circ} 10'$ E 91 lks dist

Marked T 23 NR 7E S. 28 BT

a spruce 40 ins diam

bears S. $61^{\circ} 45'$ W. 82 lks dist

Marked T 23 NR 7E S. 29 BT

Chains

a spruce 8 ins diam.
 bears N. 14° W 58 lks dist.
 marked T 23 NR 7 E S. 20 BT

Land mountainous

P. a. l. Mt. with mat

BOOK 461

July 14th At this corner set off
 21st 47' N. on the dist. line. and at 0 h 5 m

P. a. l. Mt. observe the sun on the
 meridian the resulting lat is. $35^{\circ} 22' N$.

Secs. 20 and 29. $14^{\circ} 40'$

40.00 Set temp. $1/4$ Sec. cor

80.30 Intersect N. and S. line

25 lks S. of cor. of Secs.

19, 20, 29, and 30

Thence I run

S. $89^{\circ} 49' E$ on true line

bet. Secs. 20 and 29

Slight ascent along top
 of spur of mountain,

- Chains bears E. and W.
- 5.00 Begin steep ascent along
N.W. slope of Mt.
Humphreys over loose,
sliding rock.
- 20.00 Top 800 ft above sec. cor.
and 500 ft below top of
Humphreys Peak, bears
S. 5° W. about 25.00
ch distance.
- Descend N.E. slope of
Humphreys Peak.
- 35.00 Enter spruce timber, bears
N. and S.
- 40.15 Set a Malpai Stone
20 x 15 x 10 ins. 14 ins.
in the ground for $1/4$
Sec Cor., marked $1/4$
on N. face from which

- Chains
- A spruce 10 ins diam.
Bears N. 30° W 30 lks. dist.
Marked 1/4 S 20 BT
- A spruce 8 ins. diam.
Bears S. 25° E. 40 lks dist.
Marked 1/4 S 29 BT
- 45.00 Leave timber; bears
N. 45° E and S 45° W
- 55.80 Foot of descent into canyon
course N. 20° E; begin
steep ascent.
- 57.30 Enter spruce and aspen
timber; bears N. and S.
- 75.20 A fine tree 20 ins diam.
on line, I mark
with 2 notches on
E. and W.
- 79.00 Top of steep ascent, bears
N. and S.

chains

80.30

The cor. of Secs. 20, 21,
28, and 29.Land mountainous
Soil stony; 4th rate
Timber; spruce, pine,
and aspen.

Mountainous Land 80.30 chs

July 14, 1903

N. 0° 3' W. on random line
bet. Secs 20 and 21 ^{1/4 mile}

40.00 Set Temp. 1/4 sec. cor.

79.80 Intersect E and W. line

30 lks W. of cor. which
is a malpai stone ^{in place} 3 x 2 ft
1 1/2 ft above ground,
properly marked and
witnessed, as described
by the Surveyor General.

Chains

Thence I run

S. $0^{\circ} 10'$ W. on true line
bet. Secs. 20 and 21Ascend through heavy
Spruce timber

39.90

Falls on granite stone
4 x 3 ft $1\frac{1}{2}$ ft above
groundI cut a cross (x) at
the exact cor. point
for the $\frac{1}{4}$ sec cor.
mark $\frac{1}{4}$ on W. side
from which

An aspen 6 ins diam.

Bears N. 25° E. 25 lks dist
marked $\frac{1}{4}$ S 21 BT

An aspen 8 ins diam.

Bears S. 35° W 40 lks dist.
marked $\frac{1}{4}$ S 20 BT

Chains

This cor. stands on v.
slope 1000 ft above
cor of Secs. 16, 17, 20
and 21.

75.00 Top of steep ascent
thence slight ascent

79.80 The cor. of Secs. 20, 21,
28 and 29.

Land mountainous.

Soil stony; 4th rate.

Timber; pine, aspen and

BOOK 461

July 15th at 9 h. ^{am} 0^h 1^m that I set off
35° 21' ^N on the lat. arc; 2° 40' N on
the decl. arc. and determined a true merid-
ian with the solar at the cor. 282932853

Secs. 28 and 33 ^{at} 14° 30' E
descend through heavy
spruce timber.

- 7.00 Leave Green timber line N 75° E
 11.00 Flagstaff Pipe line ^{S 60° W} cont. bears N 60° E and
 30.00 Begin ascent of spur. bears N. 60° E.
 34.00 Flagstaff pipeline; bears ^{and S 60° W} N. E. and S. W.
 40.00 Set Lava Stone, 20 x 12 x 10 in
 in stony ground in mound
 of stone for $\frac{1}{4}$ sec. cor
 marked $\frac{1}{4}$ on N. face;
 and raise a mound
 of stone 2 $\frac{1}{2}$ ft. base,
 1 $\frac{1}{2}$ ft high N. of cor.
 Pits impracticable
 41.30 Top of spur 150 ft above
 bottom; bears N. 65° E
 Begin descent
 61.00 Road; bears N. E. and S. W.
 74.00 Wash 40 lks wide, course
 N. 45° E 15 ft deep

Chains

77.50 Begin slight ascent

80.00 Set Lava Stone $30 \times 20 \times$

12 ins. 20 ins in ground

Marked with 14 pins on S. and 3 on E. for

for cor. of Secs 27, 28,

33 and 34; and raise

a mound of stone $2\frac{1}{2}$ ftbase, $1\frac{1}{2}$ ft high, W.

of cor. Pits impracticable

From which an aspen

5 ins diam

bears N. 77° E. 93 lks dist

marked T 23 NR 7E S 27 BT

An aspen 8 ins diam,

bears S. 39° E 49 lks dist,

marked T 23 NR 7E S 34 BT

An aspen 8 ins diam

bears S $2^\circ 30'$ W. 41 lks. dist

marked T 23 NR 7E S 33 BT

No other trees within limit.

Chains

Land mountainous
Soil stony; 4th rate.
Timber spruce and aspen

BOOK 461

July 16th at 7^h 30^m ^{am} L.M.T. Set
of 35° 21' ^{N.} on the lat arc. 21° 31' N on
the decl. arc. and determined true
meridian with the solar at the corner

40.00 of nos 2728. 33 and 34.

74.20 Interest S. bay of 9.9 chs
W. of cot. Stalls on a
granite boulder ^{in place} 6 x 3 x 1 1/2 ft
above ground, on which
I cut a (x) cross at
the exact cot. point for
closing cor. marked with 3 notches
on E. and W. faces. C.C. on N^{face}
A pine 14 ins diam
bears N 15° E 28 lks dist
Marked T 23 N R T E S 34 C C B T

Chains

a pine 12 in diam.

Bears N 56° 30' W. 46 lks dist

marked T 23 N R 7 E S 33 CC BT

I destroy all marks of the
old Cor. referring to
Secs. on the N.

Thence I run

N. 0° 2' W on true line bet. Secs.

33 and 34 Pa. 14° 35' E

Begin ascent of S. slope of
mountain through heavy pine
and spruce timber

8.00 Top 400 ft above cor. bears
E and W.

Begin descent of N. slope of
spur.

34.20 ^{The Point for $\frac{1}{4}$ cor.} Falls on a lava stone ^{in place} 4 x 3 ft 2
ft above ground

I cut a cross^(x) at the exact

chains

cor. point for $\frac{1}{4}$ sec. cor.,
marked $\frac{1}{4}$ on W. face, and
raise a mound of stone $2\frac{1}{2}$ ft
base, $1\frac{1}{2}$ ft high W. of cor.
from which

a pine 10 ins diam

bears $N 52^{\circ} E$ 140 lks dist
No other trees in area suitable for marking trees
 T 23 N. R. 7 E S 34 B.T.
 Pits impracticable.

41.00 Leave green timber; enter
dead timber. Bears N.W.
and S E

74.20 The Cor. of Secs 27, 28, 33 and 34
2000 ft below top of mountain
Land mountainous

Soil stony; 4th rate

Timber; pine, spruce, and aspen
Mountainous land 74.20 chs.

- Chains N $0^{\circ} 2' W$ on true line bet
 Secs. 27 and 28, Pa. $14^{\circ} 30' E$
 Begin descent through
 scattering spruce timber and
 fallen timber, and through
 aspen undergrowth.
- 5.28 Spring brook of clear water,
 Course N. $70^{\circ} E$. 7 lks wide
 Begin ascent
- 7.50 Top of ascent; begin descent.
- 18.00 Wash, 80 lks wide, Course
 N. $70^{\circ} E$. 25 ft deep
- 18.40 Begin ascent
- 22.75 Wagon road to Flagstaff
 spring; bears N $80^{\circ} E$ and S $80^{\circ} W$
- 23.00 "Jack Smith" Spring; bears
 E about 10 chs. dist. Course
 EAST
- 26.00 Wash 20 lks wide; Course
 S. $80^{\circ} E$ 10 ft deep

- Chains
38.00 Wash, ~~bears~~ 40 lks wide,
bearing S. 50° E, 10 ft deep
- 40.00 Set a level stone $24 \times 12 \times 10$
inches, 16 inches in the
ground for $\frac{1}{4}$ Sec. Cor.
marked $\frac{1}{4}$ on W. face, and
raised a mound of stone,
 $2\frac{1}{2}$ ft base, $1\frac{1}{2}$ ft high W.
of cor; from which
an aspen 5 ins. diam.
bears N 75° E ^{59°} ~~37~~ lks dist.
marked $\frac{1}{4}$ & 27 BT
- an aspen 5 ins diam.
bears ~~S. 30° W~~ ^{N $21^{\circ} 30'$} ~~37~~ lks
marked $\frac{1}{4}$ & 28 BT
- 42.00 Begin steep ascent along
S. slope of spur of main
mountain; bears E on W
- 70.00 Leave dead timber; enter

Chains live spruce and pine timber,
bears E. and W.

Over heavy boulders and
rock slides.

\$0.00 Falls on a lava boulder
3 x 1 ft 2 ft above ground
1500 ft above 14 cor.

I cut a cross (+) at the
exact cor. point for cor. of
secs. 21, 22, 27 and 28.

and mark 2 grooves on
S. and 3 grooves on E
edges, from which

A pine 16 in diam.

bears N 70° E 40 lke dist

marked T 23 NR 7 E S 22 BT

A pine 10 in diam

bears S. ^{57°30'} 45° E 25 lke dist

marked T 23 NR 7 E S 27 BT

claims

A pine 18 ins diam.

bears S 64° W 36 lks dist.

marked T 23 N R 7 E S 28 BT

A pine 10 ins diam

bears N 10° W 24 lks dist.

marked T 23 N R 7 E S 21 BT

Land mountainous

Soil stony; 4th rateTimber; spruce, pine, and
aspen

Mountainous land 80.00 lks.

July 16, 1903

July 17, 1903: At 7h 0m a.m.

l.m.t. I set off 35° 22' ^N onthe lat. arc, and 21° 22' ^N ~~on~~

on the decl. arc; and

determine a true meridian

with the Solar at the

| | |
|--------|---|
| Chains | Cor of Secs. 21, 22, 27 and 28 |
| | West on a random line bet secs. 21 and 28 |
| 40.00 | Set Temp. $\frac{1}{4}$ Sec Cor |
| 80.10 | Intersect N and S line 28 lks S. of cor. of Secs 20, 21, 28 and 29. |
| | Thence I run S $89^{\circ} 48' E$ on true line bet. secs 21 and 28. On $14^{\circ} 35' E$ Through heavy spruce timber over nearly level bench on top of mountain |
| 12.00 | Begin slight ascent |
| 28.00 | Leave spruce timber, and enter mountain pine, bass N.W. and S E |
| 36.00 | Top of spur of Mt. Humphrey. |

Lains

bears N 70° E and S 70° W

Begin descent along S. slope of
spur

40.00 Set granite stone 20 x 18 x 18 ins
for $\frac{1}{4}$ sec cor
14 ins in ground; marked
 $\frac{1}{4}$ on N. face, from
which

A fine 14 ins diam

bears N 43° E 15 lks dist.

marked $\frac{1}{4}$ S 21 BT

A fine 14 ins. diam.

bears S 40° E 18 lks dist

marked $\frac{1}{4}$ S 28 BT

41.00 over large boulders and slide
rock.

80.10 The cor. of Secs. 21, 22, 27 and 28.

Land mountainous

Soil stony; 4th rate

Timber, spruce and pine.

Mountainous land 80.10 cts

Chains N. 0° 2' W on a random line
bet. Secs. 21 and 22

40.00 Set Temp. 1/4 Sec. Cor.

80.10 Intersect E and W line 150 lks

E. of Cor of Secs 15, 16, 21 and
22; which is a sandstone
18 x 15 ins, 12 ins above ground
properly marked and witnessed
as described by the Surveyor
General.

I set a granite stone 20 x 20
x 4 ins, 14 ins in ground for
Cor. of Secs 21 and 22
marked 3 notches on S.
and 3 notches on E.
faces; ^{cl on S. face} and raise a
mound of stone 3 ft base,
1 1/2 ft high S. of cor.
from which,

Chaires

A Balsam 12 ins diam.

base S 20° E 62 lks dist

marked T23NR7ES22 B.T.C.C.

A Balsam 18 ins diam.

base S. 85° W 70 lks dist.

marked T23NR7ES21 B.T.C.C.

I destroy all marks of the old
Cor. referring to secs. on
S.

Thence I run

S. 0° 2' E on true line bet.

Secs. 21 and 22 $\text{Pa. } 14^{\circ} 40' \text{ E}$

ascending N. slope of mountain

through scattering spruce

timber and dense aspen

undergrowth

40.05 Set lava stone $20 \times 20 \times 5$ ins

on stony ground in

mound of stone, marked

Chains

1/4 on W. face for 1/4 sec
cor. from which

a spruce 6 ins diam.

bears N 35° E 5 lks dist.

marked 1/4 S 22 BT

a spruce 6 ins diam

bears S 32° W 4 lks dist

marked 1/4 S 21 BT

41.00 Leave live timber; enter
fallen spruce timber; bears
E and W.

60.00 Leave dead timber, and
enter heavy spruce timber,
bears N.E. and S.W.

77.50 Top of spur of mountain
2000 ft above base.

80.10 The cor of S sec 21, 22, 27 and 28

Low Mountainous Soil strong
with spruce timber, spruce and pine
mountainous land. 80.10 Ch.
July 17th 1978

- Chains west on a random line
bet. recs. 16 and 21.
- 1.50 Old cor. recs 15 and 16
- 40.00 Set temp $\frac{1}{4}$ sec. cor
- 80.00 Intersect N and S line 20 lks
N. of cor. recs. 16, 17, 20 and 21.
Thence I run
N $89^{\circ}51'$ \odot on true line
bet. recs 16 and 21. $\text{Pl. } 14^{\circ}45' \text{ E}$
Descend through scattering
spruce timber and dense
undergrowth
- 20.00 Foot of descent 300 ft. below
cor sec 16, 17, 20 and 21. in
canion. come north. Ascend
- 29.50 Top of ascent 700 ft above
bottom of canion. bears N and S
- 40.00 Spruce tree 6 ins in diam. I
ascend.
Mark the same $\frac{1}{4}$ S. on N face
S 21 on South face. for $\frac{1}{4}$ sec.

- Chainer
 For sec. 21 only
 cor. From which an
 aspen 10 ins in dia bears
 N 2° W 27 lks dist marked
 $\frac{1}{4}$ S 16 B.T.
- A spruce 10 ins in diam
 bears S 45° E 35 lks dist
 marked $\frac{1}{4}$ S 21 B.T.
- 48.50 bottom of canon course
 north ascend
- 78.50 corner to secs. 15 and 16
- 80.00 cor. of secs 21 and 22.
 Sand Mountain
 Soil stoney 4th rate
 Timber spruce and aspen
 Mountain land 80.00 @ 80
 July 17, 1903

Chains The cor of Secs 21, 22, 27
and 28

Land mountainous.

Soil stony; 4 $\frac{1}{2}$ rate

Timber spruce and pine.

Mountainous land 80.10 ch

July 18th At 7^h 0^m A.M. L.M.T. I set off
35° 22' ^{N.} on the lat arc. 21° 12' N. on the
decl arc, and determined a true
meridian with the eclip at the cor. of secs

21, 22, 27 and 28

BOOK 461

40.00 Set Temp. 1/4 sec cor

~~81.25~~
81.80

Intersect N and S line 107 ft
S. of cor of Secs 22, 23, 26
and 27, which is a
granite stone 10 x 8 ins 8 ins
above ground, properly
marked and witnessed as
described by the Surveyor

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Chains

General.

I set a lava stone $18 \times 12 \times 8$ ins 12 ins in the ground
 for a ^{closing} cor. of secs 22 and 27
 marked C.C. on W.

with 2 notches on S. and
 2 notches on E faces
 from which

A spruce 12 ins diam
 bears $S. 59^\circ W$ 127 lks dist
 marked T23 NR7E S 27 CCBT

A pine 24 ins diam
 bears $N 58^\circ W$ 70 lks dist
 marked T23 NR7E S 22 CCBT

I destroy all marks of old
 cor. referring to secs. on
 the W.

Thence I run
 West on true line bet.

chains

Secs 22 and 27, $\text{Loc. } 14^{\circ}40'E$
 ascending E slope of mountain
 through dense pine and
 spruce timber

4.00 Begin steep ascent

~~41.25~~
~~41.80~~ 1000 ft above ^{closing} cor. of secs
 22 and 27. Set a lava

stone $20 \times 12 \times 6$ ins 14 ins

in ground for $1/4$ cor,
 marked $1/4$ on N. face, from
 which

a pine 10 ins diam.

bears $N 32^{\circ} E$ ~~12~~ ^{10} lks dist

marked $1/4 S 22 BT$

a spruce 10 ins diam.

bears S ~~63°~~ ^{$57^{\circ}30'$} W ~~10~~ ^{9} lks

marked $1/4 S 27 B.T.$

55.00 along S.E. slope of mountain
 over slide rock and large

Chains boulders.

79.00 Top of steep ascent, 1500 ft
above $\frac{1}{4}$ sec cor; slight
ascent

~~81.25~~
~~81.80~~ The cor. Secs 21, 22, 27 and
28

Land mountainous

Soil stony; 4th rate

Timber spruce and pine.

Mountainous land ~~81.80~~^{81.25} chs

From the cor of secs 27, 28,
33 and 34, I run

E. on true line bet secs 27
and 34. $\text{Pa. } 140^{\circ} 35' \text{ E}$

Through fallen timber

28.70 Wash_n ^{50 lbs wide} Course N 30° E , 15 ft deep

34.70 Wash_n ^{30 lbs wide} Course N 20° E , 10 ft deep

Chains

40.00

Falls on a lava boulder
 3 x 2 ft 1 ft above ground
 500 ft higher than Cor of sec.
 27, 28, 33, and 34.

I cut a cross (x) at the
 exact cor point for $\frac{1}{4}$ sec
 cor, marked $\frac{1}{4}$ on N. face
 and raised a mound of
 stone 2'2 ft base, 1'2 ft
 high on N. of cor. Pits in prospect

Before setting this corner
 I made diligent search
 and failed to find any
 evidence of old $\frac{1}{4}$ cor. as
 described in field notes.

41.00 Begin very steep ascent.

60.00 The top of ridge, about
 300 ft above $\frac{1}{4}$ cor., bears
^{and S10°W.}
 N. 10° E., leave dead timber

62.00 Enter spruce timber bears N and S

47

Chains Begin descent

~~88.90~~
89.32

Intersect N. and S. line
324 links S. of ^{cor of} Secs 26
27, 34 and 35, which is
a granite stone 40 x 15 x
12 ins. in ground of stone,
properly marked and
witnessed as described
by the Surveyor General.

Set a granite stone 12 x 8 x
6 ins 9 ins in ground
for closing cor of Secs
27 and 34, marked
C.C. on W. face with
1 notch on S. and 2
notches on E faces,
from which
a spruce 16 ins diam.
bears S. ^{66°}63° W ⁷²86 lks. dist.
marked T23 NR 7 E S 34 BT

chains

A spruce 6 ins diam.

bears $N 79^{\circ} W$ ¹²⁴/₁₁₅ lks dist

marked T 23 N R 7 E S 27 BT

I destroy all marks of old
cor. referring to secs on
the W.

Land mountainous

Soil stony; 4th rate

Timber spruce and pine

Mountainous land 88.90. cks

July 18, 1903

July 19, 1903; At 8 am lmk

I set off $35^{\circ} 21' N$ onlet arc, and $21^{\circ} 1' N$ on

dec'd arc, and determine

with the Solar a true

meridian at the Cor. of

secs 26 and 35, T 23 N.

R. 7 E

2

Chains

July 19, 1903

From the old cor. of Secs.
26 and 35 previously
described I run

S $0^{\circ} 1'$ E on a random line
bet sec 34 and 35

40.00 Set temp. $1/4$ sec Cor.

77.25 Intersect S. bdy of T. 400 Acs
E. of cor. of Secs 2, 3, 34
and 35, which is a
granite stone 12×10 ins
8 ins above ground,
properly marked and
witnessed as described by
The surveyor General
Set a granite stone $16 \times$
 12×6 ins 10 ins in the
ground for closing cor. to
Secs. 34 and 35, marked

chains

C.C. on N. face, with
2 notches on the E. and 4
notches on the W. faces,
and raised a mound of
stone $2\frac{1}{2}$ ft base, $1\frac{1}{2}$ ft
high on N. of cor.

Pits impracticable

A spruce 4 ins diam.

bears $N 57^{\circ} W$ 10 lks dist

marked T 23 NR 7 E 3 34 BT

No other tree within limits.

I destroy all marks of
old cor. referring to Secs
on the N.

Thence I run

N. $0^{\circ} 01' W$
on a true line bet Secs
34 and 35 $74^{\circ} 30' E$

Descending through fallen
timber and aspen brush

Chains

- 2.25 Wash 25 lks wide, course
S. 45° E. 10 ft deep
Begin steep ascent of spur
of mountain through heavy
spruce and fine timber
- 34.25 Top of spur, 1000 ft
higher than closing cor
of sec 34 and 35
Begin descent over slide rock
- 37.25 Set lava stone 36 x 15 x 3
ins in mound of stone for
1/4 cor., ^{to sec. 35 only} marked 1/4 on W
face. from which
a spruce 16 ins diam
bears S. 85° E 167 lks dist.
marked 1/4 S 35 BT
a spruce 12 ins diam.
bears N 50° W 15 lks dist
marked 1/4 S 34 BT

- Chamis This cor is about 100 ft below
top of spur already mentioned
- 38.00 Leave timber ^{beas ^{E and W}}; continue descent
over slide rock, beas N and S
- 50.00 Enter spruce and pine timber
^{beas N and S}
- 56.25 Wash 50 lks wide 20 ft deep.
^{course}
N 35° E; begin steep
ascent
- 60.00 Begin descent from top of spur
- 63.75 Wash 50 lks wide 30 ft deep
^{course}
N 35° E, begin ascent
- 65.00 Top of spur, descend
- 74.01 Intersect the closing cor. of
secs. 27 and 34
- 77.25 The Cor of secs 26 and 35.
Land mountainous
Soil stony; 4th rate
Timber, spruce and pine
Mountainous land 77.25 chs.

- Chains E bet Secs 26 and 35, $\text{D.A. } 14^{\circ}30' \text{E}$
 40.00 Intersect the $\frac{1}{4}$ cor, which is
 a lava stone 12×10 ins 10
 ins above ground, properly
 marked and witnessed as
 described by the Surveyor ^{General}
- 56.00 Flagstaff pipeline bears $\text{S } 35^{\circ} \text{E. } 135^{\circ} \text{W}$ ^{run}
- 70.50 Intersect the cor. of Secs
 25, 26, 35 and 36, which
 is a lava stone 20×12 ins
 12 ins above ground, properly
 marked and witnessed as
 described by the surveyor
 General.

Land mountainous

Soil stony; 4^{th} rate

Timber, spruce, pine and aspen.

Mountainous land 70.50 chs

55

Chains S 0° 1' E on a random
line bet secs 35 and
36. Could not find trace of old $\frac{1}{4}$ cor.
40.00 Set temp. $\frac{1}{4}$ cor
77.00 Intersect the S. bay of T.
265 lks W. of cor to Sec
1, 2, 35 and 36, which is
a granite stone 12×10 ins
6 ins above ground,
properly marked and
witnessed, as described by
the Surveyor General.
Set a lava stone $24 \times 14 \times 4$
ins 16 ins in the ground for
closing Cor. of Secs. 35
and 36, marked C C on
N. face, with 1 notch on
the E. and 5 notches on the
W. faces. From which

chains

a pine 30 ins diam.

bears $N 29^{\circ} E$ 36 lks dist.

marked $T 23 NR 7 E S 36 CC BT$

a pine 12 ins diam

bears $N 56^{\circ} W$ 47 lks dist.

marked $T 23 NR 7 E S 35 CC BT$

I destroy all marks of old
cor. referring to secs. on
the N.

Thence I run $N 0^{\circ} 1' W$ on a
true line bet. Secs 35 and

36, $Loc 140 30' E$

over boulders and through
scattering pine timber.

4.00 Top of spur of mountain, bears
 $S 40^{\circ} E$, Begin descent into
Canyon

12.50 Bottom of Canyon, ~~course~~ $S 40^{\circ} E$
Begin steep ascent up N.
side of canyon, ~~through~~

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Chamie

- 18.00 Flagstaff Pipe line bears E and W.
- 19.00 The rim of canyon, bears S 45° E
and N 45° W
Leave Canyon, gently ascending
Through pine timber
- 37.00 The Top of spur of mountain
300 ft above bottom of canyon
bears E and W
- 37.00 Set lava stone $18 \times 12 \times 4$ ins
12 ins in ground, for $\frac{1}{4}$
cor., marked $\frac{1}{4}$ on W. face
from which
a fine 20 ins diam
bears S. 85° E 37 lks dist
marked $\frac{1}{4}$ S 36 BT
a fine 20 ins diam.
bears S. 45° W 34 lks dist
marked $\frac{1}{4}$ S 35 BT
- 39.00 Begin descent into Canyon through
spruce timber and heavy aspen
brush. bears NE and S. W.
- 40.10 Flagstaff pipe line, bears E and W.

Chains

49.00

Bottom of Canyon, course East.
Begin ascent of N. Side of Canyon

56.00

The Canyon rim, which is a
bluff 40 ft high, near E.S.W.
Through pine timber over
rolling land covered with
boulders

77.00

The cor. of 25, 26, 35 and 36.
Land mountainous
Dike story; 4th rate.
Timber, spruce and pine.
Mountainous land 77.00 cts

July 19, 1903

July 19, 1903

James A. Sampson.
U.S. Geology Surveyor

General Description

This township is very mountainous. San Francisco Peaks on San Francisco Mts. Elevation of eight different peaks 12 800 ft. above sea level. The greater portion of the North slope of these Mountains covered with fine growth of Spruce timber. The entire township covered with good grass. There are large springs of living water on section 27 and a part of the year 28 and 33 when snow is melting on the mountain. The City of Flagstaff is watered from

these springs by a gravity
pipe line 17 miles in length.
This township is so mountain-
ous that it is practically
inaccessible.

James A. Sampson,
U.S. Deputy Surveyor

LIST OF NAMES.

A list of the names of the individuals employed by.....

James A Lampfort

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 *T 21 N R 7 E, T 22 N*

R 8 E, T 22 N R 7 E, T 23 N

R 7 E, T 23 N R 8 E, T 23 N R 8 E

under his Contract # 98

of the Gila and Salt River Base and Meridian, in the Territory of Arizona, showing the respective capacities in which they acted.

William Lockridge....., Chainman.

Wm L Bradley....., Chainman.

A. Mc Dermid....., Axman.

Fred G. Roberts....., Axman.

Fred G. Roberts....., Flagman.

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BOOK 461

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted James A. Rampert
United States Deputy Surveyor, in surveying all those parts or portions

of the 7 21 N R 7 E & 22 N R 8 E
9 22 N R 7 E & 9 23 N R 7 E
and 9 23 N T 9 S E & 31 N R 8 E

of the Gila and Salt River Base and Meridian, in the Territory of Arizona, as 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 Arizona.

William Lockridge, Chainman.

Wm L Bradley, Chainman.

A. McDermid, Axman.

Red C. Roberts, Axman.

Red C. Roberts, Flagman.

Subscribed and sworn to before me this 14th Jul day
of September, 1903

W. M. F. [Signature]
Clerk Deuel County Notary Public.

[SEAL.]

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, James A. Lampert, United States
 Deputy Surveyor, do solemnly swear that in pursuance of a contract
 received from Hugh H. Price, United States
 Surveyor-General for Arizona, bearing date of the 30th
 day of June, 1902, 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 Ari-
 zona, the Manual of Surveying Instructions, and the laws of the United
 States, surveyed all those parts or portions of the

T 21 N R 7 E T 22 N R 8 E
T 22 N R 7 E T 23 N R 7 E
 and T 23 N R 8 E T 21 N R 8 E

of the Gila and Salt River Base and Meridian, in the Territory of Ari-
 zona, as are represented in the foregoing field notes as having been sur-
 veyed by me and under my direction; and I do further solemnly swear
 that all the corners of said survey have been established and perpetu-

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ated in strict accordance with the Manual of Surveying Instructions, the special instructions of the United States Surveyor-General for Arizona, and in the specific manner described in the field notes, and that the foregoing are the TRUE field notes of such survey; and should any fraud be detected I will suffer the penalty of perjury, under the provisions of an act of Congress approved August 8, 1846.

James A Sampson

U. S. Deputy Surveyor.

Subscribed and sworn to before me this *Oct 2nd* day
of *October*, 190*3*

W. F. ...
Chas. ...

4890b150-8-02

A P P R O V A L.

Office of the

United States Surveyor-General,

Phoenix, Arizona.

2/27/04 Feb. 27 - 1904.

The foregoing field notes of the survey
of *Subdivision of T. 23. N. R. 7 E.*

of the Gila and Salt River Base and Me-
ridian, in the Territory of Arizona,
Executed by *James A. Langford*
United States Deputy Surveyor, under his
contract No. 98, dated *June 30 1902*,
having been critically examined, and the
necessary corrections and explanations
made, the said field notes, and the sur-
veys they describe, are hereby approved.

Frank S. Ingalls
U. S. Surveyor-General.