

MAR 30 1905

56

acquired  
Desiring sheets  
Jan 1905

1876  
Book "A"

BOOK 1876

# FIELD NOTES

RE  
OF THE SURVEY OF THE

5<sup>th</sup> Standard Par. U. through R 18 N. and  
Survey of 5<sup>th</sup> Guide Mer. W. through Tps. 20. 19. 18 + 17 N.

1876

1876

Of the Gila and Salt River Meridian,  
Territory of Arizona

AS SURVEYED BY

John J. Fisher, United States Deputy Surveyor,

Under his Contract No. 126, dated March 14, 1905

Survey commenced March 19<sup>th</sup>, 1905

Survey completed March 30<sup>th</sup>, 1905

NAMES AND DUTIES OF ASSISTANTS.

BOOK 1876

George Cassidy Chumman

A. N. Oliver Chumman

Reynold Edmunds Chumman

Irving Ayer Chumman

J. D. Sanders Woodman

E. O. Semerway Flyman

54 Guide meridian West.

1 12 6

1 10 6

1 7 6

1 4 6

6-151

12 12 7

12 10 7

12 7 7

12 4 7

13 14 18

13 11 18

13 8 18

13 5 18

T 17 N R 19 W

T 18 N R 19 W

T 19 N R 19 W

T 20 N R 19 W

24 14 19

24 11 19

24 8 19

24 5 19

25 15 20

25 12 20

25 9 20

25 6 20

36 15 31

36 12 31

36 9 31

36 6 31

BOOK 1876

INDEX DIAGRAM.

5<sup>th</sup> Standard Par. W.

Township 21 N., Range 18 W.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32 5 <sup>th</sup> Standard Parallel North 33				36
3	3	2	2	2	1

Meanders Page.....

5<sup>th</sup> Standard Par. W.

PRELIMINARY OATHS OF ASSISTANTS.

WE, George Cassidy and A. N. Oliver  
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of 5<sup>th</sup> Standard Par. N. through R. 18<sup>th</sup> and 5<sup>th</sup> Guide Mer. through Tps. 20, 19, 18 & 17 N.

George Cassidy, Chainman.  
A. N. Oliver, Chainman.

Subscribed and sworn to before me this 18<sup>th</sup>  
day of March, 1905



My commission expires  
May 19, 1908

J. J. Fisher  
Notary Public

WE, Reginald Edmunds and Irving Auger  
do solemnly swear that we will well and truly perform the duties of ~~chainmen~~ <sup>chainmen</sup> ~~in the establishment of corners~~, according to the instructions given us, to the best of our skill and ability, in the survey of 5<sup>th</sup> Standard Par. N. through R. 18<sup>th</sup> and 5<sup>th</sup> Guide Mer. through Tps. 20, 19, 18 & 17 N.

Reginald Edmunds, Chainman.  
Irving Auger, Chainman.

Subscribed and sworn to before me this 18<sup>th</sup>  
day of March, 1905



My commission expires  
May 19, 1908

J. J. Fisher  
Notary Public

WE, J. J. D. Sanders and me  
do solemnly swear that we will well and truly perform the duties of ~~chainmen~~ <sup>me</sup> ~~in the establishment of corners~~ and other duties, according to instructions given us, to the best of ~~our~~ <sup>my</sup> skill and ability, in the survey of 5<sup>th</sup> Standard Par. N. through R. 18<sup>th</sup> and 5<sup>th</sup> Guide Mer. through Tps. 20, 19, 18 & 17 N.

J. J. D. Sanders, ~~Chainman~~ <sup>Chainman</sup>.

Subscribed and sworn to before me this 18<sup>th</sup>  
day of March, 1905



My commission expires  
May 19, 1908

J. J. Fisher  
Notary Public

I, E. O. Hemenway, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of 5<sup>th</sup> Standard Par. N. through R. 18<sup>th</sup> and 5<sup>th</sup> Guide Mer. through Tps. 20, 19, 18 & 17 N.

E. O. Hemenway, Flagman.

Subscribed and sworn to before me this 18<sup>th</sup>  
day of March, 1905



My commission expires  
May 19, 1908

J. J. Fisher  
Notary Public

5710

Chains

Having faithfully searched for the Fifth Standard parallel, I was unable to find any trace thereof W of the Standard cor Tps 21 N. Rs 17 and 18 W. Therefore, I resurveyed the Fifth Standard parallel N. through Tp 21 N.R 18 W.

Survey commenced March 19th, 1905, and executed with a W. and L. E. Gurley Light Mountain Transit with Smith Solar attachment transit not numbered. The horizontal limb is provided with two opposite verniers, reading to single minutes of arc, which is also the least count of the verniers of the lat and decl arc.

I begin at the Standard cor of tps 21 N Rs 17 and 18 W, which is a lava stone 12 x 8 ins, 8 ins above ground marked and witnessed as described by the Surveyor General, in lat  $35^{\circ} 5' 24''$  N, long  $114^{\circ} 7' 10''$  W. 6' 3" W

The instrument was examined and tested on the true meridian at Phoenix, found correct, and was approved by the Surveyor General for Arizona, March 15th, 1905. I examine the adjustment of the transit and correct the level and collimation errors thereof.

In order to test the Solar apparatus by comparing the results of observation on the sun made during a.m. and p.m. hrs with a true meridian determined by observations on the Polaris, I proceed as follows:

At 4 h p.m. l.m.t., I set off  $35^{\circ} 5' N$  on the lat arc and  $0^{\circ} 30' S$  on the decl arc and marked the true meridian thus determined with the solar by a cross on a stone firmly set in the ground 5 chs N of my station.

At 7 h 32 m p.m. l.m.t., I observed Polaris at its Western elongation in accordance with the instructions in the Manual and marked the line thus determined by a tack driven in a wooden peg driven in the ground 5 chs N of my station.

March 19th, 1905.

March 20th, at 8h a.m. l.m.t., I lay off the azimuth of Polaris  $1^{\circ} 28' E$  and marked the true meridian thus determined by cutting a small groove on the stone set last evening on which the true meridian falls 0.2 ins W of the mark determined by the Solar.

At 8h 10m a.m., I set off  $35^{\circ} 5' N$  on the lat arc and  $0^{\circ} 14' S$  on the decl arc and marked the true meridian determined with the Solar by a cross on the stone already set 5 chs N of my station. This mark falls 0.3 ins W of the true meridian, established by Polaris observation.

The Solar Apparatus by p.m. and a. m. observations defines position for true meridian about  $0' 11'' E$  and  $0' 16'' W$  of the meridian established by Polaris observation, therefore, I conclude the adjustments of the instruments are satisfactory.

The magnetic bearing of the true meridian is  $15^{\circ} W$  which gives a magnetic decl of  $15^{\circ} E$ .

From the Standard cor above described, I run W on S Boundary of Sec. 36 over level ground, gently sloping to the W.

9.00  
25.60  
35.30

cross gully, course SW 10 lks wide  
cross gully, course SW 10 lks wide  
cross gully, course SW 10 lks wide

Difference between measurements of 40.00 chs by two sets of chainmen, is 4 lks, position of middle point

40.00

By 1st set, 39.98 chs  
By 2nd set, 40.02 chs, the mean of which is  
Set a lava stone 20 x 12 x 6 ins, 16 ins in ground for Standard  $\frac{1}{4}$  Sec cor, stone marked S.C.  $\frac{1}{4}$  on N face. Raised a mound of stones 2 ft base  $1\frac{1}{2}$  ft high N of cor. No trees, pits impracticable.

Difference between measurements of 80.00 chs by two sets of chainmen, is 10 lks, position of middle point

By 1st set, 80.05 chs  
By 2nd set 79.95 chs, the mean of which is

Examiner's priv. lat. of 35 11 1/2 N

BOOK 187  
chains  
680.00

Set a lava stone 24 x 12 x 6 ins, 18 ins in ground for St. cor of secs. 35 and 36, stone marked 1 groove on E and 5 grooves on W faces, dig pits 18 x 18 x 12 ins, 3 ft E and W and 7 ft N of cor, raised mound of earth, 4 ft base and 2 ft high, N of cor. No trees.  
Soil, sandy loam, first class.  
Vegetation, grass and grease wood brush.  
Land, level, sloping gently to the W and S.

West on S boundary of Sec. 35, over level land gently sloping to the W.  
Difference between measurements of 40.00 chs by two sets of chainmen, is 8 lks, position of middle point

By 1st set, 40.04  
By 2nd set, 39.96 chs, the mean of which is 40.00  
Set a lava stone 16 x 10 x 6 ins, 12 ins in the ground for Standard  $\frac{1}{4}$  Sec. cor, stone marked S. C.  $\frac{1}{4}$  on N face. Dig pits 18 x 18 x 12 ins, 3 ft E and W of cor. Raised mound of earth 3  $\frac{1}{2}$  ft base, 1  $\frac{1}{2}$  ft high N of cor.  
Difference between measurements of 80.00 by two sets of chainmen is 14 lks, position of middle point

By 1st set, 80.07 chs  
By 2nd set, 79.93 chs, the mean of which is 80.00  
Set a granite stone 24 x 10 x 5 ins, 20 ins in ground for Standard cor secs. 34 and 35, stone marked 2 grooves on E and 4 grooves on W faces. Dig pits 18 x 18 x 12 ins 3 ft E and W and 7 ft N of cor, raised mound of earth 4 ft base, 2 ft high, N of cor.  
Soil, sandy loam, first rate.  
No timber, small amount grass and grease wood.

21.00 West on S boundary Sec. 34.  
Enter dense undergrowth grease wood.  
Difference of measurement of 40.00 chs by two sets of chainmen is 6 lks, position of middle point  
By first set 39.97 chs  
By 2nd set, 40.03 chs, the mean of which is 40.00

40.00 Set a granite stone 18 x 9 x 7 ins, 14 ins in ground for Standard  $\frac{1}{4}$  Sec. Stone marked S.C.  $\frac{1}{4}$  on N face. Dig pits 18 x 18 x 12 ins, 3 ft E and W of cor, raised mound of earth, 3  $\frac{1}{2}$  ft base, 1  $\frac{1}{2}$  ft high, N of cor.

45.55 Cross Dry creek, course SW 30 lks wide  
60.00 Cross Dry Creek, course SW 30 lks wide  
62.65 Cross Dry Creek, course SW 40 lks wide  
75.50 Cross dry wash, course SW 100 lks wide  
Difference of measurement of 80 chs by two sets of chainmen is 12 lks, position of middle point

By 1st set, 79.94 chs  
By 2nd set, 80.06 chs, the mean of which is 80.00  
80.00 Set a granite stone 18 x 8 x 6 ins, 14 ins in ground for Standard cors of secs 33 and 34. Stone marked S.C. on N face and three grooves on E and 3 grooves on W faces. Dig pits 24 x 18 x 12 ins E and W, 3 ft from cor and N 7 ft, raised a mound of earth 4 ft base 3 ft high, N of cor.  
Soil, sandy loam, first rate.  
No timber, scattering grass and grease wood.

At 12h m. l.m.t., I set off 0°10  $\frac{1}{2}$ ' on the S on the lat arc and observed the sun on the meridian. The resulting lat is 35° 5  $\frac{1}{2}$ ' N.  
Thence I run

18.60 W on S boundary of Sec. 33  
Cross gulch 10 lks wide, course SW  
30.65 Cross dry creek, 80 lks wide, course S.  
Difference of measurement of 40.00 chs by two sets of chainmen is 4 lks, position of middle point

By 1st set, 40.02 chs  
By 2nd set, 39.98 chs, the mean of which is 40.00  
40.00 Set a granite stone 16 x 12 x 5 ins, 12 ins in ground for Standard  $\frac{1}{4}$  Sec cor, stone marked S.C.  $\frac{1}{4}$  on N face. Dig pits 18 x 18 x 12 ins, 3 ft E and W of cor, raised

Chains	
	mound of earth $3\frac{1}{2}$ ft base, $1\frac{1}{2}$ ft high, N of cor. No trees.
75.30	Cross wash, course S, 20 lks wide Difference of measurement of 80.00 chs, by two set of chainmen, is 8 lks, position of middle point By 1st set, 79.96 chs. By 2nd set, 80.04 chs, the mean of which is
80.00	Set lava stone 18 x 10 x 10 ins, <del>14</del> 14 ins in ground for Standard cor, secs. 32 and 33. Stone marked S. C. on N. face and 4 grooves on E and 2 grooves on W faces. Dig pits 24 x 18 x 12 ins, 3 ft E and W and 7 ft N of cor, raised mound of earth 4 ft base, 2 ft high, N of cor. Soil, sandy loam, first class. Land, level, covered with scattering patches of grass and grease wood.
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2.00	West on S boundary Sec. 32 Leave grease wood brush, enter grassy plain. Difference of measurement of 40.00 chs by two sets of chainmen, is 6 lks, position of middle point By 1st set, 40.03 chs By 2nd set, 39.97 chs, the mean of which is
40.00	Set granite stone 20 x 6 x 6 ins, <del>16</del> 16 ins in ground for Standard $\frac{1}{4}$ Sec, stone marked S.C. $\frac{1}{4}$ on N face. Dig pits 18 x 18 x 12 ins, 3 ft E and W of cor, raised mound of earth, $3\frac{1}{2}$ ft base, $1\frac{1}{2}$ ft high, N of cor.
60.00	Leave grassy plain, enter grease wood brush. Difference of measurements 80.00 chs by two sets of chainmen, is 12 lks, position of middle point By 1st set, 79.94 chs By 2nd set, 80.06, the mean of which is
80.00	Set granite stone 18 x 8 x 5 ins, <del>14</del> 14 ins in ground for Standard cor of Secs. 31 and 32. Stone marked S. C. on N face, 1 groove on W face and 5 grooves on E face. Dig pits 24 x 18 x 12 ins, 3 ft E and W and 7 ft N of cor. Raised mound of earth, 4 ft base, 2 ft high, N of cor. Soil, sandy loam, first rate. Land, level, sloping to the E.
March 20th, 1905.	
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March 21st.	
At 7h 30 m. 1.m.t., I set off $35^{\circ} 5'$ on the lat arc and $0^{\circ} 10'$ N on the decl arc and determined with the Solar, the true meridian at the Standard cor of secs. 31 and 32, Tp 21 N, R 18 W.	
Thence I run	
	W on S boundary of Sec 31
23.85	Cross dry creek, course SE, 60 lks wide
35.85	Cross dry creek, course SE, 20 lks wide
39.80	Cross dry creek, course SE, 10 lks wide
	Difference of measurement of 40.00 chs by two sets of chainmen, is 6 lks, position of middle point By 1st set, 39.97 chs By 2nd set, 40.03 chs, the mean of which is
40.00	Set a granite stone 20 x 8 x 6 ins, <del>16</del> 16 ins in ground for $\frac{1}{4}$ sec cor, stone marked S.C. $\frac{1}{4}$ on N, raised a mound of stone 2 ft base, $1\frac{1}{2}$ ft high N of cor.
	No trees, pits impracticable.
66.65	Cross dry creek, course SE, 60 lks wide Difference of measurements of 80.00 chs by two sets of chainmen, is 10 lks, position of middle point By 1st set, 80.05 chs By 2nd set, 79.95 chs, the mean of which is
80.00	Set a granite stone 20 x 10 x 5 ins, <del>16</del> 16 ins in ground for Standard cor of Tps. 21 N, Rs 18 and 19 W, stone marked S.C. 21 N on N, 18 W on E and 19 W on W, 6 grooves on E, W and N faces. Dig pits 30 x 24 x 12 ins, 4 ft E and W and 8 ft N of cor. Raised mound of earth, 5 ft base, $2\frac{1}{2}$ ft high, N of cor. Soil, sandy loam, first class. Land, level, sloping to the S and E.

BOOK 1876

General Description:

All of Tp 21 N, R 18 W, lies within the Sacramento Valley. The land is level, the soil is rich, well adapted to agriculture, if there was water for irrigation. There is no water or timber in this Tp.

*John J. Fisher*  
U. S. Deputy Surveyor.

General Description of Tp 20 N, R 18 W:

All of this Tp lies within the Sacramento Valley. The soil is rich, the land is level, well adapted to farming if there was water for irrigation. There is no water nor timber in Tp.

NOTE:

I was unable to find any traces whatsoever of the corners of the old Fifth Standard Parallel through Tp 21 N, R 18 W.

*John J. Fisher*  
U. S. Deputy Surveyor.

5TH GUIDE MERIDIAN WEST, through Tp 20 N, Rs 18 & 19 W

36.65  
Beginning at the Standard cor of Tp 21 N, Rs 18 and 19 W, thence I run E on the S boundary of Sec 31. Set granite stone 24 x 6 x 6 ins, ~~28~~ 26 ins in ground for closing cor of Tp 20 N, Rs 18 and 19 W. Stone marked C. C. 20 N on S, 18 W on E and 19 W on W faces, with 6 grooves on E, W and S faces. Dig pits 30 x 24 x 12 ins, 4 ft E and W and 8 ft S of cor. Raised mound of earth 5 ft base, ~~2~~ 2 ft high, S of cor.

29.45  
35.00  
Thence I run S between Secs 1 and 6 over level land, sloping to the E and S.

cross wash 30 lks wide, course SE  
cross dry creek 150 lks wide, course SE  
Difference between measurements of 40.00 chs by two sets of chainmen is 6 lks, position of middle point  
By 1st set, 40.03 chs  
By 2nd set, 39.97 chs, the mean of which is

40.00  
Set a lava stone 20 x 8 x 6 ins, ~~16~~ 16 ins in ground for  $\frac{1}{4}$  sec cor, marked  $\frac{1}{4}$  on W face, raised a mound of stones 2 ft base,  $1\frac{1}{2}$  ft high W of cor.

The difference between measurements of 80 chs by two set of chainmen is 14 lks, position of middle point  
By 1st set, 80.07 chs  
By 2nd set, 79.93 chs, the mean of which is

80.00  
Set a lava stone 24 x 12 x 6 ins, ~~20~~ 20 ins in ground for cor of secs. 1, 6, 7 and 12, stone marked 1 groove on N and 5 grooves on S faces. Dig pits in 4 secs. 18 x 18 x 12 ins,  $5\frac{1}{2}$  ft distant from cor, raised a mound of earth, 4 ft base, 2 ft high, W of cor. No trees.  
Soil, sandy loam, first rate.  
Land, level, sloping to the S and E.

Thence I run S on line between secs. 7 and 12, over level country.

The difference between measurements of 40.00 chs by two set of chainmen is 8 lks, position of middle point  
By 1st set, 39.96 chs  
By 2nd set, 40.04 chs, the mean of which is

40.00  
Set a lava stone 20 x 10 x 4 ins, ~~16~~ 16 ins in ground for  $\frac{1}{4}$  sec cor. Stone marked  $\frac{1}{4}$  on W face. Raised mound of stone 2 ft base,  $1\frac{1}{2}$  ft high, W of cor.

74.00  
cross dry creek, 30 lks wide, course SE  
Difference between measurements of 80.00 chs by two set of chainmen is 12 lks, position of middle point

chains

80.00

By 1st set, 80.06 chs  
By 2nd set, 79.94 chs, the mean of which is  
Set a lava stone 20 x 12 x 12 ins, 16 ins in ground for cor of secs 7, 12, 13 and 18. Stone marked 2 grooves on N and 4 grooves on S faces. Dug pits in 4 secs. 18 x 18 x 12 ins, 5 1/2 ft distant from corner and raised a mound of earth 4 ft base, 2 ft high, W of cor.  
Soil, sandy loam, first rate.  
Land, level, covered with grease wood brush.

March 22nd at 8 30 a.m. I set off on the decl. arc and 30' 3" on the lat. arc and determine a true meridian with the solar.

24.90  
26.60  
35.00

Thence I run  
S between secs. 13 and 18 over level land, sloping to the S and E.  
cross wash, 30 lks wide, course SE  
cross wash 20 lks wide, course SE  
cross wash 50 lks wide, course SE

40.00  
59.55  
61.90  
70.70  
76.00

The difference between measurements of 40 chs by two set of chainmen is 10 lks, position of middle point  
By 1st set, 40.05 chs  
By 2nd set, 39.95 chs, the mean of which is  
Set a lava stone, 20 x 10 x 4 ins, 16 ins in ground for 1/4 sec cor, stone marked 1/4 on W face, raised a mound of stones, 2 ft base, 1 1/2 ft high, W of cor.  
cross wash, 20 lks wide, course SE  
cross wash, 20 lks wide, course SE  
cross wash, 30 lks wide, course SE  
cross wash, 30 lks wide, course SE

80.00

The difference between measurements of 80 chains by two set of chainmen is 18 lks, position of middle point  
By 1st set, 79.91 chs  
By 2nd set, 80.09 chs, the mean of which is  
Set a lava stone 22 x 10 x 8 ins, 18 ins in ground for cor secs. 13, 18, 19 and 24, stone marked 3 grooves on N and S faces. Dig pits in 4 secs 18 x 18 x 12 ins, 5 1/2 ft distant from cor, raised a mound of earth 4 ft base, 2 ft high, W of cor.  
Soil, sandy loam, first rate.  
Land, level, cut up by washes, covered with dense undergrowth of catclaw and grease wood brush.  
No trees.

23.35

Thence I run  
S between secs 19 and 24 over level land, sloping to the S and E  
cross dry creek, 60 lks wide, course SE  
Difference between measurement of 40 chains by two sets of chainmen is 12 lks, position of middle point

40.00  
45.10  
69.70

By 1st set, 40.06 chs  
By 2nd set, 39.94 chs, the mean of which is  
Set a lava stone 24 x 10 x 8 ins, 20 ins in ground for 1/4 sec cor, stone marked 1/4 on W face, dig pits 18 x 18 x 12 ins, 3 ft N and S of cor, raised mound of earth 3 1/2 ft base, 1 1/2 ft high, W of cor.  
cross wash, 10 lks wide, course SE  
cross old road, course N.E. S.W.

80.00

Difference of measurements of 80 chs by two set of chainmen, is 16 lks, position of middle point  
By 1st set, 79.92 chs  
By 2nd set, 80.08 chs, the mean of which is  
Set a lava stone 20 x 8 x 6 ins, 16 ins in ground for cor of secs. 19, 24, 25 and 30, stone marked 4 grooves on N and 2 grooves on S faces. Dig pits in 4 secs 18 x 18 x 12 ins, 5 1/2 ft distant from cor and raised a mound of earth 4 ft base, 2 ft high W of cor.  
Soil, sandy loam, first rate.  
Land, level, covered with dense undergrowth of greasewood and catclaw brush. No trees.  
Land covered with dense undergrowth 80.00 chs.

BOOK 1876

chains

8.60  
22.75

40.00  
✓

47.00  
68.50

80.00  
✓

5.50  
19.50  
22.85  
32.55

40.00  
✓

44.60  
48.80  
56.50

80.00  
✓

12 h m. l.m.t., I set off 0° <sup>37</sup>38' N on the decl arc and observed the sun on the meridian. The resulting lat is 35° 2' N.

Thence I run S between secs. 25 and 30 through dense grease wood over level land

cross wash 20 lks wide, course SE

cross wash 40 lks wide, course SE

Difference of measurements of 40.00 chs by two set of chainmen is 6 lks, position of middle point

By 1st set, 40.03 chs

By 2nd set, 39.97 chs, the mean of which is

Set a lava stone 18 x 8 x 6 ins, <sup>14</sup>14 ins in ground for 1/4 sec cor, marked 1/4 on W face. Dig pits 18 x 18 x 12 ins, 3 ft distant N and S from cor, raised mound of earth 3 1/2 ft base, 1 1/2 ft high, W of cor.

cross wash, 50 lks wide, course SE

cross wash, 40 lks wide, course SE

Difference of measurements of 80.00 chs by two set of chainmen is 12 lks, position of middle point

By 1st set, 80.06 chs

By 2nd set, 79.94 chs, the mean of which is

Set a lava stone 18 x 12 x 10 ins, <sup>14</sup>14 ins in ground for cor of secs. 25, 30, 31 and 36, stone marked 5 grooves on N and 1 groove on S faces. Dig pits in 4 secs 18 x 18 x 12 ins, 5 1/2 ft distant from cor, raised mound of earth, 4 ft base, 2 ft high W of cor.

Soil, sandy loam, first rate.

Land, level, covered with dense undergrowth of grease wood and catclaw brush.

Land covered with dense undergrowth 80.00 chs.

Thence I run S between Secs 31 and 36 over broken country, sloping to the S and E

cross gulch 20 lks wide, course SE

cross gulch 20 lks wide, course SE

cross gulch 30 lks wide, course SE

cross gulch 40 lks wide, course SE

Difference of measurements of 40 chs by two set of chainmen, is 10 lks, position of middle point

By 1st set, 39.95 chs

By 2nd set, 40.05 chs, the mean of which is

Set a lava stone, 16 x 12 x 12 ins, <sup>12</sup>12 ins in ground for 1/4 sec cor, stone marked 1/4 on W, raised mound of stones, 2 ft base, 1 1/2 ft high, W of cor. No trees. Pits impracticable.

Cross wash 30 lks wide, course SE

Cross wash, 30 lks wide, course SE

Cross wash, 30 lks wide, course SE

The difference of measurements of 80 chs by two sets of chainmen, is 20 lks, position of middle point

By 1st set, 80.10 chs

By 2nd set, 79.90 chs, the mean of which is

Set a lava stone 24 x 10 x 8 ins, <sup>20</sup>20 ins in ground for cor of Tps 19 and 20 N, Rs 18 and 19 W, stone marked 20 N on NE, 18 W on SE, 19 N on SW and 19 W on NW faces, and 6 grooves on NE, S and W edges. Raised a mound of stone, 4 ft base, 2 1/2 ft high, S of cor.

Soil, sandy loam, and gravel, first and second class.

Land, level and broken, covered with dense undergrowth of greasewood and catclaw brush.

No timber.

Land covered with dense undergrowth 80.00 chs.

March 22nd.

chains

General Description of Tp 20 N, R 18 W:

This Tp lies wholly within the Sacramento Valley and is generally level and covered with dense growth grease wood and catclaw brush. The soil is sandy loam, first rate. There is no timber nor water. Most of this Tp would be fine agriculture land if there was water to irrigate it.

Tp 20 N, R 19 W mostly lies in the foothills and river range of mountains, there being about two tier of secs on the E boundary of Tp that are comparatively level, the remainder being rough, broken, mountainous country. Vegetation is mostly grease wood and catclaw brush. No timber nor water. In places abundant grass.

*John J. Fisher*  
U.S. Deputy Surveyor

March 22nd.

March 23rd

5TH GUIDE MERIDIAN WEST, through Tp 19 N, Rs 18 & 19 W.

S between secs 1 and 6 over broken country, covered with dense undergrowth.

7h a.m. l.m.t., I set off 35° N on the lat arc and 0° 57' N on the decl arc and determined a true meridian with the Solar at the cor of secs. 1, 6, 31 and 36,

Thence I run

S between secs 1 and 6

The difference of measurements of 40 chs by two sets of chainmen, is 8 lks, position of middle point

By 1st set, 40.04 chs

By 2nd set, 39.96 chs, the mean of which is

40.00 Set a lava stone 22 x 8 x 8 ins, ~~18~~ ins in ground for 1/4 sec cor, stone marked 1/4 on W face, raised a mound of stone, 2 ft base, 1 1/2 ft high, W of cor.

68.00 Cross dry creek, 100 lks wide, course SE

Difference of measurements of 80 chs, by two set of chainmen, is 14 lks, position of middle point

By 1st set, 80.07 chs

By 2nd set, 79.93 chs, the mean of which is

80.00 Set a lava stone 22 x 15 x 10 ins, ~~18~~ ins in ground for cor of secs 1, 6, 7 and 12, stone marked 1 groove on N and 5 grooves on S faces, raised mound of stone 2 ft base, 1 1/2 ft high, W of cor.

No trees, pits impracticable.

Soil, rocky, third rate

Land, broken, rough, covered with dense undergrowth of grease wood and catclaw brush.

Land covered with dense undergrowth, 80 chs.

Thence I run

S between secs 7 and 12

1.20 cross wash 20 lks wide, course SE

3.78 cross road from Kingman to Gold Roads, course NE-SW

10.10 cross wash, 30 lks wide, course SE

Leave Sacramento Valley, ascend the NE slope of the Black or Colorado River Range of Mountains.

32.00 cross wash, 40 lks wide, course SE

Difference of measurements of 40 chains by two set of chainmen, is 12 lks, position of middle point

By 1st set, 39.94 chs

By 2nd set, 40.06 chs, the mean of which is

40.00 Set a lava stone 18 x 10 x 6 ins, ~~14~~ ins in ground for 1/4 sec cor, stone marked 1/4 on W, raised mound of stones, 2 ft base, 1 1/2 ft high W of cor. No trees, Pits impracticable.

42.00 Cross dry creek, 40 lks wide, course SE

55.00 Summit of ridge, course NW-SE *Ascend*

Difference of measurement of 80 chs by two sets of chainmen is 18 lks, position of middle point

BOOK 1876

Chains

80.00 ✓  
 By 1st set, 80.09 chs  
 By 2nd set, 79.91 chs, the mean of which is  
 Set a lava stone 20 x 10 x 8 ins, ~~16~~ ins in ground for cor of secs. 7, 12, 13 and 18, stone marked 2 grooves on N and 4 grooves on S faces. Raised a mound of stone 2 ft base, 1½ ft high, W of cor.  
 Soil, rocky, lava formation, fourth rate.  
 Land, rough, mountainous.  
 No timber, dense undergrowth of grease wood and catclaw brush.  
 Mountainous land or land covered by dense undergrowth, 80.00 chs.

March 23rd.  
 At 12h m. l.m.t., I set off 1° 0' S on the decl arc and observed the sun on the meridian, at the cor of secs. 7, 12, 13 and 18, the resulting lat being 34° 58' N.

40.00 ✓  
 Thence I run South between secs 13 and 18, ascending the N. slope of the Black Mountains  
 Difference of measurements of 40 chs by two set of chainmen is 10 lks, position of middle point  
 By 1st set, 39.95 chs  
 By 2nd set, 40.05 chs, the mean of which is  
 Set a lava stone 22 x 8 x 4 ins, ~~16~~ ins in ground for ¼ sec cor, marked ¼ on W face, raised a mound of stone 2 ft base, 1½ ft high, W of cor. No trees. Pits impracticable.

55.00  
 Ascend  
 Cross summit of ridge, course E and W  
 Descend

68.00  
 Cross dry gulch 100 lks wide, course E  
 Ascend  
 The difference of measurements of 80 chs by two set of chainmen, is 14 lks, position of middle point  
 By 1st set, 39.93 chs  
 By 2nd set, 40.07 chs, the mean of which is

80.00 ✓  
 Set a lava stone 22 x 10 x 8 ins, ~~16~~ ins in ground for cor of secs 13, 18, 19 and 24, marked 3 grooves on N and S faces. Raised monument of stones 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable.  
 Soil, rocky, lave formation, fourth rate.  
 Land, mountainous, covered by dense undergrowth of grease wood, cactus and catclaw brush.  
 Mountainous land or land covered by dense undergrowth, 80.00 chs.  
 March 23rd, 1905

March 24th.  
 7h a.m. l.m.t., I set off 34° 58' on the lat arc 1° 20' N on the decl arc and determined a true meridian at the cor of secs 13, 18, 19 and 24.

35.00  
 Thence I run South between secs 19 and 24, ascending N slope of Black Mountains.  
 Cross ridge, course E and W

40.00 ✓  
 Difference of measurements of 40 chs by two set of chainmen, is 8 lks, position of middle point  
 By 1st set, 40.04 chs  
 By 2nd set, 39.96 chs, the mean of which is  
 Set a lava stone 26 x 8 x 6 ins, 20 ins in ground for ¼ sec cor, stone marked ¼ on W face, raised a mound of stones 2 ft base, 1½ ft high, W of cor. No trees. Pits impracticable.

44.60  
 Descend  
 Cross wash, 40 lks wide, course SE  
 Ascend

47.60  
 cross ridge, course SE and NW  
 Descend

50.85  
 cross gulch 30 lks wide, course SE  
 Ascend  
 Difference of measurements of 80 chs by two set of chainman is 16 lks, position of middle point

chains		BOOK 1876
80.00 ✓	<p>By 1st set, 80.08 chs By 2nd set, 79.92 chs, the mean of which is Set a lava stone 20 x 12 x 10 ins, <del>16</del> 16 ins in ground for cor or secs 19, 24, 25 and 30, stone marked 4 grooves on N and 2 grooves on S faces, raised monument of stones 2 ft base, 1½ ft high, W of corner. No trees, pits impracticable. Soil, rocky, lave formation, fourth rate. Land, mountainous, covered with dense undergrowth of grease wood and cactus, with scattering yuccas. Mountainous land or land covered with dense undergrowth, 80.00 chs.</p>	
20.50	<p>----- Thence I run South between secs 25 and 30 Descend Cross dry creek 100 lks wide, course SE Ascend</p>	
40.00 ✓	<p>Difference of measurements of 40 chs by two sets of chainmen is 10 lks, position of middle point By 1st set, 39.95 chs By 2nd set, 40.05 chs, the mean of which is</p>	
61.00	<p>Set a lava stone 24 x 12 x 5 ins, <del>20</del> 20 ins in ground for ¼ sec cor, stone marked ¼ on W face. Raised a mound of stone 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable. Ascend Cross ridge, course NW and SE Descend</p>	
80.00 ✓	<p>Difference of measurements of 80 chs by two set of chainmen, is 12 lks, position of middle point By 1st set, 80.06 chs By 2nd set, 79.94 chs, the mean of which is</p>	
	<p>Set a lava stone 30 x 18 x 10 ins, <del>24</del> 24 ins in ground for cor or secs 25, 30, 31 and 36, stone marked 5 grooves on N and 1 groove on S faces. Raised mound of stones 2 ft base, 1½ ft high, W of cor. No trees. Pits impracticable. Soil, rocky, lava formation, fourth rate. Land, mountainous, covered with dense undergrowth of grease wood and cactus and a fair growth of nutritious mountain grass. Mountainous land or land covered with dense undergrowth, 80.00 chs.</p>	
20.80	<p>----- Thence I run South between secs 31 and 36 Descend cross dry creek 40 lks wide, course SE Ascend</p>	
21.50	<p>Cross ridge, course SE and NW Descend</p>	
22.00	<p>Cross gulch 20 lks wide, course SE Ascend</p>	
26.00	<p>Cross ridge, course NW-SE Descend</p>	
30.80	<p>Cross dry creek, 50 lks wide, course SE Ascend</p>	
40.00 ✓	<p>Difference of measurements of 40 chs by two sets of chainmen, is 12 lks, position of middle point By 1st set, 40.06 chs By 2nd set, 39.94 chs, the mean of which is</p>	
40.50	<p>Set a lava stone 24 x 12 x 8 ins, <del>20</del> 20 ins in ground for ¼ sec cor, stone marked ¼ on W face. Raised mound of stones, 2 ft base, 1½ ft high, W of cor. Descend</p>	
42.00	<p>Cross dry creek, 75 lks wide, course E Cross dry creek, 40 lks wide, course NE Ascend</p>	
44.00	<p>Cross ridge, course E and W Descend</p>	
46.10	<p>Cross dry creek 30 lks wide, course NE</p>	

BOOK 1876 chains

80.00

Ascend  
 Difference of measurements of 80chs by two set of chainmen is 16 lks, position of middle point  
 By 1st set, 80.08 chs  
 By 2nd set, 79.92 chs, the mean of which is  
 Set a lava stone 30 x 18 x 13 ins, ~~24~~ 24 ins in ground for the cor of Tps 18, 19 N, Rs 18 and 19 W., stone marked 19 N on N, 18 W on E, 18 N on S and 19 W on W faces, with 6 grooves on N, E, S and W faces. Raised a mound of stones 4 ft base, 2½ ft high, S of cor.  
 No trees, pits impracticable.  
 Soil, rocky, lava formation, fourth rate.  
 Land, mountainous, covered with dense undergrowth of grease wood and fair amount of nutritious mountain grass.  
 Mountainous land or land covered with dense undergrowth, 80.00 chs.

March 24th, 1905

March 25th, 1905.

At 7h a.m. l.m.t., I set off 34° 55' on the lat arc, 1° 44' N on the decl arc and determined a true meridian with the Solar at the cor of Tps 18 and 19 N, Rs 18 and 19 W.

40.00

Thence I run  
 South between secs 1 and 6  
 Ascend N slope of Black Mountains  
 Difference between measurement of 40 chs by two set of chainmen is 16 lks, position of middle point  
 By 1st set, 39.92 chs  
 By 2nd set, 40.08 chs, the mean of which is  
 Set a porphyry stone 18 x 8 x 4 ins, ~~14~~ 14 ins in ground for ¼ sec cor. stone marked ¼ on W, raised mound of stones 2 ft base, 1½ ft high W of cor.  
 No trees. Pits impracticable.

45.70

Cross ridge, course E and W  
 Descend

80.00

Difference of measurement of 80 chs by two set of chainmen is 10 lks, position of middle point  
 By 1st set, 80.05 chs  
 By 2nd set, 79.95 chs, the mean of which is  
 Set a lava stone 20 x 12 x 7 ins, ~~18~~ 18 ins in ground for cor of secs 1, 6, 7, and 12, stone marked 1 groove on N and 5 grooves on S faces. Raised a mound of stone 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable.

Soil, rocky, lava formation, fourth rate.  
 Land, mountainous, sloping to N and E, covered with dense undergrowth of grease wood and fair growth of grass.

Mountainous land or land covered with dense undergrowth, 80.00 chs.

20.00

Thence I run  
 South between secs 7 and 12, ascending N slope of the Black Mountains  
 Cross ridge, course E and W  
 Descend

27.30

Cross dry creek, 30 lks wide, course E. Ascend  
 Difference of measurement of 40 chs by two set of chainmen, is 6 lks, position of middle point  
 By 1st set, 40.03 chs  
 By 2nd set, 37.97 chs, the mean of which is

40.00

Set a lava stone 24 x 6 x 6 ins, ~~20~~ 20 ins in ground for ¼ sec cor, stone marked ¼ on W face. Raised a mound of stones 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable.

46.00

Descend  
 Cross a gulch 30 lks wide, course NE

chains	
80.00	<p>Ascend The difference of measurements of 80 chs by two set of chainmen, is 12 lks, position of middle point By 1st set, 80.06 chs By 2nd set, 79.94 chs, the mean of which is Set a lava stone 16 x 10 x 8 ins, <del>12</del> ins in ground for cor of secs 7, 12, 13 and 18, stone marked 2 grooves on N and 4 grooves on S faces. Raised a mound of stone 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable. Soil, rocky, lava formation, fourth rate. Land, mountainous, covered with dense undergrowth of grease wood and fair growth of grass. Mountainous land or land covered with dense undergrowth, 80.00 chs.</p>
12.40	<p>At 12h m. l.m.t., I set off <del>1° 47' N</del> on the decl arc and observed the sun on the meridian. The resulting lat is 34° 53' N at the cor of secs 7, 12, 13 and 18. Thence I run South between secs 13 and 18 Descend Cross dry creek, 30 lks wide, course E</p>
14.40	<p>Ascend Cross ridge, course E and W Descend</p>
16.00	<p>Cross dry creek, 15 lks wide, course E Ascend</p>
18.00	<p>Cross ridge, course E and W Descend</p>
21.00	<p>Cross dry creek, 100 lks wide, course E Ascend steep slope of mountain The difference of measurements of 40 chs by two sets of chainmen, is 10 lks, position of middle point By 1st set, 40.05 chs By 2nd set, 39.95 chs, the mean of which is</p>
40.00	<p>Set a lava stone 20 x 12 x 8 ins, <del>16</del> ins in ground for ¼ sec cor, marked ¼ on W face. Raised a mound of stone 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable.</p>
79.00	<p>Cross summit of mountain The difference of measurement of .80 chs by two sets of chainmen, is 20 lks, position of middle point By 1st set, 80.10 chs By 2nd set, 79.90 chs, the mean of which is</p>
80.00	<p>Set a lava stone 24 x 12 x 12 ins, <del>20</del> ins in ground for cor of secs 13, 18, 19 and 24, stone marked 3 grooves on N and S faces. Raised a mound of stone, 2 ft base 1½ ft high, W of cor. No trees, pits impracticable. Soil, rocky, lave formation, fourth rate. Land, mountainous, covered with grease wood and a fair growth of grass. Mountainous land, 80.00 chs.</p>
	<p>March 25th, 1905</p>
	<p>March 27th, 1905 At 7h a.m. l.m.t., I set off 34° 52' N on the lat arc, <del>3° 32' N</del> on the decl arc and determined a true meridian at the cor of secs 13, 18, 19 and 24. Thence I run South between secs 19 and 24 over steep side of mountain, sloping to S. The difference of measurement of 40 chs by two set of chainmen, is 18 lks, position of middle point By 1st set, 39.91 chs By 2nd set, 40.09 chs, the mean of which is</p>
40.00	<p>The point for ¼ cor falls in dry creek at bottom of deep <sup>course ?</sup> deep canon, not suitable for the establishment of a permanent cor, therefore at</p>
40.60	<p>I set a lava stone 20 x 14 x 7 ins, <del>16</del> ins in ground for witness ¼ sec cor, stone marked W. C. ¼ on W face. Raised a mound of stones, 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable.</p>

BOOK 1876

chains

80.00

Ascend steep side of mountain  
 The difference of measurement of 80 chs by two set of chainmen, is 20 lks, position of middle point  
 By 1st set, 80.10 chs  
 By 2nd set, 79.90 chs, the mean of which is  
 This point falls on the N and W slope of a lava mountain a deep canon, which crosses the line at S of cor 15 chs runs N and W about 10 chs from cor.  
 Set a lava stone 20 x 10 x 8 ins in mound of stones for cor of secs 19, 24, 25 and 30, stone marked 4 grooves on N and 2 grooves on S edges. Raised mound of stone, 2 ft base, 1½ ft high, W of cor.  
 No trees, pits impracticable.  
 Soil, rocky, lave formation, fourth rate.  
 Land, mountainous, very rough and adrupt slopes.  
 Mountainous land, 80 chs.

15.00

Thence I run  
 South between secs 25 and 30.  
 Descend steep side of mountain  
 Cross deep canon, dry, 30 lks wide, course NW  
 Ascend

40.00

Difference of measurement of 40 chs by two set of chainmen, is 14 lks, position of middle point  
 By 1st set, 39.93 chs  
 By 2nd set, 40.07 chs, the mean of which is  
 Summit of ridge, course E and W.  
 Set a lava stone 20 x 8 x 6 ins, in monument of stones for ¼ sec cor, stone marked ¼ on W face. Raised a mound of stones, 2 ft base, 1½ ft high, W of cor.  
 No trees, pits impracticable.

80.00

Descend steep side of canon, sloping to the S.  
 Difference of measurements of 80 chs by two set of chainmen, is 20 lks, position of middle point  
 By 1st set, 79.90 chs  
 By 2nd set, 80.10 chs, the mean of which is

75.73

This point falls on steep side of cannon unsuitable to establish a permanent cor, therefore I returned to where I set a lava stone 30 x 15 x 10 ins in a monument of stone for witness cor to secs 25, 30, 31 and 36. Stone marked 1 groove on S and 5 grooves on N edges and W. C. on W face. Raised a mound of stone 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable.

Soil, rocky, lava formation, fourth rate.  
 Land, mountainous.  
 Mountainous land 80 chs.

20.00

Thence I run  
 South between secs 31 and 36 from true cor point  
 Cross deep canon, 100 lks wide, course NW  
 Ascend

37.00

Summit of ridge, course E and W  
 Difference of measurements of 40 chs by two set of chainmen, 16 lks, position of middle point  
 By 1st set, 40.08 chs  
 By 2nd set, 39.92 chs, the mean of which is

40.00

Set a lava stone 24 x 12 x 8 ins, in monument of stones. Stone marked ¼ on W face. Raised a mound of stones 2-ft base, 1½ ft high, W of cor. No trees, pits impracticable.

64.00

Ascend  
 To second bench

74.00

To summit of mountain  
 Difference of measurement of 80 chs by two sets of chainmen, is 20 lks, position of middle point  
 By 1st set, 79.90 chs  
 By 2nd set, 80.10 chs, the mean of which is

80.00

Set a lava stone 18 x 12 x 10 ins, 12 ins in ground for cor of Tps 17 and 18 N, Rs 18 and 19 W.

chains

Stone marked 18 N on N and 17 N on S faces, and 18 W on E and 19 W on W faces, with 6 grooves on N, E, S and W faces. Raised mound of stone, 4 ft base, 2½ ft high, S of cor. No trees, pits impracticable.  
Soil, rocky, lava formation, fourth rate.  
Land, mountainous, very rough, with scattering vegetation of grass and grease wood.  
Mountainous land 80.00 chs.

BOOK 1876

March 27th, 1905.

5TH GUIDE MERIDIAN WEST, through Tps. 17 N, Rs 18 & 19 W.

March 28th, 1905.

At 6 h 30m. l.m.t., I set off 34° 50' N on the lat arc, 2° 56' N on the decl arc and determined the true meridian by the Solar at the cor of Tps 17 and 18 N, Rs 18 and 19 W.

Thence I run  
South between Secs 1 and 6

- 3.80 Descend
- 3.80 Cross bottom of canon, 30 lks wide, course W
- Ascend
- 11.00 Cross summit of ridge about 200 ft. above bottom of canon, course E and W
- Descend
- 19.00 Cross canon, 30 lks wide, course W
- Ascend
- 33.00 cross summit of ridge about 250 ft high above bottom of canon, course E and W
- Descend
- Difference of measurements of 40 chs by two set of chainmen, is 20 lks, position of middle point
- By 1st set, 39.90 chs
- By 2nd set, 40.10 chs, the mean of which is
- 40.00 Set a lava stone 20 x 8 x 4 ins, 18 ins in ground for ¼ sec cor, stone marked ¼ on W face. Raised mound of stones, 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable.
- 50.00 Cross bottom of canon, 50 lks wide, course W
- Ascend
- 70.00 Cross summit of ridge, course E and W
- Descend
- Difference of measurements of 80 chs by two set of chainmen, is 18 lks, position of middle point
- By 1st set, 80.09 chs
- By 2nd set, 79.91 chs, the mean of which is
- 80.00 Set a lava stone 24 x 10 x 8 ins, in monument of stones for cor of secs 1, 6, 7 and 12, stone marked 1 groove on N and 5 grooves on S edges. Raised mound of stones 2 ft base, 1½ ft high, W of cor. No trees, pits impracticable.
- Soil, rocky, lava formation, fourth rate.
- Land, very rough mountainous, very little vegetation.
- Mountainous land, 80.00 chs.

March 28th, 1905

At 12 h m. l.m.t., I set off 2° 58' N on the decl arc and observed the sun on the meridian. The resulting at is 34° 49' N.

Thence I run  
South between secs 7 and 12

- Descend
- 13.00 Cross deep canon, 30 lks wide, course NW. Ascend
- 17.00 Cross summit of ridge, course NW-SE
- Descend
- 20.00 Cross canon, 20 lks wide, course NW

chains	
	Ascend Difference of measurements of 40 chs by two set of chainmen is 12 lks, position of middle point By 1st set, 40.06 chs By 2nd set, 39.94 chs, the mean of which is
40.00 ✓	Set a lava stone 20 x 12 x 8 ins, <del>6</del> 12 ins in ground for $\frac{1}{4}$ sec cor, stone marked $\frac{1}{4}$ on W face. Raised a mound of stones 2 ft base, $1\frac{1}{2}$ ft high, W of cor. No trees, pits impracticable.
70.00	Cross summit of ridge, course E and W Descend Difference of measurements of 80 chs by two set of chainmen, is 8 lks, position of middle point By 1st set, 80.04 chs By 2nd set, 79.96 chs, the mean of which is
80.00 ✓	Set a lava stone 24 x 12 x 4 ins, in monument of stones for cor of secs 7, 12, 13 and 18, stone marked 2 grooves on N and 4 grooves on S faces. Raised a mound of stone 2 ft base, $1\frac{1}{2}$ ft high, W of cor. No trees, pits impracticable. Soil, rocky, lava formation, fourth rate. Land, rough mountainous. Very little vegetation. Mountainous land, 80.00 chs.
March 28th, 1905.	
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March 29th, 1905. At 6h 30m. a.m. l.m.t., I set off $34^{\circ} 48'$ N on the lat arc, $3^{\circ} 19'$ N on the decl arc and determined a true meridian with the Solar at the cor of secs 7, 12, 13 and 18. <i>Thence I run South bet Secs. 13 &amp; 18</i>	
30.00	Descend steep side of mountain, sloping to S Cross deep canon, 30 lks wide, course W Ascend Difference of measurements of 40 chs by two set of chainmen, is 16 lks, position of middle point By 1st set, 39.92 chs By 2nd set, 40.08 chs, the mean of which is
40.00 ✓	Set a lava stone 22 x 9 x 5 ins, in monument of stones for $\frac{1}{4}$ sec cor, stone marked $\frac{1}{4}$ on W face. Raised a mound of stones, 2 ft base, $1\frac{1}{2}$ ft high, W of cor. No trees, pits impracticable.
52.50	Cross summit of ridge, course E and W Descend
70.00	Cross deep canon, 50 lks wide, course SW Ascend Difference of measurements of 80 chs by two set of chainmen, is 20 lks, position of middle point By 1st set, 79.90 chs By 2nd set, 80.10 chs, the mean of which is
80.00 ✓	Set a granite stone 16 x 10 x 8 ins, <del>12</del> 12 ins in ground for cor of secs 13, 18, 19 and 24, stone marked 3 grooves on N and S edges. Raised a mound of stone 2 ft base, $1\frac{1}{2}$ ft high, W of cor. No trees, pits impracticable. Soil, rocky, lava formation, fourth rate. Land, very rough, mountainous, cut up by deep canons and high ridges. Very little vegetation. Mountainous land, 80.00 chs.
-----	
March 29th. At 12h m.l.m.t., I set off $3^{\circ} 21'$ N on the decl arc and observed the sun on the meridian, the result in lat being $34^{\circ} 47'$ N. Thence I run South between secs 19 and 24 over high mountain range.	
38.00	Ascend Cross summit of high ridge, course E and W Difference of measurements of 40 chs by two set of chainmen, is 12 lks, position of middle point By 1st set, 40.06 chs By 2nd set, 39.94 chs, the mean of which is

chains  
 40.00 As true point for cor falls on very steep slope of mountain unsuitable for the establishment of permanent cor, therefore, at  
 39.00 I set a lava stone 16 x 12 x 8 ins in monument of stone for witness  $\frac{1}{4}$  sec cor, stone marked WC $\frac{1}{4}$  on W face. No trees, pits impracticable. *and raised a mound of stone 2 ft base 1 1/2 ft high W of cor.*  
 65.00 Descend steep side of mountain from true cor point  
 Cross deep canon, 40 lks wide, course SW  
 Ascend  
 Difference of measurements of 80 chs by two sets of chainmen, is 20 lks, position of middle point  
 By 1st set, 79.90 chs  
 By 2nd set, 80.10 chs, the mean of which is  
 80.00 Set a lava stone 24 x 15 x 12 ins, in monument of stones for cor of sec 19, 24, 25 and 30, stone marked 4 grooves on N and 2 grooves on S faces. Raised mound of stones 2 ft base, 1 1/2 ft high, W of cor.  
 No trees, pits impracticable.  
 Soil, rocky, lava formation, fourth rate.  
 Land, Very abrupt mountainous, cut up by deep canons. Very little vegetation.  
 Mountainous land, 80.00 chs.

March 29th, 1905

March 30th, 1905

At 6h 30m. a.m. l.m.t., I set off 34° 46' N on the lat arc, 3° 42' N on the decl arc and determined a true meridian at the cor of secs 19, 24, 25 and 30.

Thence I run

South between secs 25 and 30 over rough mountainous country.

Descend

30.00 Cross deep canon, 20 lks wide, course W  
 Ascend

Difference of measurements of 40 chs by two set of chainmen, is 10 lks, position of middle point  
 By 1st set, 40.05 chs  
 By 2nd set, 39.95 chs, the mean of which is

40.00 Set a lava stone 24 x 8 x 6 ins, in monument of stones stone marked  $\frac{1}{4}$  on W face. Raised a mound of stones 2 ft base, 1 1/2 ft high, W of cor. No trees, pits impracticable.

56.00 Cross summit of ridge, course E and W  
 Descend steep slope of mountain

74.85 Cross dry creek, 30 lks wide, course SE  
 Ascend

Difference of measurements of 80 chs by two set of chainmen, is 16 lks, position of middle point  
 By 1st set, 79.92 chs  
 By 2nd set, 80.08 chs, the mean of which is

80.00 Set a lava stone 16 x 10 x 6 ins, ~~12~~ ins in ground for cor of secs 25, 30, 31 and 36, stone marked 5 grooves on N and 1 groove on S edges. Raised a mound of stones 2 ft base, 1 1/2 ft high, W of cor.  
 No trees, pits impracticable.  
 Soil, rocky, fourth rate.  
 Land, very rough, mountainous.  
 Mountainous land, 80.00 chs.

March 30th

At 12h m. l.m.t., I set off 3° 45' N on the decl arc and observed the sun on the meridian. The resulting lat is 34° 45' N.

Thence I run

South between secs 31 and 36 over rough, mountainous country.

Ascend steep slope of mountain

Difference of measurements of 40 chs by two set of chainmen, is 6 lks, position of middle point  
 By 1st set, 39.97 chs  
 By 2nd set, 40.03 chs, the mean of which is

chains  
40.00  
43.30  
74.00  
77.60  
80.00

Set a lava stone 18 x 12 x 6 ins, in monument of stones for  $\frac{1}{4}$  sec cor, stone marked  $\frac{1}{4}$  on W face. Raised mound of stones 2 ft base,  $1\frac{1}{2}$  ft high, W of cor.  
 No trees, pits impracticable.

Cross summit of ridge, course NW-SE  
 Descend steep mountain side

Cross canon, 40 lks wide, course SW  
 Ascend

Cross ridge, course E and W  
 Descend  
 The difference of measurements of 80 chs by two set of chainmen, is 14 lks, position of middle point  
 By 1st set, 80.07 chs  
 By 2nd set, 79.93 chs, the mean of which is

Set a granite stone 18 x 12 x 12 ins, in monument of stones for cor of Tps 17 N, Rs 18 and 19 W on 4th Standard Parallel ~~W.N.~~ Stone marked SC 17 N on N, 18 W on E, and 19 W on W faces, with 6 grooves N, E and W faces. Raised a monument of stone 4 ft base,  $2\frac{1}{2}$  ft high, N of cor.  
 No trees, pits impracticable.  
 Soil, rocky, fourth rate.  
 Land, rough, mountainous.  
 Mountainous land, 80.00 chs. March 30th, 1905

GENERAL DESCRIPTION

Townships 19 N, Ranges 18 and 19 West passes over the N slope of the Black Range Mountains, land very rocky, lava formation, covered with dense growth of grease wood, and in places producing abundant growth of nutritious grass. There is no agriculture land in these townships, excepting on the East side of Tp 19 N, R 18 W, which lies out in Sacramento Valley. There is no water or timber.

Townships 18 North, Rs 18 and 19 West, passes over the summit of the Black Mountains, very rough and rocky and cut up by deep canons. There is no agriculture land in this township. It produces scattering growth of grass and grease wood. Land generally worthless.

The same description applies to Tp 17 N, Rs 18 and 19 West.

*John J. Fisher*  
 U.S. Deputy Surveyor.

LIST OF NAMES.

A list of the names of the individuals employed by John J Fisher

....., 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 5<sup>th</sup> Standard Par. N. through R. 18 W and 5<sup>th</sup> Guide Mer. through Tps. 20, 19, 18 & 17 N - showing the respective capacities in which they acted:

- George Cassidy ..... Chainman.
- A. N. Oliver ..... Chainman.
- Reginald Edmunds ..... ~~Chainman~~ Moundman.
- Irving Angus ..... ~~Chainman~~ Moundman.
- J. D. Sanders ..... Moundman.
- ..... Axman.
- E. O. Hemenway ..... Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John J Fisher

....., United States Deputy Surveyor, in surveying all those parts or portions of the 5<sup>th</sup> Standard Par. N, through R 18 W and 5<sup>th</sup> Guide Meridian N. through Tps. 20, 19, 18 and 17 N,

Salt River meridian, Territory of Oregon of the Gila and which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Oregon

- George Cassidy ✓ ..... Chainman.
- A. N. Oliver ✓ ..... Chainman.
- Reginald Edmunds ✓ ..... ~~Chainman~~ Moundman.
- Irving Angus ✓ ..... ~~Chainman~~ Moundman.
- J. D. Sanders ✓ ..... Moundman.
- ..... Axman.
- E. O. Hemenway ✓ ..... Flagman.

Subscribed and sworn to before me this 30<sup>th</sup> day of March, 1905

J. J. Fisher  
Notary Public



My commission expires  
May 17, 1908

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

BOOK 1876

I, John J. Fisher, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Frank S. Ingalls United States Surveyor General for Arizona, bearing date of the 14<sup>th</sup> day of March, 1905, 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 Arizona, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of 5<sup>th</sup> Standard Par. N. through R. 18 W. and 5<sup>th</sup> Guide Meridian W. through Tps. 20, 19, 18 & 17 N.

Gila and Salt River meridian, in the Territory of Arizona, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

John J. Fisher  
United States Deputy Surveyor.

Subscribed by said John J. Fisher, and sworn to before me }  
this 1<sup>st</sup> day of February, 1906



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

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz., June 29, 1906

The foregoing field notes of the survey of the Fifth Standard Parallel North, through Range 18 West and the survey of the Fifth Guide Meridian West through Tps. 19, 18, 19 and 20 North, of the Gila and Salt River Base and Meridian, in the territory of Arizona,

executed by John J. Fisher U.S. deputy surveyor under his contract No. 126, dated March 14<sup>th</sup>, 1905, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank S. Ingalls  
United States Surveyor General.

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

United States Surveyor General.