

1
BOOK 1488

1488

1488

F I E L D N O T E S
OF THE SURVEY OF THE
THIRD STANDARD PARALLEL SOUTH THRU
Ranges 1, 2, 3, 4 , 5, 6, 7, 8, 9,
10, 19 and a part of 18 East.

Gila and Salt River Base and
Meridian,

ARIZONA.

By J. B. McLaughlin, D. S., under
Contract dated June 18, 1883.
Survey commenced January 18, 1884
Survey completed February 4, 1884.

For description of
 instrument and
 preliminary notes
 See Book No 2

Oct. 15 & 16. 8.

31	32	R.	33	1	34	E.	35	36
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31	32	R.	33	3	34	E.	35	36
92	90		87		86		84	82
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31	32	R.	33	4	34	E.	35	36
79	78		76		74		73	71
6	5		4		3		2	1
31	32	R.	33	5	34	E.	35	36
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6	5		4		3		2	1
31	32	R.	33	6	34	E.	35	36
56	54		52		51		49	48
6	5		4		3		2	1
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45	43		41		39		37	35
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Beth. Pa. 15 & 16 S

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Third Standard Parallel S.

Chains

Standard

From the cor. to Tps. 15-
S. Co. 1 E. and
1 N. recently established
by me. I run
East on a random
line 60 miles sitting
temporary 1/4 and Sec.
corn. at each 40 & 80
Ch. and at the end
of 60 miles make a
deligent search for
the cor. to Tps. 15 of S.
Co. 10 & 11 E. but fail
to find it. I there-
fore go to the cor.
to Tps. 15 & 16 S. Co.
12 & 13 E. and retruce
N. 12 miles but not finding
the Tps. Cor. to Tps. 15 S. Co.
10 & 11 E. I establish it;
For the field notes of which.

Through Range 10 E.
Line

See Book No 4

I find the Closing
of the 3rd Standard
run from the
meridian to be
15 Ch. S. and the length
of the line to be 1/2 mile
The course of the true
line will therefore
be $S. 99^{\circ} 50' N.$

I therefore run $S. 99^{\circ} 50' N.$
on a true line on
the S. Ry. of Sec. 36

Our level land

4000
Set a post 3 ft. long 3 ins. diam. with marked
stone, 12 ins. in the ground ^{stand} Sec. 36
marked $S. 50^{\circ} N.$ Run 90 ft. to $S. 50^{\circ} E.$ 12
ins. E. and $N.$ of 10 ft. dist. and place
a mound of earth 1 1/2 ft. high 3 1/2 ft. base. around
post.

2nd Standard Parallel
 Cairns

5000

Set a post 4 ft.
 long, 4 ins. sq.
 with marked
 stone 12 ins. in
 the ground for Standard
 lev. to S. 35 and
 36 marked S.C.
 T. 15 N. R. 10 E. on N.
 S. 36 on E. and
 S. 35 on N. face with
 1 notch on E. and 5
 notches on N. face.
 dug pit 15 x 18 x 12 ins.
 N. E. & N. of post 5/2 ft.
 dist. and raised
 a mound of earth
 2 1/2 ft. high 4 1/2 ft. diam
 around post
 see face level
 Soil 1st. rate
 Scattering trash

S. through Range 10 E.
Chino

Good ground

S. 89° 50' W. on the S. Bdy.
of Sec. 35

20. 12° 45' E.

4000 Set a post 3 ft long 3 ins. diam with marked
stone, 72 ins. in the ground for ^{stand} Sec. Cor.
marked S.C. on N. face, dug pits 18 x 18 x 12
ins. E. and W. of post 57 ft. dist. and raised
a mound of earth 1 1/2 ft. high 3 1/2 ft. base around
post.

5000

Set a post 4 ft. long
4 ins. sq. with marked
stone 12 ins. in the
ground for Standard
Wor. to Sec. 34 & 35
marked S.C. 5. 150.
R. 10 E. on N. S. 35 on E.
and S. 34 on W. face.
with 2 notches on E.
and 4 notches on N.
face - dug pits

2nd Standard Parallel
Chairs

18 x 18 x 12 ins. N.E.
and W. of post. $5\frac{1}{2}$
ft. dist. and
raised a mound
of earth $2\frac{1}{2}$ ft. high
5 ft. base around
post.

Surface level
Dip 1st rate
Scattering brush
good grass

S 9° 50' N. on the S. By.
of Sec. 34

16.00
40.40

Var. 12° 45' E.
Road S.E. & N.W.

Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground for ^{stand} Sec. Cor.
marked $\frac{1}{2}$ S.E. on X ^{corner} dig pits 18 x 18 x 12
ins. E. and W. of post 3 ft. dist. and raised
a mound of earth $2\frac{1}{2}$ ft. high, $2\frac{1}{2}$ ft. base, around
post.

S. Throgl Range 10 E.
Larvis

8000

Set a post 4 ft. long
4 in. sq. with marked
stone 12 in. in the
ground for Standard
lev. to Sec. 33 & 34
marked S. E. 5 15 S. R. 10 E.
on N. S. 34 on E. and
S. 33 on N. face with
3 notches on E. & N. face
dry pits 18 x 18 x 12 in. N.
E. and N. of post 5 1/2 ft.
dirt. and raised a
mound of earth 2 1/2 ft
high 4 1/2 ft. from around
post.

Surface level
Soil 1. st. rate
Scattering brush
good grass

3rd. Standard Parallel
Chains

18950 ft. on the South
By. of Sec. 33
Var. 12° 45' E.

600

Road from Tucson to
Quipota Br. N.E. S. & N.

4000

Set a post 3 ft. long 3 ins. diam. with marked
stone, 12 ins. in the ground ^{marked} for
marked + S.C. on N. face due to 12 x 12
ins. E. and N. of post 2 ft. in diameter
a mound of earth 4 ft. high on
post.

8000

Set a post 4 ft. long
4 ins. dia. with marked
stone 12 ins. in the
ground for ^{Standard} Cor. to
Sec. 22 or 33 marked
S.E. 5. 15 S. R. 10 E. on N.
S. 33 on E. and S. 32
on N. face with 4
notches on E. and 2
notches on N. face
dry pit 18 x 18 x 12

S. Through Range 10 E.
Chain

iron, N. E. and N. of post
5 1/2 ft. dist. Rapid
raised a mound
of earth 2 1/2 ft. high
4 1/2 ft. base around
post.

Surface level

Soil 1st rate

Scattering cuts saw mesquite
and greasewood brush

South 89° 50' N. on the S. Ry.
of Sec. 32

Sta. 120 45' E.

28.54

Dry wash 10 links wide
E. N.

40.00

Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground form ^{aa} Sec. 32
marked S. Con N. Ave. dug pits 18 x 18 x 12
ins. E. and W. of post 5 1/2 ft. dist. and raising
a mound of earth 2 1/2 ft. high 3 1/2 ft. base around
post.

2nd Standard Parallel S.
Chairs

80.00 Set a post $4\frac{1}{2}$ ft. long
4 ins sq. with
marked stone 12 ins.
in the ground for
Standard Cor. 1st Sec.
1 and 25 marked S.C.
T. 15 S. R. 10 E. or N.
S. 32 on E. and S. 31 on
N. face. with 5 notches
on E. and 1 notch on
N. face. dig pits
18 x 15 x 12 ins. N. E. & N.
of post $5\frac{1}{2}$ ft. dia. and
raised a mound
of earth 2 ft. high
 $4\frac{1}{2}$ ft. dia. around
post.

Surface rolling
Soil 2nd. Gate
Dune mesquite cut down
and green wood brush
good grass

Through Range 10 E.
Chain

S. 8900' N. on the S. Co. of Sec. 31 Twp. Va. 12'45" E.

4000

Set a post 3 ft. long 3 ins. diam. with marked stone, 12 ins. in the ground for ^{Sec.} Sec. Cor. marked 4 S. Co. N. face. avg. rds 13 x 13 x 12 ins. E. and W. of post. 1/2 ft. high and raised a mound of earth 1 1/2 ft. high. 3/4 ft. base ground post. from which a mesquite tree 4 ins. in diam. to S. 64' N. 94 lbs. dist. marked 14 S. B. T. No other trees within limit.

5000

Leave valley
Set a post 4 ft. long 4 ins. diam. with marked stone 12 ins. in the ground for Standard Cor. to Twp. 10' S. Co. 9 5' 10" E. marked. S. Co. Twp. S. on N. R. 10 E. S. 31 on E. and R. 9 E. S. 36 on N. face.

✓

Ind. Standard Parallel
Through Range 10 E.
Chin

with 6 notches on
 N. E. & S. face dug pit 24 x
 18 x 12 ins cross wire on
 each line N. E. & S. of
 post 6 ft. dist. and
 raised a mound
 of earth 2 1/2 ft. high
 5 ft. face around post.
 Surface rolling
 Soil Ind. rate
 Dense mesquite catclaw
 and green wood bush
 Good grass

End Standard Parallel 12

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S. Through Range 9. E.

Chairs

From the Standard Cor.
to Sp. 15. S. Co. 9810 E.
first established. I run
S. 89° 50' W. on the S. Coy.
of Sec. 36.

Va. 12° 45' E.

4000

Set a malpais rock
16 x 14 x 6 ins, 11 ins. in the
ground for Standard "4"
Sec. Cor. marked S.C. "4" on
N. face. and made a
mound of stone alongside
Pike impracticable
from which a Palo Verde
6 ins. in diam. brs S. 40° E.
11 limbs dist. marked
S.C. "4" S.B.T. No other
trees within limits. Round
Top of ridge brs. N. 8. S.
Altitude 2700 ft. descend
Between two Buttes

64.00

Ind. Standard Parallel
Lime

77.00 Dry sack 20 lbs. wide
to S. and into
valley

80.00 It a mufair's rock
18x18x7 ins. 12 ins. in the
ground for Standard
Cor. to Secs. 35 and 36
marked S.C. with
1 notch on E. and 5
notches on W. edge.
dug pits 18x18x12 ins
N. E. & W. of stone 5-12
ft. dist. and
raised a mound
of earth 2 ft. high
7 1/2 ft. base along side
a Butte to, N. 60° E. about
25 chs. dist.
a Butte to, S. 60° E. about
30 chs. dist.
Surface rolling

South Through Range 9 E. Texas

Soil 3rd. rate
 Dune mesquite
 cat's claw and
 gumwood bush
 ✓ good grass

S. 84° 55' N. on the South
 Coy. of Sec. 35
 Va. 12045' E.

19.00 Leave valley for No. 1.
 40.00 ✓ *malpais* ^{bladed} 10 x 9 x 6 ins. 7 ins.
 in the ground for 1/2 Sec, Cor, marked S.C. on N
 18 x 18 x 12 ins. E. and W.
 and raised mound of earth

from which a Palo Verde
 ✓ fine in drain. for S. 20' N.
 57 links dist marked 4 S.B. 5
 No other trees within limits

62.00 Dry wash 25 links with
 led st.

80.00 ✓ Set a malpais rock

Ind. Standard Parallel
Chairs

6 x 12 x 9 ins. in
the ground for
Standard Cor.
to Secs. 34 & 35 marked
S.E. with 2 notches
on E. and 4 notches
on N. edge. dug pit
18 x 15 x 12 ins. N.E. &
N. of stone 5 1/2 ft. dist
and raised a
mound of earth
2 ft. high x 4 ft. base
around feet. alongside
surface vert. ridge
Open cat clow
and greenwood Brook
Good grass
Altitude 2700 ft.

South Through Range & E.
Chairs

S. 89° 58' N. on the S. By.
of Sec. 34

ascend Va. 12° 45' E.

5,000 Top of N. side of Butte
Altitude 2800 ft descend

1,000 Wash 50 lbs. with 100 S.
East of Butte.

4,000 Set a post 3 ft. long 3 ins. diam. with marked
stone, 12 ins. in the ground for a ^{fixed} Sec. Cor,
marked S.S.C. on N. face, dig pits 18 x 18 x 12
ins. E. and W. of post 5 ft. dist. and raised
a mound of earth 1 1/2 ft. high. 3 1/2 ft. base around
post. from which a mesquite
tree 8 ins. in diam. to S.
S. 100 W. 57 lbs. dist marked
S.C. 44 S. 35 No other
tree within limits

80,000 Set a malpais rock
20 x 8 x 6 ins. 15 ins. in
the ground for Standard
Cor. to Sep. 30 1884.
marked S.C. with

Ind. Standard Parallel

Lines

3 notches on E. & N. edges
and raised a
mound of stone
along side.

Out. impracticable
Surface mountainous
soil Ind. rate

Dwarf mesquite catclaw
and palo verde brush

✓ Good grass

S. 89° 50' W. on the S. E. of
Sec. 33

Va. 12° 45' E.

How

Set a malpais rock
16 x 6 x 6 ins. 11 ins. in
the ground for standard
1/4 Sec. cor. marked
S. E. 1/4 on N. face. and
raised a mound
of stone along side

S. through Range & E.
 Rais

80.00

✓ Pit impracticable
 Set a malpais rock
 20x12x4 ins. 15 ins.
 in the ground for
 Standard Cor. to Sec.
 32 & 33 marked S, B,
 with 4 notches on E.
 and 2 notches on N.
 edge. and raised
 a mound of
 stone alongside.

Pit impracticable
 Surface mt. ridge

Soil 2nd. rate

Dense mesquite, Palo Verde
 and cat claw Bush

Good grass

✓ Altitude 2700

Std. Standard Parallel
Chains

S. 79° 50' W. of the S.
Cg. of Sec. 32
Va. 12° 45' E.

4.00

Dry wash 20 lbs.
Side Co., N.C.

40.00

Set a malpais rock
18x6x6 ins. 2 ins. in
the ground for
Standard 14 Sec. Cor.
marked 14 S.C. on N.
face, and raised
a mound of stone
alongside.

Pit's impracticable

52.90

Dry wash 20 lbs. with cor. S.

15.50

Dry wash 20 lbs. with cor. S. N.

80.00

Set a malpais rock
14x10x6 ins. 9 ins. in
the ground for Standard
Cor. to Sec. 31 and 32
marked. S.C. with

S. through Range 9 E.
Chain

5 notches on E. and
1 notch on N. edge
and raised a mound
of stone alongside.
Pits impracticable
from which a mesquite
tree 4 ins. in diam.
No. N. 34' N. 25 lbs. dis-
marked. S. 15 S. R. 9 E.
S. 31 B. 5. No other
trees within limits
surface mt. ridge
Soil 2nd. rate

Dense mesquite Palo Verde
and cat claw Bush

✓ good grass

S. 89° 50' N. on the S.
Cry. of Sec. 31
Va. 12° 45' E

250 ✓ Dry wash 25 lbs. with br. S. N.

Ind. Standard Parallel
Chains

Ascent

26.50 Top of mt. ridge frs.
N. Sand S. and descend
Attitude 29.50 ft.

39.90 Dry wash 15 lbs. wide
Co. S. N.

40.00 Set a meppis with
20x12x10 ins 15 ins. in
the ground for
Standard ¹⁴ ¹⁴ lbs. marked
S. C. 14 on N. face and
raised a mound
of stone alongside
it impracticable

58.75 Dry wash 20 lbs. wide
Co. S. N.

50.00 Set a granite ^{stone} 18x18x6
ins. 12 ins. in the
ground for Standard
lev. to Tps. 15 S.
R. 859 E. near hill

A through Range 9^C
Chavis

A. C. with 6 notches
on N.E. & N. edges.
and raised a
mound of stones
alongside of Pit
impracticable
Altitude 2750

So far as mountain ridge
Soil rocky 3rd rate
Dense mesquite cat claw
and Palo Verde Bush
Good grass

I carefully examined the
adjustments of my
Solar Transit to-day
particularly the
latitude and reversing
apparatus and found
them correct.

January 16th 1854

Ind. Standard Parallel Lines

From the Standard Cor.
to Sep. 15 - S. Co.
8 and 9 C. just established
by me. I run
N. 89° 50' W. on the
S. Co. of Sec. 36
Va. 12° 45' E.

- 35.00 Dry wash 140 links
wide Cor. N. N.
- 40.00 Set a granite ~~stone~~ 20 x 10 x 6
ins. 15 ins. in the
ground for ^{std.} 14 Sec Cor.
marked S. Co. 14 on N.
face and raised a
mound of stone along it.
Pit impracticable.
- 63.06 Dry wash 10 links wide
Cor. N. E.
- 80.00 Set a granite stone
14 x 6 x 6 ins. 9 ins.
in the ground

S. through Range S.E.
 Harris

for Standard Cor.
 to Secs. 35 and 36
 marked S.E. with
 notch on E. and
 5 notches on N. edge,
 and run a moored
 of stone alongside.

Pike impracticable
 from which a Palo
 Verde 4 ins. in diam
 to S. 71° E. 47 links
 cut, marked W.T. 5.15 h.
 R. & E. 1.36 a.

No other trees within limits
 surface mountain ridges
 soil rocky 3rd. rate
 Some mesquite catclaw
 and Palo Verde Bush
 Good grass

2nd Standard Parallel Lines

89950 N. on the S. By.
of Sec. 35
Twp. 12-45 E.

Observed

12.00

Top of mt. ridge. 75,
N. 2.5 E. and divide
altitude 2500 ft.

26.39

Dry wash 240 feet wide
Sec. 4, 100 E. and divide

40.00

Set a post 3 ft. long 3 ins. diam. hole
stone, 12 ins. in the ground ^{stone}
marked S. Com. N face, two pits 12
ins. E, and W. of post 5 ft. dist. and

75.40

Dry wash 160 lbs. wide
Sec. 4.

77.10

Dry wash 80 lbs. wide
Sec. 4.

80.00

Set a post. 4 ft. long
4 ins. sq. with
marked stone 12

S. through Range & E.
Chains

ins. in the ground
for Standard Cor. to
Secs 34 and 35 marked
S. E. First S. Q. S. E. on N.
S. 35 on E. and S. 34
on the face north
2 notches on E. and
4 notches on the face.
dug pit 15 x 15 x 12
ins. N. E. or N. of post
5 1/2 ft. dist. and
raised a mound
of earth 2 ft. high x 2
ft. face around post.
from which an
Ironwood tree 6 ins. in
diam. No. ~~200~~ ^{S. 200} N. 200 ft.
dist. marked ^{N. B. S. T. S. E.}
R. S. E. S. 34
No other trees within limits
Surface rolling and

Pr. Standard Parallel Chains

mountainous

Soil 4th water

Some mesquite; cat's claw
and Palo Verde brush

✓ Good grass

S. 89° 58' W. on the S. By.

7 Sec. 34.

Ta. 12° 45' E.

4500

Set a post 3 ft. long 3 ins. diam. with marked
stone, 12 ins. in the ground ^{etc} for
marked S. S. on N. face, dog pile 18 x 18 x 12
lbs. E. and W. ^{etc} Set a 3 ft. post
a row of ^{etc} 1 1/2 ft. high. ^{etc} post.

8000

✓ Set a post 4 ft. long
4 ins. sq. with
marked stone 12
ins. in the ground
for standard cor. to
Secs. 33 & 34 marked
S. E. T. 15 S. R. 5 E. on

South Through Range & E. Chain

N. S. 34 on E. and S. 33
 on N. face - north 3
 notches on E. and N. faces.
 dug pits 18 x 18 x 12 ins.
 N. E. & N. of post 5 1/2
 ft. dist. and raised
 a mound of
 earth 2 ft. high 4 1/2
 ft. - tall around post
 from which a mesquite
 tree 8 ins. in diam. to 8.

N. 48 E. 163 lbs. dist.

marked T. 15 S. R. & E. S. 34 B. 5.

No other trees within limits

Surface level

Soil 1st. rate

Divine catclaw, mesquite

and ironwood bush

good grass

290

Std. Standard Parallel S.
Chains

N. 89° 51' W. on the S. Ch.
of Sec. 33
Sta. 12° 45' E.

4000 Set a post 3 ft. long 3 ins. diam. with mark
stone 12 ins. in the ground for
marked S.S.C. on N. face. dug hole 18 x 18 x 12
ins. E. and W. of post; fill with earth & used
a ring of earth 12 ft. high 4 ft. wide around
post.

44.70 Dry mark 80 links with
Sec. N.E.

56.13 Dry mark 60 links with
Sec. N.E.

75.49 Dry mark 15 links with
Sec. N.

1000 Set a post 4 ft long
4 ins. sq. with marked
stone 12 ins. in the
ground for Standard
Sec. to Sec. 32 & 33
marked S.E. T. 15 & 19. 8 E.
on N. 833 on E. and

through Range 8 E.

Chain

S. 32 on N. face, with
 4 notches on E. and
 2 notches on N. face,
 dug pit 15 x 15 x 12
 ins. N.E. of post.
 5 1/2 ft. dist. and
 raised a mound
 of earth 2 ft. high
 24 1/2 ft. from around post.
 from which a Palo Verde
 + iron in diam. pit. N. 34 1/2 W.
 43 links dist. marked
 S. 5. 15 - S. 8 E. S. 39 1/2 W.
 No other trees within limits
 Surface level
 Soil ind. rate
 Dense mesquite - cat-
 claw and Palo Verde
 Brush
 good grass
 Altitude 2675 ft.

2nd Standard Parallel
Chain

S. 59° 50' W. on the South
By. of Sec. 32
va. 12° 45' E.

17.45 Dry work 60 links wide
Sec. 32.

35.70 Dry work 150 links wide
Sec. 32.

40.00

Set a granite ^{block} stone, 12 x 8 x 7 ins., 8 ins.
in the ground for ^{the} Sec. 32, marked 256 on it.
Then dry pits 18 x 18 x 12 ins. E. and W.
at about 1/4 ft. dist. and raised a mound of earth
14 ft. high, 3 1/2 ft. base, alongside.

75.10 Dry work 200 lbs. wide Sec.
32. 100 E.

80.00 Set a post 4 ft. long
4 ins. sq. with marked
stone 2 ins. in the
ground for Standard
Sec. to Sec. 31 or 2
marked S. C. 7. 15 h.
✓ R. 8 E. on N. S. 32 or E

South through Range & E, Chain

and s. 31 on W. face.
 with 5 notches on E. and
 1 notch on W. face. with
 dug pit 18x18x12 ins.
 N.E. & W. of post; 5 1/2
 ft. dist. and raised
 a mound of earth
 2 ft high 4 1/2 ft. face
 around post.
 from which a
 mosquito 4 ins. in
 chain. No. 35 N. 209 lbs.
 dist. marked 5. 15 s.
 A. S. E. s. 31. B. S. etc. this
 trap within mound
 Surface level
 Soil 2nd. rate
 Duv. cat class
 musjunct & pale Verde Bush
 good grass
 Altitude 2650

Ind. Standard Parallel Chains

S. 89° 58' N. on the S. E. of
of Sec. 31
Va. 12° 45' E.

40.00 Set a post 3 ft. long 3 ins. diam. with marked
stone, 12 ins. in the ground for ^{Standard} Sec. Cor.
marked $\frac{1}{4}$ S.E. or N. corner, dug pits 18 x 18 x 12
ins. E. and N. of post 12 ft. deep and raised
a mound of earth 15 ft. high 35 ft. base around
post from which a
Cable runs 4 ins. in diameter
to N. 12° N. 123 links
dist. marked $\frac{1}{4}$ S.E. & S.
No other trees within limits

41.60 Dry mark 110 lbs. wide
Sec. N.

68.50 Dry mark 25 lbs. wide
Sec. N.

8.00 Set a post 4 1/2 ft.
long 4 ins. sq. with
marked stone 12 ins.
in the ground for
Standard Sec. to S. E.

South through Range SE.
 Chim

15 S. R. 758 E.
 marked. S.E. T. 15 S. B. N. A.
 R. 8 E. S. 31 on E. and
 R. 7 E. S. 36 on W. face.
 with 6 notches on N.E. & W.
 face. dug pits 24x18x
 12 ins. narrow on
 each side N.E. & W. of
 post 6 ft. dist. and
 raised a mound
 of earth 2 1/2 ft. high 5 ft.
 from which a ^{mesquite} ~~tree~~ ¹⁰ ins. in
 diam. to N. 12° E. 235 lbs.
 dist. marked. T. 15 S. R. 8 E.
 S. 31 B. T. No other tracks
 within limits.
 Surface level
 Soil 2nd rate
 Dense mesquite-cut brush and
 Cuts 1/2 in. Band good grass

3rd Standard Parallel

From the Standard Cor. to Sec. 15
Chain No. 758 E. first established. I run

1.8905 N. on the S. C. of Sec. 36
7th 120 45' E.

15.00 Dry wash 40 links
wide cor. N. N.

19.05 Dry wash 120 lbs. wide
C. - C.

30.00 Trail for C. S. S.

35.07 Dry wash 30 links
wide cor. N.

40.00 Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground for ^{Standard} S. E. Cor.
marked $\frac{1}{4}$ S. S. Cor. N. face, dug pits 18 x 18 x 12
ins. E. and W. of post 5 $\frac{1}{2}$ ft. dist. and raised
a mound of earth 1 $\frac{1}{2}$ ft. high, 3 $\frac{1}{2}$ ft. base, around
post.

46.60 Dry wash 80 lbs. wide,
C. - N.

61.00 Dry wash 40 lbs. wide
C. - C.

80.00 Set a post 4 ft. long
4 ins. sq. with marked
stone, 12 ins. in the ground
for ^{Standard} Cor. to Secs. 185 and
36 marked S. C. S. 15 S.

S. through Range 7 E.
Chairs

R. 76 on N. S. 36 on E.
and S. 85 on W. face.
with 1 notch on E. and
5 notches on W. face. dug
pile 18x18x12 ins. N. E. 15 W.
of post 5 1/2 ft. dist.
and raised a
mound of earth
2 ft. high 4 1/2 ft base
surround post.

From which a mesquite
tree 10 ins. in diam.
to S. 71° E. 50 lbs. dist.
marked "B. T. S. 15 S. R. 7 E.
S. 36 No other trees
within limits

Surface level
Soil 1st rate

Dense mesquite cat claw
and ~~brush~~ brush

Good grass altitude 2650 ft.

3rd. Standard Parallel
Chairs

S. $89^{\circ}50'$ W. on the
S. by. of Sec. 35
Va. $12^{\circ}45' E.$

- 4.06 Dry wash 120 lbs. wide
Sec. N.
- 7.00 Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground for ^{stand.} Sec. Cor.
marked $\frac{1}{2}$ S. Sec. on N. face; dug pits 18 x 18 x 12
ins. E. and W. of post 5 $\frac{1}{2}$ ft. dist. and raised
a mound of earth $1\frac{1}{2}$ ft. high. $3\frac{1}{2}$ ft. base. around
✓ post. from which a mesquite
5 ins. in diam. to. N. $76^{\circ} E.$
98 lbs. dist. marked "4" S. B. T.
No other trees within limits
- 57.76 Dry wash 80 lbs. wide
Sec. N.
- 77.10 Dry wash 60 lbs. wide
Sec. N.
- 8.00 Set a post 4 ft. long
4 ins. sq. with
marked stone 12 ins.
✓ in the ground

S. through Range 7 E.
 Cairns

for Standard Co. to
 Feb. 24 and 25 marked
 S. 15 h R. 7 E. N. 135
 on E. and S. 34 on N.
 face. with 2 notches
 on E. and 4 notches on
 N. face. dug pits
 18 x 18 x 12 in. N. E. & N.
 of post 5 1/2 ft. dist.
 and made a
 mound of earth
 2 ft. high 4 1/2 ft.
 diam around post
 from which a mosquito
 trap 8 in. in diam. N.
 N. 15 E, 116 lbs. dist.
 marked S. 15 h R. 7 E. S. 34
 a mosquito trap
 in diam. for N. 30 N.
 122 lbs. dist. marked
 S. 15 h R. 7 E. 134 S. 34

Ind. Standard Parallel
Lines

A mesquite - oasis in
drain. to N. 80° W. 79
the dist. marked
S. 15 S. Q. 7 E. S. 24 B. 7

Surface level
Soft red. rate
Dune catclaw and
mesquite bush
Good grass

S 89° 50' N. on the
S. B. of Sec. 34
Va. 12° 45' E.

2144 Dry wash 20 lbs.
wide less 2 N.

2560 Indian trail to N. S.

4000

Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins, in the ground ^{Standard} for Sec. Cor,
marked $\frac{1}{2}$ S.E. on N. face, dug pits 18 x 18 x 12
ins. E. and W. of post $5\frac{1}{2}$ ft. dist. and raised
a mound of earth: $1\frac{1}{2}$ ft. high, 34 ft. base around
post.

S. through Range 7 E.
Chains

47.30

Dry wash 30 lbs. wide
to N. 24.

63.94

Dry wash 40 lbs. wide
to N. 24.

80.00

Set a post 4 ft. long
4 ins. sq. with marked
stone 12 ins. in the ground
for standard corr. to Sec.
23 & 34 marked S. C. T. 15 S.
R. 7 E. on N. S. 24 on E.
and S. 30 on N. face.
with 3 notches on E.
and N. face. deep pits
18 x 18 x 12 ins. N. E. & N. of
post. 5 1/2 ft. dirt. and
raised a mound
of earth 2 ft. high
4 1/2 ft. tall around
post from which a
magnetic 5 ins. in diam.
to N. 240 at 53 lbs.

End Standard Parallel Chains

Dist. marked T. 10-1.
 R. 7 E. S. 33 B. T. No other
 trees within limits
 surface level
 Soil 1st. rate
 Dense mesquite and
 cat claw brush
 Good grass
Altitude 2375 ft.

S. 89° 50' N. on the
 S. Coy. of Sec. 33
 T. 12 45' E.

- 190 Dry wash 60 links
with Sec. N.
- 26,90 Dry wash 10 links with
Sec. N. N.

4000 Set a post 3 ft. long 3 ins. diam with marked
 stone, 12 ins. in the ground for ^{Stand} Sec. Cor,
 marked 1 S.S.C. on N. face, two pits 18 x 18 x 12
 ins. E. and N. of post 3 ft. dist. and raised
 a mound of earth 18 ft. high 3 ft. base around

✓

S. through Range 7 E.
Chain

post. from which a
magnite 4 ins. in diam
br. N. 46° E. 49 lbs. dist.
marked "4 S. B. T.

No other trees within
limits

50.36 Dry wash 20 links wide
Co. N. W.

54.44 Dry wash 20 lbs. wide Co. N.

8000 Hit a post. 4 ft. long
4 ins. dia. with marked
stone 22 ins. in the
ground for Standard Co.
to be. 32530 marked
N. 5.15 S. R. 7 E. on N.
S. 33 on E. and h. 22
on N. face. with
4 notches on E. and
2 notches on N. face.
dug pits 18 x 8 x 12
in N. E. S. W. of post.

3rd Standard Parallel
Chains

5 1/2 ft. dia. and
raised a mound
of earth 2 ft. high
4 1/2 ft. base around
post.

Surface level
Soil sub. rate
Dune set clay and
greewood brush
good grass

✓ Altitude 2300

S. 9950' N. on the
S. E. of Sec. 32
T. 12° 45' E.

24.32 Dry wash 20 lbs. wide
lev. N. 100' N.

28.22 Dry wash 15 lbs. wide
lev. N.

4000 Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground ^{std} Sec. 32,
marked S. C. M. N.

S. through Runge & E.
Chairs

pts. E. and W. of post 5 1/2 ft. dist. and 16.
a mound of earth 1 1/2 ft. high. 3 1/2 ft. base, around
post.

from which a
pale verde 4 ins. in
diam. br. S. 73° W.
18 limbs dirt marked
"S. B. T. O. A. A. A."
trees within limbs

7600

Leave some musquiti
and cat's claw brush

8000

Set a post 4 ft. long
4 ins. sq. with marked
tree 2 ins. in the
ground for standard
lev. to Sec. 31 and 32
marked N. C. T. 15 S.
Q. 7 S. on N. S. 32 on E.
and S. 31 on N. face.
With 5 notches on
E. and 4 notches on
N. face dug

3rd Standard Parallel
Chains

pits 18x18x12 ins. N.
E. & W. of post 5 1/2
ft. dist. and
raised a mound
of earth 2 ft. high
4 1/2 ft. base
around post.
Surface level
Soil 1st. rate
Dense mesquite and
cat claw brush 16 ch.
Good grass
✓ Altitude 2450 ft.

S. 89° 50' W. on the
S. sy. of Sec. 31
Va. 12005 E.

4170

Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground for ^{stand} Sec. Cor.
marked 1 S.S. on N. face, dig pits 18 x 18 x 12
ins. E. and W. of post 5 1/2 ft. dist. and raised
a mound of earth 1 1/2 ft. high 3 1/2 ft. base around

S through range & E.
Chain

8000

post.

Set a post 4 1/2 ft. long
4 ins. sq. with
marked stone 12 ins.
in the ground for
standard lev. to 5 ft.
15 - 10 S. Res. 6 1/2 E.
marked S. 6. 5. 15 - S. on
N. R. 7 E. S. 31 on E.
R. 6 E. S. 36 on N. face,
with 6 notches on N.
E. N. face, dug pits
24 x 18 x 12 ins. ^{excavated} on each
line N. E. & N. of
post 6 ft. dist. sand
raised a mound
of earth 2 1/2 ft. high
5 ft. diam around post.
Surface level
Soil 1st rate
Scattering rubble quite

o

3rd Standard Parallel
through Range 7 &
Chain

good grass
Altitude 2500 ft.

I carefully examined
the adjustments of
my Solar Transit
the day - particularly
the latitude and
reversing apparatus
and found them
correct

✓ January 17th 1884

S. through Range 6 E.

Chain

From the ^{Standard} Cor. to T₁,
1500 S. R. 6 and 7 E.
just established.

Run S. 89° 55' W.
on the S. 24 of Sec. 26
W. 12° 45' E.

4000

Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground for ^{Stand.} Sec. Cor.
marked $\frac{1}{2}$ S.S.C. on N. face, dug pits 18 x 18 x 12
ins. E. and $\frac{1}{2}$ of post 5 $\frac{1}{2}$ ft. diam and raised
a mound of earth 1 $\frac{1}{2}$ ft. high 3 $\frac{1}{2}$ ft. base around
post.

8000

Set a post 2 ft long
4 ins. diam with mark-
ed stone 12 ins. in
the ground for.

Standard Cor. to
Sec. 35 & 36 marked
S. 6. 5. 15 S. R. 6 E. on N.
S. 26 on E. and S. 35
on N. face, with notch
on E. and 5 notches

End Standard Parallel

on N. face. dug
pit 15x15x12 in
N. E. & N. of post
5 1/2 ft. deep and
with a mound
of earth 2 ft high
4 1/2 ft. base around
post.

Surface level

Soil 1st. int.

Scattering mesquite bark

Good grass

Platycodon grandiflorus

S. 8950 N. to the

N. 24. of Sec. 35
No. 12045 E.

35.40 Dry wash 80 links wide
loc. N. in centre of
valley.

39.00 Trail bet. A & B.

South through Range E.
Chain

40.00

Set a post 3 ft. long 3 ins. diam with marked stone, 12 ins, in the ground for ^{mark} Sec. Cor. marked $\frac{1}{2}$ S.E. on N. face, dug pits 18 x 18 x 12 ins. E. and N. of post $5\frac{1}{2}$ ft. dist. and raised a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base. around post.

48.00

Dry wash 41 lbs. with
Co. N.E.

8.000

Set a post 4 ft. long
4 ins. sq. with
marked stone 12 ins
in the ground for
Standard Cor. to
Sec. 34 5 35 marked
S.E. 5. 15 S. R. 6 E. on N.
S. 35 on E. and S. 34 on
N. face. with
2 notches on E. and
4 notches on N. face.
dug pits 18 x 18 x 12
ins. N.E. & N. of post
 $5\frac{1}{2}$ ft. Disk and

Ind. Standard Pyramid
 Cairns.

and raised a
 mound of earth
 2 ft. high $4\frac{1}{2}$ ft.
 base, around post
 surface level
 Soil, st. rate
 Scattering brush
 Good grass

S. 89° 50' N. on the
 S. Coy. of Sec. 34
 T. 12° 45' E.

4000

Set a granite stone, 16 x 10 x 6 ins., 4 ins.
 in the ground for 4 Sec. ^{Dist} Cor, marked 4 R. on N
 face, dug pits 18 x 18 x 12 ins. E and N.
 of stone $5\frac{1}{2}$ ft. dist. and raised a mound of earth
 $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base, alongside.

8000

Set a post 4 ft.
 long, 4 ins. diam.
 with marked stone
 12 ins. in the ground

S. through Range 6 E.
 Chain

For Standard Cor.
 to Sec. 3350 + marked
 S. 15. S. R. 6 E. on N.
 S. 24 on E. and S. 33
 on N. farm with
 3 notches on E. & N.
 faces. dug pits
 18 x 18 x 12 ins. N. E. & N. W.
 of post 5 1/2 ft. dirt
 and raised a
 mound of earth
 2 ft. high 4 1/2 ft.
 base around post
 surface level
 Soil end note
 Deer mosquito and
 cat's claw burr

S. 89° 50' N. on the S.
 E. of Sec. 33. 12° 45' E.

Ind. Standard Parallel
Lines

2550 Cross mark Sec. 1. 68° E. 50 lbs. wt.
 31,5-0 Enter same mark Sec. E.
 32,57 Leave same mark source N. W.
 4000 Set a post 3 ft. long 3 ins. diam with marked
 stone, 12 ins. in the ground for ^{Standard} Sec. Cor,
 marked 4 Sec. on N. face, dug pits 18 x 18 x 12
 ins. E. and W. of post 5 1/2 ft. dist. and raised
 a mound of earth 1 1/2 ft. high. 3 1/2 ft. base around
 post.

8000 Leave valley. Set a
 post 4 ft. long 4 in.
 dia. with marked
 stone 12 ins. in the
 ground for ^{Standard} Sec.
 To Sec. 02 or 03 marked
 S. 6. 5. 15 S. E. 6 E. ^{on N.} S.
 33 on E. and S. 02
 on N. face. with 4
 notches on E. and 2
 notches on N. face.
 dug pits 18 x 18 x 12
 ins. N. E. & W. of

S. through Range 6 E.
 Linn

post 5 1/2 ft. dia.
 and raised a
 mound of earth
 2 ft. high & 1/2 ft. base
 around post.
 from which a mesquite
 tree 6 ins. in dia.
 to S. 40° E. 25 links
 dist marked N.B. T. 5, 15d.
 R. & E. S. 33 No other
 trees within limits
 surface level
 Soil 2nd. rate
 Dune cat's claw Pale Verde
 and mesquite brush

S. 89° 58' W. on the
 South Cy. of Sec 32
 Va. 12° 45' E.

31.65

Dry wash 30 lbs. wide
 low. H.

Ind. Standard Parallel Chairs

- 4000 Set a post 3 ft. long 3 ins. diam with marked stone, 12 ins, in the ground for ^{stand} Sec. 31 marked $\frac{1}{2}$ S.S. on N. side of post 12 x 12 x 12 ins. E. and W. of post 3 ft. diam and raised a mound of earth $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base around post. over int. ridge
- 52.70 Dry wash 30 lbs. wide
Sec. N.E.
- 8000 Set a slate stone 16x12x6 ins. 11 ins. in the ground for Standard Plan. to Secs. 31 and 32 marked S.E. with 5 notches on E. side 1 notch on N. edge dry pit 18x15 x 12 ins. N.E. of stone 5 $\frac{1}{2}$ ft. dirt and raised a mound of earth 2 ft. high 4 $\frac{1}{2}$ ft. face along side
Surface mountainous

Thompson Range & Co.
Reno

Soil rocky 2nd. rate
Dense cedar & pine
fir and grasswood
Bunch Altitude 3300

S 90° 5' W. on the
S. by. of Sec. 31
Twp. 12° 45' E.

11.00 Dry 20 ft. deep, 30 links
wide cor. N.E. corner
28.70 Top of Butte altitude 3700 ft
and descent

4.000 Set a granite stone
16 x 12 x 15 ins. 11 ins. in
the ground for "14
Stand. Sec. cor. marked
S.E. "14 on N. face
and raised a mound
of stone alongside.
Top imperceptible
2.64 Dry wash 10 links wide

Int. Standard Parallel
Chain

	Co. S.W. Foot of round Butte
74.00	Dry wash 15 links wide Co. S.
95.32	Dry wash 20 lbs. wide Co. S.E.
107.64	Dry wash 10 lbs. wide Co. S.E.
117.00	Dry wash 15 links wide Co. S.W.
130.00	Dry wash 20 lbs. wide Co. S.
147.50	Dry wash 10 lbs. wide Co. S.W.
159.40	Dry wash 20 lbs. wide Co. S.
165.00	Set a granite stone 20x16x12 in 15 in. in the ground for Standard Co. to 5 ft. 1506 S. Co. 556 E. marked S.E. with 6 notches on N.E. & W. faces, also

S. through Range 6 E,
Davis

and raised a
mound of stone
along side. *Pis. unipunctata*
Surface mounds in

Soil 2nd. rate

Dune cuts down Palo Verde
and cactus brush
Attitude 2350 ft.

I took up the discrepancy
here it being half way
between the Principal
Mound and Santa Cruz
Guide Mound.

2nd Standard Parallel S.
Lines

From the Standard Cor.
to Apr. 15 S. R. 516
E. just established &
run S. 59° 58' W. on the S.
By. of Sec. 36
Var. 12° 45' E.

- 4.62 Dry mark 20 links wide
Sec. S.
- 14.76 Dry mark 15 links wide
Sec. S.
- 29.40 Dry mark 10 links wide
Sec. S. & N.
- 40.00 Set a granite rock 16 x 8 x 6
in. 11 in. in the
ground for ^{Standard} Sec.
line marked S. B.
14 on N. face and
raised a mound
of stone alongside.
- ✓ Pit's unproductive
- 48.49 Dry mark 20 links wide

through Range E.
Lavin

Co. N.W.

7000

Road from Towner to
Arapahoe Co. N.W. & S.E.

7630

Dry wash 30 miles wide
ly. N.W.

8000

Get a granite stone
12x10x8 ins. 8 in in
the ground for
Standard Mer. to
Secs. 35 and 36 marked
S.E. with 1 notch on
E. and 5 notches on
N. edge. duly pit
8x8x12 ins. N.E. 5
ft. of stone 5 1/2 ft. dist
and raised a mound
of earth 2 ft. high of 1/2
ft. face alongside.
Surface mountainous
Soil 2nd. rate
Dense mesquite & Palo Verde forest
good grass

2nd Standard Parallel Line

S. 89° 50' W. on the
S. E. of Sec. 80.

Val. 12° 45' E.

23.59 Dry wash 10 lbs. wide
Sec. N.W.

40.00 Set granite 14 x 10 x 6 ins. 9
ins. in the ground
for standard 14 Sec. 80.
marked S.E. 14 on N.
face and raised a
mound of stone
alongside Pit impracticable

54.50 Wash 30 links wide Sec. N.W.

58.15 Same wash Sec. S.W. 30 links wide

66.40 Dry wash 30 links wide
Sec. N.W.

75.37 Dry wash 20 lbs. wide
Sec. N.W.

80.00 Set a granite stone
12 x 10 x 6 ins. 8 ins. in
the ground for.

S. through Range 5 E. Rains

Standard Cor. to Secs.
34 and 35 marked
S. E. with 2 notches on
E. and 4 notches on
N. edge. and raised
a mound of stone
along side.

Out temperature cell

Surface mountains

Soil 2nd. rate

Dense brush

Good grass

Altitude 2500 ft.

1.0900 N. on the S. E. of
of Sec. 34 Var. 12° 45' E.

3.42

Dry wash 40 links
wide 100. N. N.

38.57

Dry wash 15 links wide
100. N. 10° N.

2nd Standard Parallel Chairs

- 40.00 Set a granite stone
 18x16x12 ins. 12 ins.
 in the ground for
 Standard 114 Sec. 100.
 marked S.C. 114 on
 N. face. and raised
 a mound of stone
 alongside.
 Post impracticable
- 74.90 Dry wash 15 miles
 with Sec. N. N.
- 50.00 Set a Quartz rock
 14x8x6 ins. 9 ins. in
 the ground for Standard
 Sec. to Sec. 33 & 34
 marked S.C. with
 3 notches on E. & N.
 edge. and raised a
 mound of stone
 alongside. Post
 impracticable

South through Range 5 E. Hains

Surface wet. ridge
 Soil 2nd. rate
 Dune pale sand and
 muskeg: touch
 Good grass
Altitude 2700 ft.

S. 5000: N. on the
 S. Ry. of Sec. 33
 Va. 120 45' E.

- 1,25 Road to N. N. S. & E.
- 4.62 Dry wash 15 links wide
 ab. N. N.
- 4.000 Set a granite ^{stone} 16X14X6
 in. 14 in. in the
 ground for Standard
 14 Sec. 33. marked
 S. 6. 14 on N. face and
 raised a mound of
 stone alongside.
 Pts. impracticable

65

Ord Standard Parallel
Kaui

43.85 Dry wash 110 weeks
 with less. N.
 80.000 Granite stone 14x5x7
 pins. 9 pins in the
 ground for Standard
 and less. to Sec.
 32530 marked 16
 with 4 notches on
 E. and 2 notches on
 W. edges. and
 raked a mound
 of stone alongside
 It's impracticable
 surface rising hills
 Soil rocky 2nd. rate
 Dense brush
 Grass fair
 Altitude 2700 ft

South through Range 5 E.
Chairs

S. 90° 55' N. over the
S. 24. of Sec. 32
Va 12045' E.

15.30
19.00
4.00

Work 40 lbs. wide cor. N. N.
Work 30 lbs wide cor. N.
Set a granite stone
14x7x6 in 9 in. in
the ground for "4"
S.E. ^{Standard} cor. marked
S.E. "4" on N. face,
and raised a
mound of stone
along side

24.50
49.30
57.50
62.00
78.10
80.00

Pits unpracticable
Work 20 links wide cor. N. N.
" " " " " "
" 20 " " " "
" 30 " " " North
" 15 " " " "

Set a granite stone
14x10x4 in. 9 in. in

2nd. Standard Parallel

Chain

the ground for Standard
 Ck. to Secs. 31 and 32
 marked S.C. with
 5 notches on E. and
 1 notch on N. Edges.
 And would be
 moved of stone
 alongside, Pit
 impracticable.

Surface broken
 Soil rocky and rate
 Dense mesquite, Palo
 Verde and greewood
 brush

1/2 of 7' N. on the
 S. E. of Sec. 31
 N. 13° 45' E.

- 15.00 Dry work 110 links
- 21.00 Dry work 15 links

South through Canyon C, Chains

- with W. N.
- 3010 Dry wash 120 lbs.
width 40 ft. deep. loc. N. W.
altitude 2900 ft.
- 4000 Set a granite rock 12x10x5
ins. 9 ins. in the
ground for ^{standard} sec. loc.
marked S.C. 114 on
N. face. and raised
a mound of stone
alongside. Pit
unpracticable and
- 5345 Top of mt. to N. & S. and
descend.
- 76.20 Indian trail to N. & S.
- 79.34 Dry wash 20 lbs.
width 60. N. W. Foot of
mt. to N. & S.
- 8000 Set a granite ^{stone} 18x12x10
ins. 12 ins. in the
ground for Standard

Ind. Standard Parcel
Chains

Cor. to Tps. 15-1-1 S.
 Rs. 4-5-2, marked
 with 16" ^{width} notches
 on N. E. and W.
 edges. and raised
 a mound
 of straw sloughs
 of its impracticable
 From which a
 Palo Verde tree 4
 ins. in diam. N.
 S. 40° W. 4 lbs. dirt
 marked ^{at} S. 15 N. R. 4 E.
 S. 36 No other
 trees within 1/2 mile
 Surface mountainous
 Soil rocky 2nd rate
 Dense brush
 Poor grass

S. through Range & E.

Ohio

I carefully examined
the adjustments
of my Solar
Transit to-day
particularly the
latitude and
reversing apparatus
and found them
correct.

January 18th 1854

Std. Standard Small
Chain

From the Standard Cor.
to Sta. 15 S. Co. 485
E. just established by me
I run S. 89° 00' W. on
the S. Co. of Sec. 26
Va. 12° 45' E.

- 10.40 Dry wash 20 links wide Co.
S. W.
- 22.00 Same wash Co. N. W.
- 27.65 Road to. N. S.
- 29.00 Dry wash 120 links
wide Co. N. W.
- 39.30 Dry wash 5 lbs. wide
leg N. W.
- 40.00 Set a granite stone
12 x 10 x 6 ins. 5 in. in
the ground for
Standard "4 Sec. Cor.
marked S. E. "4 on
N. face. and
raise a mound

S. through Range 4 E,
Chains

74.90
8000

A stone alongside
of *Pit. impracticata*. The
Dry wash 15 yards
wide less, N. N.
Set a granite stone
12 x 10 x 10 ins. 5 ins.
in the ground for
standard. Terr. to Sec.
35 and 36 marked
S.C. with 1 notch on
E. and 5 notches on
N. edge. and made
a mound of stone
alongside. *Pit.*
impracticata.
Surface rolling
Soil rocky 2nd. rate
Dense brush and cactus
Altitude 2050 ft.

3rd. Standard Parallel
Chains

	Set 9058 N. on the S. Co. of Sec. 35 T. 20 N. R. 24 W. E.
84.00	Road to N.E. S. 1 N.
4040	Set a granite ^{stone} 14 x 10 x 5 ins. 9 ins. in the ground for $\frac{1}{2}$ Sec, Cor, marked 150 on N. face, dug pits 18 x 18 x 12 ins. E. and N. of stone 5 1/2 ft. dist. and raised a mound of earth 1 1/2 ft. high. 3 1/2 ft. base. alongside.
58.10	Dry work 20 lbs. with N. N.
79.60	Road fr. N. S.
8000	Set a Quarry rock 12 x 8 x 5 ins. 8 ins. in the ground for Standard Cor. to Sec. 34 & 35 marked S.E. with 2 notches on E. and 4 notches on N. edge. dug pits 18 x 18 x 12 ins. N.E. & N. of stone

S. through Range 4 E.
 Cairns

5½ ft. dist. and
 raised a mound
 of earth 2 ft. high 4½
 ft. tall alongside
 surface rolling
 Soil rocky sub. rate
 Dense Palo Verde, Ironwood
 mesquite & cactus brush

S. 89° 50' N. on the S.
 Ry. of Sec. 34
 Va. 12° 45' E.

10.90 Dry wash 30 links wide
 S. S. N.

40.00 Set a granite stone 14x8x6
 ins. 9 ins. in the
 ground for ^{stand} 14 Sec. cor.
 marked S. C. "4 on N.
 face and raised a
 mound of stones alongside.
 C. to impracticable

Ind. Standard Parallel
Chain

- 49.40 Dry wash 40 lbs wide
Co. N. N.
- 50.00 Road. ss. N. N. & S. E.
- 54.00 Dry wash 15 links wide
Co. N. E.
- 90.00 Set a granite stone
14x12x6 ins. in
the ground for Standard
Co. to Sec. 33 & 34
marked S. E. with 3
notches on E. & N. edges,
and raised a
mound of stone
alongside. Pit impracticable
From which a Cal Verde
4 ins. in diam. N. N.,
N. 40° N. 25 links dist.
marked T. 15 S. R. 4 E.
S. 34 B. T. No other
tree within limits
Surface rolling

S. through Range N. E.
 Chain:

Soil rocky 3rd. note
 Dense Palo Verde, brown
 mesquite & leucos fresh
 Altitude 2500 ft.

S. 89° 50' N. on the S. C. of
 of Sec. 33

- 36.00 ^{road} Top of mountain top.
 N. & S. & down altitude 2700 ft.
- 4000 ft Granite 18x8x6 ins 12 ins
 in the ground for standard
 "4 Sec. 33. marked
 S. C. "4 on N. face
 and raised a
 mound of stone
 along side. Pit
 unpracticable
- 52.07 Dry wash 20 links wide
 bet. S. roads.
- 59.00 Top of mt. ridge top.

3rd. Standard Parallel

Chain

65.00 N. W. & S. E. descend
Foot of mountain hill
N. W. & S. E.

90.00 Set a granite ^{stone} 12x10x6
ins. pins in the
ground for Standard
Cor. to Secs. 32 and 33
marked S. E. with
4 notches on E. and
2 notches on W. edges,
and raised a
mound of stone
along with. Pit
intractable

Surface mountainous
Soil rocky 3rd. rate
Dune to mts. No grass
The indications of copper
and silver are good

S. through Range 4 E
Chain

S. 89° 50' N. on the S.
Cg. of Sec. 32
Th. 12° 45' E.

37.34 Dry wash 30 links wide
lev. S. N.

4000 Set a granite stone, 14 x 6 x 6 ins., 9 ins.
in the ground for ^{stand} Sec, Cor, marked 150, on N.
face, dug pits 18 x 18 x 12 ins. E. and N.
of stone 5 1/2 ft. dist. and raised a mound of earth
1 1/2 ft. high, 3 1/2 ft. base. alongside.

5600 Dry wash 20 links wide lev.
S. N.

8000 Set a granite stone, 12 x 7 x 6
ins. This in the ground
for standard lev.
to Secs. 31 and 32
marked S. E. with 5
notches on E. and
1 notch on N. edges,
dug pits 18 x 15 x 12
ins. N. E. & N. of stone
5 1/2 ft. dist. and

3rd. Standard Parallel
Chains

and raised a
mound of earth
2 ft. high 4 ft.
square along side,
from which a mesquite
tree grew in clump.
Tr. N. 30° E. 80 links
dist. marked T. 15 S.
B. 4 E. S. 32. B. 5. No other
trees within limits
Surface rolling
Soil rocky 3rd. rate
Dense Iron wood, mesquite
and Palo Verde brush
Altitude 2350 ft.

1990 50' N. on the
S. Coy. of Sec. 31
Va. 12° 45' E.

10/14 Dry wash 20 links wide
Sec. S. N.

S. through Range & E. Chain

- 21.00 Indian village 7 houses
 b.s. S. of line 7 chains
- 40.00 Set a granite stone, 16 x 10 x 8 ins., 11 ins.
 in the ground for ^{stand} Sec, Cor, marked 1/2 Sec. on N.
 face, dug pits 18 x 18 x 12 ins. E. and W.
 of stone 5 1/2 ft. dist. and raised a mound of earth
 1 1/2 ft. high, 3 1/2 ft. base alongside.
- 59.00 Indian trail to N.E. & S.W.
- 79.90 Dry wash 30 links wide to
 S. 100 ft.
- 80.00 Set a post 4 1/2 ft. long 4
 ins. sq. with marked
 stone 24 ins. in the
 ground for Standard box
 to Apr 15 A. R. 354 E.
 marked S.C. T. 15 S. on
 N. R. 4 E. S. 31 on E.
 and R. 3 E. S. 26 on W.
 face, with 10 notches on
 N.E. & W. face. From
 which a Palo Verde tree 8
 ins. in diam. to.

3rd Standard Parallel
 Chains through Anupkote.

N. 40° E. 112 lbs. dist.
 marked T. 15 S. R. 4 E.
 S. 31 B. 5.

A Palo Verde tree 7 ins. in
 diam. br. N. 46° E. 97
 lbs. dist. marked
 B. 5. T. 15 S. R. 4 E. S. 31

A Palo Verde tree 7 ins.
 in diam. br. S. 34° W.
 48 lbs. dist. marked
 W B. 5. T. 15 S. R. 3 E. S. 26.

Sungai bed

Soil 3rd. rate

Dense mesquite, catclaw,
 and palo verde brush

Grass poor

Altitude 2325 ft.

1895 ft.

3rd Standard Parallel ⁸²

S. through Range 3 E.

BOOK 1488

Chains

From the Standard Cor.
to Twp. 15 S. Co.
Range 4 E. just established
I run S. 89° 55' W.
on the S. Coy. of Sec. 36
Va. 12045° E.

1.25
30.50
40.00

Dry wash 15 links wide cor. S.
Dry wash 40 links wide cor. S.W.

Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground for ^{Stand.} Sec. Cor.
marked 1/4 S.W. cor. face, dug pits 18 x 18 x 12
ins. E. and W. of post 5 1/2 ft. dist. and raised
a mound of earth 1 1/2 ft. high 3 1/2 ft. base around

post from which a
Cato blower 4 ins. in diam.
br. S. 32° W. 43 links dist.
marked S.E. "4 S. B.T."

79.50
80.00

No other trees within limits
Dry wash 15 links
wide cor. S.W.
Set a post 4 ft. long
4 ins. diam. with marked

Ind. standard Parallel

Chains

stone 12 in. in the
ground for standard
Cm. to feet. 3506
marked S.C. T. 15-S.
R. 3 E. on N. S. 36 on
E. and S. 35 on W.
further dug pit 18x18
in. N.E. of post.
5 $\frac{1}{2}$ ft. dist. and
raked a mound of
earth 2 ft. high 4 ft.
ft. wide around
post from which
a mesquite tree 5
in. in diam. br.
at 30 ft. 98 lbs. dist.
marked T. 15-S. R. 3 E.
S. 35. C. T. No other
trees within limits
Surface level
Soil 2nd. rate

D. through Range 3 E.
Chains

Dense Palo Verde mesquite
and green wood bush
No grass Altitude 2350 ft.

S. $89^{\circ} 58' N.$ on the S. C. of
of Sec. 35
Var. $12^{\circ} 45' E.$

H 500

Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground for ^{stand.} Sec. Cor.
marked $\frac{1}{2}$ Sec. on N face, dug pits 18 x 18 x 12
ins. E. and W. of post $5\frac{1}{2}$ ft. dist. and raised
a mound of earth $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base around
post. from which a
mesquite 18 ins. in diam.

Rs. N. $10^{\circ} E.$ 166 lbs. dist.
marked "4 S. B. T.

No other trees within limits

8000

Set a post 4 ft.
long 4 ins. diam.
with marked stone
12 ins. in the ground
for stand Sec.

85
 2d Standard Parallel
 Churns

To Secs. 34 & 35 marked
 S. 35 S. 15 S. R. 3 E.
 on N. S. 35 on E. and
 S. 34 on N. face. with
 2 notches on E. and 4
 notches on N. face. sup.
 pits 18 x 18 & 12 in. N. E.
 & N. of post. 5 1/2 ft.
 dist. and. David
 a mound of earth
 2 ft. high 4 1/2 ft
 diam around post.
 from which a mesquite
 tree 6 in in diam. br.
 N. 15° E. 181 links dist
 marked S. 15 S. R. 3 E.
 S. 35 B. 5. No other
 trees within limits
 surface level
 Soil gravelly 2d. rate
 Dura Palo Verde.

S. through Range & E.
Chains

mesquite and
juniper wood brush
Altitude 2300

S. 89° 50' W. on the S. E. of
Sec. 34 Jan. 12th 1884

4000

Set a post 3 ft. long 3 ins. diam with marked
stone, 12 ins. in the ground ^{touch} Sec. Cor.
marked $\frac{1}{4}$ S.E. on N face, dug pits 18 x 18 x 12
ins. E. and W. of post $5\frac{1}{2}$ ft. dist. and run
a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base. around
post. from which a mesquite-

tree 6 ins. in diam. to S.
N. 10° W. 74 links dist.
marked "4 S.B. 5. No other
trees within limits

6650

An Indian Village about
8 chains S. of here

8000

Set a post 4 ft. long
4 ins. sq. with marked
stone 12 ins. in the

Ind. Standard Parallel

ground for standard
 lev. to face, 34503
 marked S. 6. 5. 15 S.
 R. 3 E. on N. S. 24
 on E. and S. 33 on W.
 face. ^{3 notches on E + W} dug pit 18x18x12
 ins. N. E. 15 ft. of post.
 5 1/2 ft. dia. and
 raised a mound
 of earth 2 ft. high
 4 1/2 ft. base around
 post.

Surface level
 Soil sand. red
 Dense mesquite and
 greenwood brush
 altitude 2375 ft.

S. 89° 50' W. on the S.
 By. of Sec. 33
 Va. 12° 45' E.

S. through Range 3 E.

- 6.60 Road to. N. and S.
- 11.00 Dry wash 16 lbs. with
No. 1.
- 17.61 Leave down brush-entire
enclosure
- 20.10 Leave indian field
4.00 Set a post 3 ft. long 3 ins. diam. with marked
stone, 12 ins. in the ground for ^{Stand.} Sec. Cor,
marked $\frac{1}{4}$ S.C. on N. face. dug pits 18 x 18 x 12
ins. E and W. of post $5\frac{1}{2}$ ft. dist. and raised
a mound of earth $1\frac{1}{2}$ ft. high, $3\frac{1}{2}$ ft. base. around
post.
- 8.00 Set a post 4 ft. long
4 ins. sq. with marked
stone 12 ins. in the
ground for Stand.
Cor. to Sec. 32 & 33
marked S.C. T. 15 & R. 3 E.
on N. S. 33 on E. and
S. 32 on W. face with
4 notches on E. and
2 notches on W. face.

Ind. Standard Pyramid

dug pit 8x8x1/2 in
 N. of post 5 1/2
 ft. dist. and
 raised a mound
 of earth 2 ft. high
 4 1/2 ft. base
 around post
 from which an
 ironwood 8 in. in
 diam. to N. 40 E. 84
 inch dist. marked
 T. 15 S. R. 3 E. S. 33 03.5
 No other trees within limits
 surface level
 Soil red rate
 Dense mesquite catclaw
 and grasswood brush 7757
 No grass
 Altitude 2350 ft.

South through Range 3 E.

S. 29° 50' N. on the S.
 C. of Sec. 32
 Va. 12° 45' E.
 Road to N. H. 8 & C.

28,46

4,000

Set a post 3 ft. long 3 ins. diam with marked
 stone, 12 ins. in the ground for ^{stand} Sec. Cor.
 marked $\frac{1}{2}$ S.S.C. on N face, dug pits 18 x 18 x 12
 ins. E. and W. of post 5 1/2 ft. dist. and raised
 a mound of earth 1 1/2 ft. high, 3 1/2 ft. base. around
 post.

65,51

Dry mark in the wide
 Sec. H.

8,000

Set a post 4 ft. long
 4 ins. sq. with
 marked stone 12 ins. in
 the ground for stand-
 and lev. to Sec.

31. and 32 marked S.C.
 T. 15 S. R. 3 E. on N. S.
 32 on E. and S. 21 on
 N. face. South
 5 notches on E. and.

Ind. Standard Parallel
Lines

1 notch on N. face.
 dug pit 15x12
 ins. N.E. & W. of
 post 5 1/2 ft. dist.
 and raised a mound
 of earth 2 ft. high 4 1/2
 ft. base around post.
 from which a
 mesquite 5 ins. in
 diam. fr. N. 40 W. 86
 links dist. marked
 T. 15 & R. 3 E. S. 21 Q. T.,
 a mesquite 6 ins. in
 diam. fr. S 77° E. 24
 links dist. marked
 W. Q. T. T. 15 S. R. 3 E. S. 32.
 No other trees within limits.
 Surface level
 Soil red. silt
 Dense Ironwood, mesquite
 and Palo Verde Bush

S. through Ranges & E.
 Paris

S. $59^{\circ} 50'$ W. on the
 S. Ry. of Sec. 21

Th. $12^{\circ} 45'$ E.

18.42 Road bet. N.W. - E.

40.00

Set a post 3 ft. long 3 ins. diam with marked
 stone, 12 ins. in the ground for ^{mark} Sec. Cor.
 marked $\frac{1}{2}$ S.S. Cor. ^{face}; dug pits 18 x 18 x 12
 ins. E. and W. of post $5\frac{1}{2}$ ft. dist. and raised
 a mound of earth $1\frac{1}{2}$ ft. high $3\frac{1}{2}$ ft. base, around
 post.

6363 Dry wash 20 links
 wide Sec. H.

6641 Dry wash 15 links wide
 Sec. H.

80.00 Set a post $4\frac{1}{2}$ ft.
 long 4 ins. sq. with
 marked stone 12
 ins. in the ground
 for Standard Sec. T.

Thru 155 S. R. 283

E. marked S. C. 5' 15"

on N. R. 3 E. S. 31 on E.

Ind. Standard Parallel S.
 through S. E.
 Chais

A. 2 E. S. 36 on N. face
 with 6 notches on N.E.
 & N. face. ^{crossed with parallel lines} 49 ft.
 24 x 18 x 12 in. N.E. & N.
 of post. 6 ft. dist.
 and raised a
 mound of earth
 2 1/2 ft. high 5 1/2 ft.
 base around post.
 Surface level
 Soil 3rd. rate
 Dense mesquite catclaw
 and Palo Verde brush

I carefully examined the
 adjustment of my solar
 transit. to-day particularly
 the latitude and meridian
 apparatus and found
 them correct.

January 19th 1884

Ind. Standard Parallel
Chain, S. through Range 2 E.

From the Standard
Cor. to Sp. 15. S.
Pa. 253 E. just established
I run S. $89^{\circ}58' N$.
on the S. Ry. of Sec. 36
Va. $12^{\circ}45' E$.

9.11 Dry wash 10 miles wide
Cor. S.

1400 Dry wash 15 miles wide
Cor. S.

4000 Set a granite $14 \times 10 \times 6$
ins. \times ins. in the
ground for Standard
1/4 Sec. Cor. marked
S.C. 14 on N. face,
and raised a mound
of stone along side.
Pit impracticable
from which an Ironwood
tree 7 ins. in diam. to,
N. $80^{\circ} W$. 46 miles dist.

Ind. Standard Corall

Chairs

marked "4 S. B. T. No other
trees within limits

4016 Dry wash 15-20
yards S. of St.

5054 Road to N. W. & S. E.

7118 Road to N. W. & S. E.

7551 Dry wash 20 yards
S. of St.

8006 Set a limestone 22x12x
6 ins. 8 ins. in the
ground for Standard
Cor. to Nos. 35 & 36
marked S. E. with
1 notch on E. and
5 notches on N. edge,
and raised a
mound of stone
alongside. Pit
unpracticable from
which a Palo Verde
5 ins. in diam. to.

V

S. through Range 2 E,
Chavis

N. 41° N. 11 links dist.
marked 5.15 S. R. 2 N.
S. 35 Q. 5. No other
trees within limits
Surface broken
Soil rocky 2nd rate
Dense mesquite, catclaw
& Palo Verde brush
Altitude 2025 ft

S. 59° 50' N. on the S.
Cty. of Sec. 35.
Tn. 12° 45' E.

4000 lbs. Porphyry rock 16 x 10 x 8 ins.
11 ins. in the ground
for Standard 114 Sec.
Cor. marked 14 S. E.
on N. face. and raised
a mound of stone
alongside.
Pike impracticable

Ind. Standard Parallel
Chains

8000

according

Set a pegging rock 20x8x8
ins. 15 ins. in; the ground
for Standard Cor.

To Sec. 34 + 35 marked
S.E. with 2 notches on
E. and 4 notches on
N. edge. and raised
a mound of stone
along side.

Part impracticable

Surface mountainous

Soil 4th rate

Dense brush

No grass

S. 890 51' N. on the S.

Co. of Sec. 34

Pa. 12° 45' E.

according

Top of stump of

7. 10

S. through Range 2 E.
Chains

Quijotas mt. to. N. N.
and S. E. altitude 3950 ft.
Theerrick fan Arterian
well to. N. 40° E. in
Logan City about 60 chs.
distant.

General alluvio store to.
S. 37° 15' W. about 40 chs.
distant.

The Cur mine to. N. 21°
15' W. 15 chains distant.

Diamond

11.47 Foot of Perpendicular cliff
300 ft. high. continue to diamond.

36.00 Base of Quijotas mt. to N. N.
and S. E. altitude 2550 ft.

40.00 Set a granite rock 18x10x8
ins. 12 ins. in the
ground for standard
114 Sec. less. marked
St. 114 on W. face

2d. Standard Parallel
Chain

and raised a
mound of stone
alongside.
Pile impracticable
on N. side of wash

57.45 Dry wash 15 links wide
lev. S. H.

64.72 Dry wash 20 links wide
lev. S. H.

65.06 Road to. Cr. S. H.

67.62 Dry wash 10 links wide
lev. S.

72.00 Road to. Cr. N. and S. H.

Set a granite rock
14 x 10 x 8 ins. 9 ins. in
the ground for

Standard lev.

to Sec. 33 5 24

marked S. E. with
8 notches on E. and N.

edges, and raised

S. through Camp 2 E.
Chains

a mound of stone
along side. P.
Pit, impracticable
Surface mountainous
soil with water
Dense brush last 60 chs.
No grass

S 89° 51' W. on the
S. E. of Sec. 23
about Sta. 1204500

3240

Top of wet ridge to N. of
and descend altitude 2600 ft.

4000

Set a granite stone 18x
10x4 ins. 12 in. in the
ground for Sta. 1204500
1/4 Sec. cor. marked
St. 14 on N. face
and raised a
mound of stone along side
Pit impracticable

2nd Standard Parallel Chain

From which a Squares
14 ins. in diam. for
N. 30° W. 18 links dist.

60.90 Dry wash 10 links wide
W. N. W. around

71.30 Top of mt. ridge for
N. 45° S. and around

50.00 Set a granite stone
16 x 10 x 11 ins. 11 ins. in
the ground for Standard
Cor. to Sec. 32 8 33
marked S.C. with 4
notches on E. and 2
notches on W. edge,
and raised a
mound of stone alongside
it's impracticable
Surface mountainous
Soil 4th rate
Dense brush
Grass poor

J. through Range 2 E.
Rains

- 9.00 J. 59050' N. on the S.
13.10 Coy. of Sec. 32
Va. 12050' E.
Front of net for No. 1.
40.00 Dry wash 15 miles wide
Co. 1 N.
Set a granite stone 16 x 10 x 10 ins. 11 ins.
in the ground for ^{Standard} Sec. Cor, marked 150. on N.
face, dug pits 18 x 18 x 12 ins. E. and N.
of stone 5 1/2 ft. dist. and raised a mound of earth
1 1/2 ft. high. 3 1/2 ft. base. alongside.
88.80 Dry wash 20 miles wide Co.
1 N.
81.75 Set a malpais rock
12 x 10 x 8 ins. 8 ins. in
the ground for
Standard Cor.
to Sec. 31, and 32
marked 150, with
5 notches on E. and
1 notch on N. edge.
dug pits 18 x 18 x 12 ins.

103

Ind. Standard Parallel
Lains

N.E. & W. of stone 5 1/2 ft
dist; and raised
a mound of
earth 2 ft. High
4 1/2 ft. base alongside
From which a
Cabo Verde 6 ins. in diam.
br. N. 8° E. 174 links dist.
marked T. 15 S. Q. 2 E.
A. 32 B. T. an Ironwood
8 ins. in diam. br.
N. 25° W. 175 links dist
marked T. 15 S. Q. 2 E.
A. 31 B. T. No other
logs within limit
Surface mountainous
Soil Ind. & 4 th rate
Dense mesquite, cat-
claw and Cabo Verde
Brush. No grass

S. through Range W E,
Chains

From 5000 ft. on the
S. Cr. of Sec. 31

Va. 12° 50' E.

2000

around mt. for N.E. & S.W.

3618

Top of mt. for N.E. & S.W.

Descend

4000

Set a malpais rock

20 x 12 x 5 ins. 15 ins.

in the ground for
standard 14 sec. level.

marked S.C. 14 on

N. face and raised
a mound of stone
along side.

Pit impracticable

4900

Foot of mt. in canon
bet. N. around

5600

Top of mt. for N.E. & S.W.

Descend

8000

Set a malpais rock

22 x 8 x 6 ins. 17 ins. in the

Ind. Standard Parallel
 S. through Range 2 E.
 Chains

ground for Stand-
 ard Cor. to 5 ps.
 15 S. Pa. 152 E.
 marked S.B. with
 6 notches on N. E. & W.
 edges. and raised
 a mound of stone
 alongside.

Pit impracticable
 on N.W. slope of mt.

Surface magnesian
 Soil 4th rate

Dense mesquite & Palo Verde
 Brush

No grass

Ind. Standard Parallel
S. through Range & E.
Chario

From the Standard Cor.
to Tps. 150 S. Co.,
1 & 2 E. just established
I read S. 89° 50' W.
on the S. Edge of Sec. 36
Var. 92° 55' E.

1700 Foot of mt. to N.W. & N.E.
ascend

425 Top of mt. to N.W. & N.E.
descend

4000 Set a malpais rock
14x12x10 ins. 9 ins. in
the ground for Standard
1/4 Sec. Cor. marked
S.E. 1/4 on N. face
and raised a
mound of stone
along side.

Pit impracticable
4900 Foot of mt. to N.W.
& N.E.

107
 3rd

Standard Parallel

Chains

62,10 Dry wash 100 links wide
 Co. N. W.

5000 Set a malpais rock
 14 x 12 x 6 ins. 9 ins. in
 the ground for
 standard line to S. W.
 35 + 36 marked S. E.
 with 7 notches on E,
 and 5 notches on W.
 edge. dug pits 18 x
 18 x 12 ins. N. E. S. W.
 of stone 5 1/2 ft. dia.
 and raised a mound
 of earth 2 ft. high
 4 1/2 ft. wide alongside
 surface mountainous
 soil rocky with some
 dense mesquite and
 cactus. Undergrowth
 altitude 2050 ft.

S. through Range & E.
 Chain

Set a granite stone 12 x 10 x 6 ins. 8 ins.
 in the ground for ^{stand.} Sec. 35
 Va. 130 E.

0.42 Dry wash 40 lbs. wide
 by S. N.

1000 Set a granite stone 12 x 10 x 6 ins. 8 ins.
 in the ground for ^{stand.} Sec. 35, Cor. marked S. E. N.
 by two aug pits 18 x 18 x 12 ins. E. and N.
 of stone 5 1/2 ft. dist. and raised ground at north
 14 ft. high, 3 1/2 ft. high also aug.

18.04 Dry wash 25 inches wide
 by S. N.

1000 Set a granite stone 12 x 10 x 5
 ins. 5 ins. in the
 ground for Standard Cor.
 to Secs 34 & 35 marked
 S. E. with 2 notches
 on E. and 4 notches on
 N. edge. aug pits
 18 x 18 x 12 ins. N. E. & N.
 of stone 5 1/2 ft.
 dist. and raised

Ind. Standard Parallel Chains

a mound of earth
 2 ft. high 4 1/2 ft.
 base along side
 surface nothing
 Soil Ind. rate
 Dense catclaw, mesquite,
 Palo Verde and grasswood
 Brush no grass

S. 89° 50' W. on the
 S. Ry. of Sec. 34
 Va. 13° 5' E.

- 7.00 Euter wash
 - 10.17 Leave wash loc. S.W.
 - 25.80 Dry wash 25 links wide
loc. S.W.
 - 28.00 Same wash loc. S.W.
 - 29.50 " " " S.W.
 - 40.00
- Set a post at the end of the line marked
 Stone, 12 ins. in diameter
 marked 4 S.C.M.N.
 ins. E. of W.

S. through Range 1 E.
Chains

a mound of ...
1905.

- 53.88 Dry wash 31 links
wide Leo. S. W.
- 60.21 Dry wash 15 links wide
Leo. S. W.
- 61.70 Same wash Leo. N. W.
- 63.00 Dry wash 15 links wide
Leo. S. 80° W.
- 64.40 Dry wash 40 links wide
Leo S.
- 79.55 Dry wash 20 links wide
Leo. S. W.
- 80.00 Set a post 4 ft.
long 4 ins. sq. with
marked stone 12
ins. in the ground
for Standard Cor.
To Sec 33 & 34 marked
S. 5. 15 S. R. 1 E. or N.
S. 24 or E. and S.

Ind. Standard Parallel
Chains

33 on W. face, with
3 notches on E. & W.
face. dug pits 18x18
x 12 ins. N. E. & N. of
post. 5 1/2 ft. dist. and
raised a mound
of earth 2 ft. high 4 1/2
ft. feet around post.
From which a
Palo Verde 5 ins. in
diam. br. N. 48° W. 76
links dist. marked
T. 15 S. R. 1 E. S. 33 @ J.
No other trees within
sight.

Surface rolling & rocky
Soil 4th rate
Dune catclaw mesquite
and Palo Verde Brush
and greasewood brush

A. through Range 1 E.
Chairs

S. 89° 50' N. on the
S. cor. of Sec. 33
Var. 18° 10' E.

40.00

Set a post 3 ft. long 3 ins. diam. with marked
stone, 12 ins. in the ground for ^{Stack} Sec. Cor.
marked $\frac{1}{2}$ S.C. on N face and pits 18 x 18 x 12
ins. E. and N. of post 2 ft. dist and raised
a mound of earth 1 1/2 ft. high on top around
post.

from which a
meaguri 8 ins. in diam.
to N. 10° E. 40 links dist
marked as S.B. 5.

No other trees within limits

07.13

Dry wash 40 links wide
lev. S. N.

62.00

Dry wash 25 links wide
lev. S. N.

80.00

Set a post 4 ft. long
4 ins. sq. with
marked stone 12 ins
in the ground for
Standard tree. To

Ind. Standard Parallel
Chains

Secs. 32 & 33 marked
 S. C. T. 15 S. R. 1 E. m. N.
 S. 33 on E. and S. 30
 on W. faces with 4 notches
 on E. and 2 notches
 on W. edges - faces
 deep pit 18 x 8 x 12 ins.
 S. E. 15 W. of post, 5 1/2
 ft. dist. and raised
 a mound of
 earth 2 ft. high 4 1/2
 ft. base around post.
 Surface rocky ridge
 and gullies
 Soil 4th rate
 Dense mesquite Palo
 Verde & greenwood
 Brush no grass
 Altitude 1725 ft.

S. through Range 1 E.
Chain

S. 89° 50' N. on the S.
Cry. of Sec. 32
Va. 13° 15' E.

32.40

Enter mark

34.00

Leave mark cor. S 80° N.

40.00

Set a post 3 ft. long 3 ins. diam. with marked
stone, 12 ins. in the ground for ^{Standard} Sec. Cor.
marked $\frac{1}{4}$ SSC on N. face. dug pits 18 x 18 x 12
ins. E. and N. of post 5 ft. dist. and raised
a mound of earth 1 1/2 ft. high, 3 ft. base, around
post.

62.00

Dry mark 20 links
wide cor. S. N.

80.00

Set a post 4 ft. long 4
ins. dia. with marked
stone 12 ins. in
the ground for
Standard cor. to
Sec. 31 and 32
marked S. E. 5. 15 S.
R. 1 E. on N. S. 32 on E.
S. 31 on N. face.

2nd. Standard Cavalry Chairs

with 5 notches on E.
and 1 notch on W.
fours. dug pit
18 x 18 x 12 ins. N.E. &
W. of post. 5 1/2 ft.
diam. and raised
a mound of
earth 2 ft. high
4 1/2 ft. diam around
post.

Surface ascending
gradly to N.E.

Soil sub. rate.
Dense mesquite and
greasewood brush
no grass

Altitude 1725 ft.

T 99° 50' N. on the
By. of Sec 31
Var. 13° 15' E.

A. through Range 1 E.
Chains

12.58 Indian tomb 40 links
S. of line
27.58 Enter field
34.00 Break fence leave field
40.00 Set a post 5 ft. long 2 ins. diam. in the ground
stone, 12 ins. in diam. ^{stand} S. E. Cor.
marked $\frac{1}{2}$ S.S. or N. face; dug pit 15 x 15 x 12
ins. E. and W. of post 5 ft. dist. and raised
a mound of earth 1 1/2 ft. high 3 ft. base around
post.

80.00 Standard
To the ^N hor. to Sp. 15
S. Co. 1 E. 5 W.
Surface level
Soll 1st. rate
Dense greasewood and
mesquite brush
No grass

I carefully examined
the adjustment
of my solar transit
to-day particularly

the latitude and
reversing apparatus
and I found them
correct.

✓ January 21st. 1884

General Description

This line runs over mountains and level country. The greater part of the line runs over level country.

The vegetation consists of Mesquite, Palo Verde, greenwood and catclaw brush with nearly all the varieties of cactus. The oil varies from 1st to 4th rate.

Grass is very poor and scattering except at the start end of the line where it is good.

It also passes over the Quijota Mountain which has been found to be very rich in silver.

The Capago Indians

118A

BOOK 1488

Have scattering villages
both N. & S. of the line.

Ind. Standard Parallel

Chains

From the Standard 14
 Sec. Cor. on the S.
 By. of Sec. 33 T. 15 S.
 R. 18 E. recently described
 by me. ^{Post probably marked in the stone mound} now East
 on the S. By. of Tps. 15 S.
 on a random line
 with a variation of
 120° 30' E. sitting temporary
 14 Sec. and Sec. Cor.
 at each 40 and 80 Chs.
 and at 200 Chs. I search
 for the Standard Cor.
 to Secs. 35 & 36; but
 fail to find it. I
 therefore continue my
 line E. and at 767.21 Chs.
 I arrive at a point
 414 Chs. N. of the Standard
 Cor. to Tps. 15 S. R. 19
 and 20 E. which is

S. through Range. 19 E.

Chain

a large mesquite - post
 properly marked and
 notched with pits
 on each line N. E. & N.
 of post 6 ft. dist. and
 a marked of earth
 around post. February 1st 1854

Then I ran N. $89^{\circ}42'N$
 on a true line on
 the S. Ry. of Sec. 36
 Va. $12^{\circ}30'E$.

520

4400

Road brs. N and S.

marked 12 ft. on the ground for
 marked S. E. on N.
 N. E. N.

from which a
 mesquite stump ^{4 in in diam} frs.

S. $20^{\circ}E$. 7 links dist. marked

18. 114 S. B. J. No other trees

within limits

Ind. Standard Parcel
 Chain

5990
 8000

Road to N.W. & E.
 Set a post 4 ft. long
 4 ins. sq. with
 marked stone 12 ins
 in the ground
 for Standard Cor.
 to Secs. 35 and 36
 marked S.E. 5. 10 - S.R.
 19 E. on N. S. 36 on
 E. and S. 35 on N. face
 with 1 notch on E. and
 5 notches on N. face.
 dug pits 18 x 18 x 12 ins.
 N.E. & N. of post.
 5 1/2 ft. dist. and
 raised a mound
 of earth 2 ft. high
 4 1/2 ft. diam
 around post.
 from which a
 magnetic stamp 14 ins.

S. through Range 19 E.
Chains

in diam. to N. 31° E.
1st bench dist: marked
T. W. L. R. 196. S. 26 W. S.

No other trees within bench

Surface level

Soil 1st rate

Dense mesquite and

greewood brush

Grass fair altitude 3900 ft.

N. 59° 42' W. on the S.
Qty. of Sec - 35 -
Va. 12000' E.

35.26 Leave dense brush & valley
to N. and S. begin to
ascend mt. ridge

4000 Sit on granite stone
18 x 6 x 12 ins. in the
ground for standard
114 Sec. of lev. marked
S.C. 114 on N. face.

Ind. Standard Parallel

Chains

and raised a mound of stone alongside.

But impracticable

57.46 Dry wash 15 links wide Sec. S.

6000 Road to N.W. & S.E.

73.00 Wash 60 links wide Co. S.E. around steep bluff.

75.50 Top of bluff to.

N.W. and S.E. Altitude 4200 ft.

8000 Set a granite 12x10x5 in. 4 in. in the

ground for standard Sec. to Sec. 34 & 35 - marked S.E. with 2

notches on E. and 4 notches on N. edge

and raised a mound of stone alongside

A. through Range 19 E.

Chains

Pipe impracticable
 Surface level and
 mountains
 Soil 1st and 4th rate
 Dense mesquite and
 greenwood brush 35.26 Cha
 Scattering brush 44.74
 Grass fair
 Altitude 4175 ft.

N. 89° 42' W. on the S.
 By. of Sec. 34
 Va. 12° 30' E.

Over mt. ridges

7.10

Dry wash 40 links wide
 low. It's across ^{over} mt. ridges

25.00

Dry wash 60 links wide
 low. S.E.

40.00

Set a granite ^{stand.} stone 10 x 10 x 6 in 7
 in the ground for 1 Sec. Cor. mark S.E. N.
 face, dug pits 18 x 18 x 12 in E N.
 of stone 53 ft. dist and

3rd. Standard Parallel Chairs

- 43.90 Wash 15 links wide lev.
S.E.
- 63.50 Wash 44 links with Co. N.
- 69.00 Same wash 30 lbs. wide
lev. N.E.
- 71.50 Same wash 30 lbs wide
lev. S.E.
- 80.00 Set a granite stone
24x8x6 ins 18 ins.
in the ground
for Standard Cor.
to Sec. 32534 marked
S.C. with 3 notches
on E. and N. edges
dug pits 18x18x12
ins. N.E. or N. of
stone 5 1/2 ft. Set
and raised a
mound of earth
2 ft. high

S. through Range 19 E.
Chairs

4 1/2 ft. bore along ridge
Surface mountainous
Soil 3rd. rate
Scattering mesquite brush
Grass fair
Altitude 4180 ft

N. 89° 42' W. on the S.
By of Sec. 33

Var. 12° 30' E.

ascending over mt. ridge
Mark Sec. 33 E.

8.00

15.00

same mark Sec. 33 E.
around

40.00

Set a granite stone
18 x 16 x 6 ins. 12 ins. in
the ground for
Standard "4" Sec. 33 E.
marked S. E. "4" on
N. face, and raised
a mound of

3rd. Standard Parallel
Chains

stone along side
 Pit is unperfected
 8000 ft. granite rock in
 place 14x10x8 ft above
 ground which I
 marked for the
 Standard level to
 Sec. 32533 with a
 cross (+) at exact cor
 point and 4 notches
 E. and 2 notches W.
 of cross. and raised
 a mound of stone
 along side.

Surface mountainous
 Soil 4th rate
 Grass scattering
 Altitude 4500 ft.

v

S. through Range 190
Chains

St. 59042' N. on the S.
By. of Sec. 32
Va. 12° 30' E.

Ascending

12.00 Low summit S. N. of line
6 chs. high; mt. peak
extends 120 chs. around
S. E. slope of rocky
mt. at an angle of 34°
55.70 Top of mt. ridge S. N.
N. W. and S. E. altitude 500 ft.
chain along S. end of
mt. ridge and
canon.

40.00 Set a granite stone
18 x 14 x 12 ins. in
the ground for standard
14 Sec. lot. marked
St. 14 on N. face and
raised a row
of stone alongside.

Int. Standard Parallel
Chains

8000

Pik impracticable
among huge boulders.

Set a granite rock
24x8x6 ins. 18 ins. in

the ground for Standard
Cen to S. end of 2
marked 16. with 5
notches on E. and 1
notch on N. edge.
and raised a mound
of stones alongside.

Pik impracticable Dressed
Surface more tainous
Soil 4th rate
Some grass No timber
Altitude 5100 ft.

C. 89042' N. on the S.
By. of Sec. 31
D. 12° 30' E.
D. 12000

S. through Range 19 E.
Chains

- 2200 Dry wash 15-16 ft wide
to S.
- 4000 Set a granite stone
16x14x12 ins in
the ground for Standard
14 Sec. Cor. marked
14 S.C. on N. face
and raised a mound
of stone alongside
Piki impunctata etc.
- 70.40 Creek 5-6 ft wide to
S. 12° E. altitude 4300 ft. around.
- 76.00 Top of mt. ridge to
N. & S. altitude 4500 ft. descend
- 87.21 Set a granite stone
20x10x4 ins 15 ins in
the ground for Standard
Sec. to Twp. 15 & 16 S.
R. 15 & 19 E. marked
S.C. with 6 notches
on N.E. & N. faces.

3rd. Standard Parallel
Chains through Range 198.

and raised a
mound of stone
along side.

Pit, impracticable
Surface mountains

Soil & the rest

Grass poor

No timber

Altitude 4400 ft

I carefully examined the
adjustments of my
Solar Transit, to day
particularly the latitude
and reversing apparatus
and found them correct

✓ Feb. 2nd. 1854

182

3rd. Standard Parallel.

S. through Range 18 E.

BOOK 1488

Lines

From the Standard Cor.
to Sta. 15 on S. Cor.
18 and 19 E. just
established. I run
N. $59^{\circ}42' N.$ on the
S. Co. of Sec. 36
Va. $12^{\circ}20' E.$

Descending

9.45 Dry wash 20 links wide
Sta. 1.

26.69 Creek 41 links wide
Co. $111^{\circ} E.$ attach 4200 ft. mound
East slope Santa
Catarina mt.

4000 Set a granite $18 \times 10 \times 4$
ins. $1/2$ ins. in the
ground for Standard
"4 Sec. Cor. marked
S.C. "4 on N. face
and raised a mound
of stone along side.

✓

Std. Standard Parallel
Chairs

8000

Pike impracticable
Set a granite rock
20x12x3 lbs. 15 ins. in
the ground for
Standard level to Sec.
35536 marked N.E.
with 1 notch on E.
and 5 notches on W.
edge. and raised
at mound of stone
alongside. Pike impracticable
on E. slope of rocky
bluff of mt.

Surface mountainous
Soil rocky Std. rate
bearing oak
Grass poor
Altitude 4675

through Range 1 & E.
Chains

N 89° 40' W on the S.
Pg. of Dec. 25
Bar 12° 00' E.

ascending

3850

Top of mt. ridge. W.S.
N. and S. Altitude 5200ft
cloud

4000

A rock in place 3x2x1
ft. above ground
which I marked for
Standard "4" Sec. Cor.
with a cross ⁽⁺⁾ at exact
cor. point and "4" N.C. on
S face. and raised
a mound of stone
alongside. Cts impracticable.
The position of the rock
was such I could
not mark it on N. face.
A powder with a
flat. rock on top

Ind. Standard Parallel
Chains

- 15 ft. high 10 ft. in
chain. fr. N. 45° W.
5 lbs. dist.
- 57.30 Creek 6 lbs. wide lev. 1
attitude 4800 ft. around
- 69.00 Top of mt. ridge
fr. S. 27. 5° E. descend
attitude 5200 ft.
- 81.00 A foulder in place
12 x 10 x 10 ft. which I
mark for the Standard
lev. fr. sea. 34530 -
with a cross (+) at
exact lev. point and
2 notches E. and 4 notches
W. of cross. and raised
a mound of stone
alongside. From which
a white oak 2 in. in
diam. fr. S. 45° E. 48
Tubs dist. marked

S through Range 18 E.
Chain

W. A. T. T. 15 h. A. 18 E. S. 35
A Black oak 10 ins. in
diam. Fr. N. 61° W. 46

limbs dist. marked
T. 15 h. A. 18 E. S. 34 A. T.

No other trees within limit
altitude 500 ft. in canon
foot of main range
Surface mountains
are rocky

Soil 4th rate

✓ Scattering oak grow fair

N. 89° 42' W. on the S.
By of. Sec. 34

7a 12° 30' E.

Ascend

35.78 Creek 6 lbs. wide 20
ft. down precipices from
50 to 150 ft. high
4000. Set a granite stone

2nd. Standard Parallel
Chains

18x9x6 ins. 12 ins. in
the ground for Standard
"4 Gen. Cox. marked
S.E. "4 on N. face
and raised a
mound of stones along side

5000
7000

Pike impracticable
Enter dual fork altitude 5950 ft

Set a granite stone
18x10x6 ins. 12 ins. in
the ground for Standard
Cox. to Sec. 33834 marked
S.E. with 3 notches
on E. and N. edges
and raised a
mound of stone
along side.

Pike impracticable
Altitude 7,450 ft.
Infer mountainous
Soil 2nd. rate

S. through Range 18 E.
Chain

Dense forest 30 chs.
Duttings " 50 chs
No grass the last 60 chs.

N. 89° 42' W. on the
S. By. of Sec. 33
Va. 12° 30' E.

Round through dense
magnolia forest

10.00 Top of mt. to N.W.
and S.E. altitude 7550 ft.

14.00 Descend

4.00 To the Standard 14 Sec.
Cor. on the S. By.
of sec. 33. 15 S R 18 E
Surface mountainous
Soil 4th rate
Dense Prime Timber
and magnolia forest

February 4th 1884

General Description

This line runs over the
S. End of the Santa
Catalina mts, and
is very rough
except the E. end
which is level.

On the mountains
are found Pine, Pinon
Oak and white-oak
Juniper and several
other kinds of trees
Also mesquite bush.
The mountains ^{are} of granite
formation and
are well watered
For final notes see Book No 8

U. S. Surveyor General's Office,

Tucson, Arizona, July 21, 1884

The foregoing Field Notes of the Survey of the

Third Standard Parallel
 South, through Ranges
 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 19
 and a part of 18 East.

Of the Gila and Salt River Base and Meridian, Arizona, execu-
 ted by J. B. McLaughlin

Deputy Surveyor, under his contract of the 18th

day of June, 1884, having been

critically examined and the necessary corrections and explana-
 tions made, the said Field Notes and the surveys they describe

are hereby approved

Raphael Johnson
 Surveyor General.