

2247

4-679.

AUG 20 1910

127 (1)

Accepted S. L. O. letter
E. dated Nov. 4-1912.

Book A.

BOOK 2247

2247

FIELD NOTES

OF THE SURVEY OF THE

THIRD GUIDE MERIDIAN EAST,

Through Tps. 5, 6, 7 & 8, N.

Bet. Rs. 12 & 13 E.

2247

2247

Of the Gila & Salt River Base & Meridian,

ARIZONA.

AS SURVEYED BY

Jesse B. Wright, United States Deputy Surveyor,

Under his Contract No. 160, dated October 2, 1909

Survey commenced May 25, 1910

Survey completed June 2, 1910

6-151

2247

2247

128

(A)

BOOK 2247

NAMES AND DUTIES OF ASSISTANTS.

James M. Barney, Chairman,

Edgar M. Darnall, Chairman,

Chas. E. Bean, Chairman.

Ben J. Kinsey, Chairman.

Jose N. Lopez, Axeman,

Francisco Guitierrez, Flagman.

BOOK 2247

2nd Standard Parallel North

| | | | | |
|--------------|----|----|----|--------------|
| | 1 | 17 | 6 | |
| | 12 | 16 | 7 | |
| T.8N.,R.12E. | 13 | 16 | 18 | T.8N.,R.13E. |
| | 24 | 15 | 19 | |
| | 25 | 14 | 30 | |
| | 36 | 14 | 31 | |
| | 1 | 13 | 6 | |
| | 12 | 12 | 7 | |
| T.7N.,R.12E. | 13 | 11 | 18 | T.7N.,R.13E. |
| | 24 | 11 | 19 | |
| | 25 | 10 | 30 | |
| | 36 | 9 | 31 | |
| | 1 | 9 | 6 | |
| | 12 | 8 | 7 | |
| T.6N.,R.12E. | 13 | 7 | 18 | T.6N.,R.13E. |
| | 24 | 7 | 19 | |
| | 25 | 6 | 30 | |
| | 36 | 6 | 31 | |
| | 1 | 4 | 6 | |
| | 12 | 4 | 7 | |
| T.5N.,R.12E. | 13 | 3 | 18 | T.5N.,R.13E. |
| | 24 | 3 | 19 | |
| | 25 | 2 | 30 | |
| | 36 | 1 | 31 | |

1st Standard Parallel North

INDEX DIAGRAM

Third Guide Meridian East.

130
BOOK 2247
10

PRELIMINARY OATHS OF ASSISTANTS.

WE, James M. Barney, Edgar M. Donnell and Chas. E. Bean and Benj. Kinsey
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 3rd Guide Meridian East, through Tps. 5, 6, 7 & 8 N. bet. Rs. 12 & 13 E.

James M. Barney, Edgar M. Donnell, Chainman.
Chas. E. Bean, Benj. Kinsey, Chainman.

Subscribed and sworn to before me this 25th
day of May, 1910
My Com. Exp. + 25/13
Jan 25, 1913



J. L. Evans
Notary Public
Residence Ariz.

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

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



WE, Jose N. Lopez and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of 3rd Guide Meridian East, through Tps. 5, 6, 7 & 8 N., bet. Rs. 12 & 13 E.
Jose N. Lopez, Axman.
_____, Axman.

Subscribed and sworn to before me this 25th
day of May, 1910
My Com. Exp. + 25/13
Jan 25, 1913



J. L. Evans
Notary Public
Residence Ariz.

I, Francisco Guitierrez, 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 3rd Guide Meridian East, through Tps. 5, 6, 7 & 8 N. bet. Rs. 12 & 13 E.
Francisco Guitierrez, Flagman.

Subscribed and sworn to before me this 25th
day of May, 1910
My Com. Exp. Jan. 25 1913



J. L. Evans
Notary Public
Residence Ariz.

Chains.

Survey commenced May 25, 1910, and executed with a W. & L. E. Gurley light mountain transit, special make, unnumbered, with Burts patent solar attachment.

The horizontal limb of the instrument being provided with two double verniers placed opposite to each other and each reading to 1' of arc, which is also the least reading of the latitude and declination arcs of the solar.

I begin as per instructions at the Standard corner of Tps. 5 N., Rs. 12 & 13 E., which is a feldspathic stone 15x12x5 ins. above ground, marked and witnessed as described by the Surveyor General. Latitude $33^{\circ}43'27''N$ - Long. $111^{\circ}03'24''W$. This corner being in a dilapidated condition, I re-mark the stone S.C. on N., with 6 grooves on E. & W. faces, and rebuild a mound of stone 5 ft. base, 5 ft. high N. of Cor.

I examine and test carefully the adjustments of the transit and solar attachment and find same correct.

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

At 3h p.m., l.m.t., at the above described corner, I set off $33^{\circ}43\frac{1}{2}'$ N. on the latitude arc, and $20^{\circ}55\frac{1}{2}'$ N. on the declination arc, and determine a meridian with the solar, and mark the meridian thus determined by a tack in a stake driven firmly in the ground 5 chs. N. of the instrument.

May 25, 1910.

May 26, 1910, at 3h 19m a.m., l.m.t., I observe Polaris at Eastern Elongation, in accordance with instructions in the Manual, and mark the line thus determined by a cross on a fixed stone, 5 chs. N. of my station.

At 7h a.m., l.m.t., I lay off the azimuth of Polaris, $1^{\circ}25'$ to the West, and mark the true meridian thus determined by a tack in the stake 5 chs. N. of my station, which point falls .25 ins. E. of the mark determined by the solar.

At 8h a.m., l.m.t., I set off $33^{\circ}43\frac{1}{2}'$ N. on the latitude arc and $21^{\circ}3\frac{1}{2}'$ N. on the declination arc, and determine a meridian with the solar, which meridian is identical with the true meridian determined by Polaris observation. The solar apparatus, by a.m. and p.m. observations defines positions for meridians identical with and $0^{\circ}13''$ W., respectively of the true meridian established by Polaris observations: therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8h a.m., is $N. 14^{\circ}20' W.$; the angle thus determined gives the magnetic declination as $14^{\circ}20' E.$

From the Standard cor. above described, House of Tobe Cline, at Dagger Springs, brs. $N. 13^{\circ}50' W.$ about 1 mile dist.

The elevation of this corner, is 2,800 ft.; above sea-level as given by an English aneroid barometer, $4\frac{1}{2}$ ins. diam., compensated for temperature, the elevations in feet being read by a vernier reading to 1 ft.

Throughout this survey, I give the elevations thus deduced, in order to more accurately show the comparative elevations of different points, and the elevations thus given I believe to be correct to within an accuracy of 50 ft. above sea-level.

From the Standard corner above described, I run, as per instructions;

North, bet. secs. 31 & 36.

Over mountainous land, descending, through dense paloverde, and tesseta, with great difficulty.

18.00 Dry wash, 20 lks. wide, course W.N.W., ascend gradually.

② 3rd Guide Meridian East, through Tps. 5 N., bet. Rs. 12 & 13 E.

Chains.

- 23.50 Read, from Dagger Springs to Salt River, brs. NW. & SE. Difference of measurements of 40.00 chs. by 2 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 sandstone 24x14x8 ins. 18 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. No bearings available, pits impracticable. Cor. on top of flat ridge, brs. NW. & SE.
- 67.00 Dry wash, 50 lks. wide, course NW.
- 72.00 Edge of mesa, brs. SW. & NE., desc. precipitous NW. slope.
- 78.45 Dry wash 120 lks. wide, course westerly, ascend. Difference bet. measurements of 80.00 chs. by 2 sets 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 granite stone 24x12x3 ins. 18 ins. in the ground for cor. of secs. 25, 30, 31 & 36, marked with 1 notch on S. and 5 notches on N. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor., from which,
A palonegro tree 12 ins. diam. brs. N. $77^{\circ} 20'$ E. 55 lks. dist. marked T. 5 N. R. 13 E. S. 30 B.T.
A mesquite tree 8 ins. diam. brs. S. 1° E. 62 lks. dist., marked T. 5 N. R. 13 E. S. 31 B.T.
A mesquite tree 8 ins. diam. brs. S. $52\frac{1}{2}^{\circ}$ W. 65 lks. dist., marked T. 5 N. R. 12 E. S. 36 B.T.
A mesquite tree 6 ins. diam. brs. N. $65\frac{1}{2}^{\circ}$ W. 20 lks. dist., marked T. 5 N. R. 12 E. S. 25 B.T.
- Land, mountainous, broken.
Soil, 3rd rate, stony, gravelly.
No timber.
Undergrowth, paloverde, palonegro, greasewood, mesquite, scattering cedar.
Mountainous land, covered with dense undergrowth, or loose stones, and exceptionally difficult to survey, 30.00 chs.

North, bet. secs. 25 & 30.

- Over mountainous land, ascending, through dense mesquite.
- 6.15 Dry wash, 150 lks. wide, course SW., leave mesquite, enter dense paloverde and greasewood.
- 11.25 Begin ascend steep SE. slope, with great difficulty.
- 22.00 Top of Spur, brs. SW. & NE., desc. steep, NW. slope.
- 25.90 Canyon, 150 lks. wide, course SW., asc. SE. slope. Difference bet. measurements of 40.00 chs. by 2 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 Set a granite stone 20x12x10 ins. 15 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. No bearings available, pits impracticable.
At this cor. at 11h 57m a.m., l.m.t., I set off $21^{\circ} 5'$ N. on the decl. arc, and observe the sun on the meridian. The resulting latitude is $33^{\circ} 45'$ N.
- 43.00 Slope changes to NE., and desc.
- 50.95 Dry wash, 20 lks. wide, course SE., asc. grad. along SE. slope over very stony ground.
- 55.00 Asc. steep stony S. slope. Difference bet. measurements of 80.00 chs. by 2 sets of chainmen is 6 lks.; position of middle point,
By 1st set, 80.03 chs.
By 2nd set, 79.97 chs., the mean of which is
- 80.00 Set a sandstone 24x12x3 ins. 18 ins. in ground for cor. of secs. 19, 24, 25 & 30, marked with 2 notches on S. & 4 notches on N. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. No bearings available.

3rd Guide Meridian East, through Tps. 5 N., bet. Rs. 12 & 13 E. (8)

Chains.

Land, mountainous,
Soil, 3rd rate, stony.
No timber.
Undergrowth, palo verde, palonegro, mesquite, greasewood,
scattering cedar, cacti.
Mountainous land covered with dense undergrowth and
exceptionally difficult to survey, 80.00 chs.

- North, bet. secs. 19 & 24.
Over mts. land, asc. steep stony S. slope, with great
difficulty.
- 15.00 Top of high, rocky spur, brs. SW. & NE., elevation, 4100
ft., desc. grad.
Difference bet. measurement of 40.00 chs. by 2 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
- 40.00 Set a sandstone 24x10x8 ins. 18 ins. in ground for
 $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of
stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
No bearings available, pits impracticable.
- 52.00 S. Rim of canyon, brs. SW. & NE., desc. prec.
66.00 Middle of canyon, 250 ft. deep, course SW., asc. prec.
Difference bet. measurements of 80.00 chs. by 2 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 Cor. point falls on prec. N. slope of Canyon, on
perishable ground, therefore at
- 81.90 Top of N. rim of canyon, I
Set a syenite stone 24x10x8 ins. 18 ins. in ground for
witness cor. to cor. of secs. 13, 18, 19 & 24, marked
WC. on NE. face, with 3 notches on S. & N. edges, and
raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
No bearings available, pits impracticable.
- Land, mts.
Soil, stony, 3rd rate.
Timber, scattering cedar.
Undergrowth, cedar, cacti.
Mts. land, broken and stony, and exceptionally difficult
to survey, 80.00 chs. May 26, 1910.

May 27, 1910.

- At 7h a.m., l.m.t., I set off $33^{\circ}46'$ N. on the lat. arc,
and $21^{\circ}14'$ N. on the decl. arc, and determine a true
meridian with the solar, at the true point of secs.
13, 18, 19 & 24; thence I run, for cor. of
- North bet. secs. 13 & 18.
Over mts. land, asc. grad. over stony ground, with great
difficulty.
- 1.90 Witness cor., as heretofore described.
25.00 Top of ridge, brs. E. & W.,
32.00 Desc. steep.
Difference of measurements of 40.00 chs. by 2 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 syenite stone 20x10x8 ins. 15 ins. in ground for
 $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of
stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
No bearings available, pits impracticable.
- 66.00 In saddle, brs. NE. & SW., asc. grad.
74.00 Asc. steep, stony, SE. slope.
Difference of measurements of 80.00 chs. by 2 sets 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

4 3rd Guide Meridian East, through Tps. 5 N., bet. Rs. 12 & 13 E.

Chains.

80.00 Set a syenite stone 20x10x8 ins. 15 ins. in ground for cor. of secs. 7, 12, 13 & 18, marked with 4 notches on S. & 2 notches on N. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. Elev. of this cor. 4300 ft. No bearings available, pits impracticable.
 Land, mts.
 Soil, 3rd rate, stony.
 Timber, scattering oak and cedar.
 Undergrowth, scrub oak, cacti.
 Mts. stony, land, exceptionally difficult to survey, 80.00 chs.
 At this cor. at 11h, 57m a.m., l.m.t., I set off $21^{\circ}15'$ N. on the declination arc, and observe the sun on the meridian. The resulting lat. is $33^{\circ}47'$ N. ✓

North bet. secs. 7 & 12.

Over mts. land, asc. stony SE. slope of spur, with great difficulty.

- 5.72 Top of spur, brs. SE. & NW., desc. steep.
 10.00 Canyon 10 chs. wide, 300 ft. deep, course SE., asc. prec. SE. slope through dense scrub oak.
 16.00 N. rim of canyon, NW. & SE., asc. grad.
 22.00 Top of ridge, brs. E. & W. desc.
 36.00 Foot of slope, and asc.
 Difference bet. measurements of 40.00 chs. by 2 sets of chainmen is 4 lks.; position of middle point,
 By 1st set, 39.98 chs.,
 By 2nd set, 40.02 chs.; the mean of which is
 40.00 Set a sandstone 24x12x6 ins. 18 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. No bearings available, pits impracticable.
 53.00 Top of slope, thence along top of divide, N. & S.
 70.00 Along W. slope of divide, near top, 4300 ft. elev.
 Difference bet. measurements of 80.00 chs. by 2 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 sandstone 24x10x8 ins. 18 ins. in ground for cor. of secs. 1, 6, 7 & 12, marked with 5 notches on S. & 1 notch on N. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. No bearings available, pits impracticable.
 Land, mts.
 Soil, 3rd rate, stony, gravelly.
 Timber, scattering oak, and cedar.
 Undergrowth, scrub oak, cacti.
 Mountainous land exceptionally difficult to survey,
 80.00 chs.

North bet. secs. 1 & 6.

Over mts. land, along W. slope of divide.

Difference bet. measurements of 40.00 chs. by 2 sets 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,

- 40.00 Set a sandstone 20x10x8 ins. 15 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor., No bearings available, pits impracticable
 50.00 Indian ruins, consisting of remains of walls, and about 50 compartments, outer dimensions of ruins 150 ft. square.
 55.00 Cross divide, NNW. & SSE., thence along East side of same

Chains.

Difference bet. measurements of 80.00 chs. by 2 sets of chainmen is 16 lks.; position of middle point,
 By 1st set, 80.03 chs.,
 By 2nd set, 79.92 chs., the mean of which is
 80.00 Set a sandstone 20x10x10 ins. 15 ins. in ground for cor. of Tps. 5 & 6 N., Rs. 12 & 13 E., marked,
 T. 6 N. on NE.,
 R. 12 E. on SE.,
 T. 5 N. on SW., and
 R. 12 E. on NW. faces, with 6 notches on N. S. E. & W. edges, and raise a mound of stone 5 ft. base 4 ft. high S. of cor. No bearings available. Pits impracticable.
 Land, mts., s
 Soil, 3rd rate, gravelly, stony.
 Timber, scattering oak and cedar.
 Undergrowth, scrub oak, and cacti.
 Mts. land exceptionally difficult to survey, 80.00 chs.
 May 27, 1910.

6 3rd Guide Meridian East, through Tps. 6 N., bet. Rs. 12 & 13 E.

| | |
|--------|---|
| Chains | <p>May 28, 1910.</p> <p>At 7h a.m., l.m.t., at the cor. of Tps. 5 & 6 N., Rs. 12 & 13 E. as heretofore described, I set off $33^{\circ}49'$ N. on the lat. arc, and $21^{\circ}24'$ N. on the decl. arc, and determine a true meridian with the solar, thence I run,</p> <p>North bet. secs. 31 & 36.</p> <p>Over mts. land, asc. steep SE. slope with great difficulty,</p> |
| 10.00 | <p>Top of East side of butte, apex 5 chs. W., elev. 5500 ft. desc. steep NE. slope, through dense oak and cedar. Difference bet. measurements of 40.00 chs. by 2 sets of chainmen is 10 lks.; position of middle point,</p> <p>By 1st set, 40.05 chs.,</p> <p>By 2nd set, 39.95 chs.; the mean of which is</p> |
| 40.00 | <p>Set a sandstone $20 \times 14 \times 6$ ins. 15 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor., from which, An oak tree 24 ins. diam. brs. N. $30\frac{1}{2}^{\circ}$ E. 224 lks. dist., marked $\frac{1}{4}$ S. 31 B.T.</p> <p>An oak tree 14 ins. diam. brs. N. $76^{\circ}10'$ W. 130 lks. dist., marked $\frac{1}{4}$ S. 36 B.T.</p> |
| 52.00 | Desc. prec. |
| 58.00 | Bowyer Canyon, 2 chs. wide, course W., elev. 4100 ft. spring 5 chs. E. Corral 10 chs. E. |
| 59.00 | Asc. steep stony SE. slope. Difference bet. measurements of 80.00 chs. by 2 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 |
| 80.00 | <p>Set a syenite stone $24 \times 8 \times 6$ ins. 18 ins. in ground for cor. of secs. 25, 30, 31 & 36, marked with 1 notch on S. & 5 notches on N. edges, and raise a mound of stone 3 ft. base 2 ft. high W. of cor.</p> <p>No bearings available, pits impracticable.</p> <p>Land mts.</p> <p>Soil, stony, 3rd rate.</p> <p>Timber, scattering cedar, and oak.</p> <p>Undergrowth, scrub oak, and cacti.</p> <p>Mts. land exceptionally difficult to survey, 80.00 chs.</p> |
| | <p>North bet. secs. 25 & 30.</p> <p>Over mts., stony land, asc. with great difficulty.</p> |
| 12.00 | <p>Top of ridge, brs. SW. & NE., Elev. 4600 ft., desc. broken NW. slope.</p> <p>Difference bet. measurements of 40.00 chs. by 2 sets of chainmen is 8 lks.; position of middle point,</p> <p>By 1st set, 40.04 chs.,</p> <p>By 2nd set, 39.96 chs., the mean of which is</p> |
| 40.00 | <p>Set a sandstone $20 \times 10 \times 8$ ins. 15 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.</p> <p>No bearings available, pits impracticable.</p> |
| | <p>Difference bet. measurements of 80.00 chs. by 2 sets. of chainmen is 20 lks.; position of middle point,</p> <p>By 1st set, 80.10 chs.,</p> <p>By 2nd set, 79.90 chs.; the mean of which is</p> |
| 80.00 | <p>Set a red sandstone $18 \times 10 \times 8$ ins. 12 ins. in ground for cor. of secs. 19, 24, 25 & 30, marked with 2 notches on S. and 4 notches on N. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.</p> <p>No bearings available, pits impracticable.</p> <p>At this cor. at 11h, 57m a.m., l.m.t., I set off $21^{\circ}25'$ N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is $33^{\circ}50\frac{1}{2}'$ N.</p> <p>Land mts., broken. Soil, 3rd rate, stony, gravelly.</p> <p>Timber, scattering cedar. Undergrowth, dense scrub oak.</p> <p>Mts. land or land covered with dense undergrowth, exceptionally difficult to survey, 80.00 chs.</p> |

3rd Guide Meridian East, through Tps. 6 N., bet. Rs. 12 & 13 E. 7.

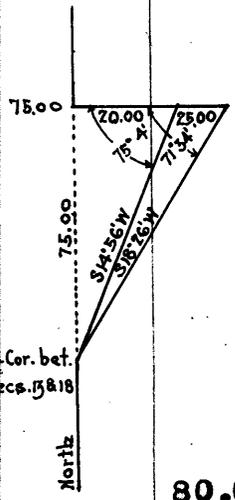
Chains

- North, bet. secs. 19 & 24.
Over mts. land desc. NW. slope, through dense scrub oak with great difficulty.
- 23.00 Foot of steep slope, enter narrow valley, brs. SW. & NE.
30.75 S. edge of Salome Creek.
31.50 Centre of Salome Creek, course SW., running water, 15 lks. wide, 3 ins. deep.
33.00 N. Bank of Salome Creek.
38.00 Leave valley, beg. asc. steep SE. slope.
Difference bet. measurements of 40.00 chs. by 2 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 18x10x6 ins. 12 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 4 ft. base 3 ft. high W. of cor.
No bearings available. Pits impracticable.
New Indian settlement of about 20 indians, brs. East 10 chs, who cultivate about 20 acres of land along Salome Creek.
- 43.00 Gulch 50 lks. wide, course SE., near mouth. asc. steep. S. slope. along point.
- 60.00 Asc. prec. SE. slope. very broken and stony.
Difference bet. measurements of 80.00 chs. by 2 sets 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
- 80.00 Mark cross (X) on granite boulder in place, 48x50x36 ins. above ground, with 3 notches on N. & S. of cross, for cor. of secs. 13, 18, 19 & 24, and raise a mound of stone 4 ft. base 3 ft. high W. of cor.
No bearings available, pits impracticable.
Land, mts.
Soil, 3rd rate, stony. small loamy tracts along Salome Creek.
Timber, scattering cedar, oak, cottonwood.
Undergrowth, scrub oak, cacti.
Mts. land, or land covered with dense undergrowth exceptionally difficult to survey, 80.00 chs.
May 28, 1910.

May 29, 1910.

- At 7 h a.m., l.m.t., at the cor. of secs. 13, 18, 19 & 24, I set off $33^{\circ}51\frac{1}{2}'$ N. on the lat. arc, and $21^{\circ}33\frac{1}{2}'$ N. on the decl. arc, and determine a meridian with the solar, thence I run,
- North, bet. secs. 13 & 18.
Over mts. land, asc. prec. SE. slope, over loose boulders, with great difficulty.
- 22.00 Top of bluff, brs. NE. & SW. asc. grad. along SE. slope, through dense oak and juniper timber and scrub oak.
33.00 Top, brs. NE. & SW., desc. NW. slope.
36.00 Gap or saddle on top of ridge, brs. NW. & SE. elev. 6200 ft. Desc. steep, stony, ENE. slope.
Difference bet. measurements of 40.00 chs. by 2 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
- 40.00 On SW. rim of Hell's hole, I
Set a red sandstone 24x6x6 ins. 18 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
No bearings available, pits impracticable.
Thence the line lies close to foot of bluff facing East, along which it is impossible to chain or walk, therefore, I send a man ahead, and place a flag on line on N. rim of what is known as Hell' hole.

Chains.



It being impossible to secure a base line at the $\frac{1}{4}$ sec. cor., I leave a large flag on this corner, and go to the flag on line on N. rim of Canyon, and measure a base line of 25 chs. to the East, with great care and precision, this being the longest base line possible, owing to the topography of the country.

At 20 chs. on this base, the flag at $\frac{1}{4}$ sec. cor. brs. S. 14° 56' W., angle subtended by the base is 75° 4', dist. to back flag is $20.00 \times \text{tang. } 75^\circ 4' = 75.00$ chs.

At 25 chs. on the base, the flag, brs. S. 13° 26' W., angle subtended by base is 71° 34', dist. to back flag is $25.00 \times \text{tang. } 71^\circ 34' = 75.00$ chs., therefore I conclude that my triangulation is correct. The cor. of secs. 13 & 18, falls on inaccessible point on W. side of canyon; My triangulated dist. gives triangulation point as 35.00 chs. on N. line bet. secs. 7 & 12.

80.00 Cor. point for cor. of secs. 7, 12, 13 & 18,

Land, mts., very rough and stony.
 Soil, 3rd & 4th rate.
 Timber, oak, juniper, cedar.
 Undergrowth, scrub oak.
 Mts. land, exceptionally difficult to survey, 30.00 chs.

North, bet. secs. 7 & 12.

Over mts. land, asc. along, prec. ESE. slope.

30.00 Head of Canyon, SSE., asc. abrupt.

35.00 Triangulation point heretofore located. It being impracticable to establish a witness cor. to cor. of secs. 7, 12, 13 & 18, I continue measurement.

Difference bet. measurements of 40.00 chs. by 2 sets of chainmen is 2 lks.; position of middle point,

By 1st set, 39.99 chs.,

By 2nd set, 40.01 chs.; the mean of which is

40.00 on N. rim of 1st bluff, brs. NW. & SE., I

Set a sandstone 20x10x10 ins. 15 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. from which, An oak tree 10 ins. diam. brs. N. 64° W. 80 lks. dist., marked $\frac{1}{4}$ S. 12 B.T. Elev. of this cor. 6500 ft.

No other bearings available.

46.00 Top of 2nd bluff, brs. NW. & SE. thence asc. through dense oak and juniper. on SE. slope.

65.00 Top of divide, brs. SE. & NW., elev. 7000 ft.

Top of Greenback Peak on same divide, brs. W. about 30.00 chs. elev. 7500, desc. NE. slope. through very dense oak, juniper, pine, manzanita.

Difference bet. measurements of 80.00 chs. by 2 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

80.00 Set a porphyry stone 20x10x6 ins. 15 ins. in ground for cor. of secs. 1, 6, 7 & 12, marked with 5 notches on S. & 1 notch on N. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. from which,

A juniper tree 12 ins. diam. brs. N. 76° E. 14 lks. dist., marked T. 6 N. R. 13 E. S. 6 B.T.,

A juniper tree 18 ins. diam. brs. S. 30° E. 4 lks. dist., marked T. 6 N. R. 13 E. S. 7 B.T.,

An oak tree 30 ins. diam. brs. S. 54 $\frac{1}{2}$ ° W. 127 lks. dist., marked T. 6 N. R. 12 E. S. 12 B.T.,

An oak tree 24 ins. diam. brs. N. 86° W. 92 lks. dist., marked T. 6 N. R. 12 E. S. 1 B.T.

Land, mts., soil, 3rd rate.

Timber, oak, juniper, pine, Undergrowth, manzanita, scrub-oak.

Mts. land exceptionally difficult to survey, 80.00 chs.

At this cor. at 11h 57m a.m., l.m.t., I set off 21° 35' N.

on the decl. arc, and observe the sun on the meridian.

The resulting lat. is 33° 53' N.

Chains.

- North, bet. secs. 1 & 6.
Over mts. land, desc. steep NE. slope, through jungle of manzanita, and scrub oak, and heavy oak timber, with great difficulty.
- 35.00 Canyon, 2 chs. wide, course NE., asc.
Difference bet. measurements of 40.00 chs. by 2 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
- 40.00 Set a red sandstone 30x10x6 ins. on bed rock, in mound of stone for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, from which,
An oak tree 30 ins. diam., brs. N. 40° E. 28 lks. dist., marked $\frac{1}{4}$ S. 6 B.T.,
An oak tree 24 ins. diam. brs. S. 58° W. 26 lks. dist., marked $\frac{1}{4}$ S. 1 B.T. Elev. of this cor. 6000 ft.
- 41.70 Top East pt. of spur, brs. E. & W., desc.
- 44.00 West branch of Salome Creek, 150 lks. wide, course SE. running water 5 lks. wide, 3 ind. deep. permanent. asc. broken SW. slope.
- 50.50 Glch. 20 lks. SSE., asc. steep, SW. slope.
Difference bet. measurements of 80.00 chs. by 2 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
- 80.00 Cor. point of Tps. 6 & 7 N., Rs. 12 & 13 E., falls in glch. 10 lks wide, course SW.
- 80.67 Set a granite stone 24x10x10 ins. 18 ins. in ground for witness cor. to cor. of Tps. 6 & 7 N., Rs. 12 & 13 E., marked W.C. on NE. face, with 6 notches on N., S., E. & W. edges, and raise a mound of stone 4 ft. base, 3 ft. high S. of cor., No bearings available, Pits impracticable.
Land, mts., Soil, 2nd & 3rd rate, stony.
Timber, Oak, pine, juniper, cottonwood.
Undergrowth, scrub oak, manzanita, buck brush, locust.
Mts. land heavily timbered and covered with dense undergrowth and exceptionally difficult to survey, 80.00 chs.
May 29, 1910.

May 30, 1910.

- At 7h a.m., 1.m.t., at the true cor. point of cor. of Tps. 6 & 7 N., Rs. 12 & 13 E., I set off 33° 54' N. on the lat. arc and 21° 43' N. on the decl. arc, and determine a true meridian with the solar, thence I run,
North, bet. secs. 31 & 32, T. 7 N., Rs. 12 & 13 E.,
Over mts. land asc. steep SE. slope, through dense scrub oak and buck brush, with great difficulty.
- 27.00 Top of High butte, brs. E. & W., desc. steep N. slope.
Elev. of top, 6500 ft.
- 30.00 Enter dense pine.
Difference bet. measurements of 40.00 chs. by 2 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 granite stone 18x6x8 ins. 12 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor., from which,
An oak tree 6 ins. diam. brs. S. 31° E. 43 lks. dist., marked $\frac{1}{4}$ S. 31 B.T. No other bearings available.
Desc. grad. through dense oak, juniper and pine.
- 49.90 Trail, brs. E. & W., from J.R. Ranch to Greenback valley.
- 52.00 Foot of slope, brs. E. & W., wash, 10 lks. wide, course NE., asc. SE. slope.
- 59.00 Top of rise, brs. E. & W., desc. grad.
- 68.50 Foot, asc. grad.
- 75.00 Top of rise, desc. grad.
Difference bet. measurements of 80.00 chs. by 2 sets of chainmen is 12 lks.; position of middle point,

10 3rd Guide Meridian East, through Tps. 7 N., bet. Rs. 12 & 13 E.

Chains.

- By 1st set, 80.06 chs.,
By 2nd set, 79.94 chs.; the mean of which is
- 80.00 Set a sandstone 13x8x6 ins. 12 ins. in ground for cor. of secs. 25, 30, 31 & 36, marked with 1 notch on S. & 5 notches on N. Edges, from which,
An oak tree 12 ins. diam. brs. N. 2° E. 100 lks. dist., marked T. 7 N., R. 13 E., S. 30 B.T.,
A juniper tree 8 ins. diam. brs. N. 71° W. 36 lks. dist., marked T. 7 N., R. 12 E., S. 25 B.T.,
A juniper tree 24 ins. diam. brs. S. 50° W. 59 lks. dist., marked T. 7 N., R. 12 E., S. 36 B.T.,
A juniper tree 15 ins. diam. brs. S. 4½° E. 121 lks. dist., marked T. 7 N., R. 13 E., S. 31 B.T.

Land mts.

Soil, 3rd rate, gravelly, stony.

Timber, pine, oak, juniper.

Undergrowth, scrub oak, pine, manzanita.

Mts. land, heavily timbered, or covered with dense undergrowth, and exceptionally difficult to survey,

80.00 chs.

At this cor. at 11h 57m a.m., l.m.t., I set off 21° 44' N. on the decl. arc and observe the sun on the meridian, the resulting lat. is 33° 54½' N.

North, bet. secs. 25 & 30.

Over mts. land, desc., through oak and juniper, with great difficulty.

- 22.00 S. Rim of canyon, brs. E. & W., desc. abrupt.
26.00 Canyon, 8 chs. wide, 400ft. deep, course E., asc. prec.
30.00 N. rim of canyon, brs. E. & W.
32.00 Sharp E. pt. bet. canyons, brs. E. & W., desc. abrupt.
33.00 Canyon 8 chs. wide, course SE. asc. prec.

Difference bet. measurements of 40.00 chs. by 2 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 Pt. for ¼ sec. cor. falls on prec. SW. slope of canyon, on perishable ground.

- 41.80 Set a sandstone 30x12x6 ins. on bed rock, in mound of stone for witness cor. to ¼ sec. cor. marked W.C. ¼ on W. face, from which,
An oak tree 6 ins. diam. brs. N. 10° E. 22 lks. dist., marked W.C. ¼ S. 30 B.T.,
A juniper tree, 10 ins. diam. brs. N. 67° W. 60 lks. dist., marked W.C. ¼ S. 25 B.T.

Asc. grad. from cor.

- 57.00 Ridge, brs. NE. & SW., desc.

- 73.20 Wash, 20 lks. wide, course NE., asc.

Difference bet. measurements of 80.00 chs. by 2 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 Top of long E. slope,
Set a sandstone 20x3x6 ins. 15 ins. in ground for cor. of secs. 19, 24, 25 & 30, marked with 2 notches on S. & 4 notches on N. edges, and from which,
A pine tree 6 ins. diam. brs. N. 25° E. 16 lks. dist., marked T. 7 N. R. 13 E. S. 19 B.T.,
An oak tree 8 ins. diam. brs. S. 2½° E. 70 lks. dist., marked T. 7 N., R. 13 E. S. 30 B.T.,
An oak tree 14 ins. diam. brs. S. 51° W. 105 lks. dist., marked T. 7 N., R. 12 E. S. 25 B.T.,
An oak tree 12 ins. diam. brs. N. 38½° W. 75 lks. dist., marked T. 7 N., R. 12 E. S. 24 B.T.

Land, mts., stony. Soil, 3rd rate, stony gravelly.

Timber, pine oak juniper. Undergrowth, scrub oak, pine.

Mts. land exceptionally difficult to survey, 80.00 chs.

May 30, 1910.

3rd Guide Meridian East, through Tps. 7 N., Det. Rs. 12 & 13 E. 11.

| Chains | |
|--------|--|
| | May 31, 1910. |
| | At 7h a.m., 1.m.t., at the cor. of secs. 19, 24, 25 & 30, I set off 33° 56' N. on the lat. arc, and 21° 52' N. on the decl. arc and determine a true meridian with the solar, thence I run, |
| | North, bet. secs. 19 & 24. |
| | Over mts. land, desc., through juniper, oak, and pine timber, with great difficulty. |
| 8.50 | Dry wash 50 lks. wide, course E., lv. timber., asc. open SW. slope, over stony ground. |
| 14.00 | Top of long spur, brs. E. & W., desc. NE. slope. |
| 38.00 | Gulch 100 lks. wide, course SE., asc. SW. slope. |
| | Difference bet. measurements of 40.00 chs. by 2 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 | Set a quartzite stone 20x10x3 ins. 15 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, from which, |
| | An oak tree 12 ins. diam. brs. S. 20° E. 3 lks. dist., marked $\frac{1}{4}$ S. 19 B.T., |
| | An oak tree 6 ins. diam. brs. West, 82 lks. dist., marked $\frac{1}{4}$ S. 24 B.T. |
| 55.00 | Top of long spur, brs. SE. & NW., desc. NE. slope. |
| 70.00 | Gulch 50 lks. wide, course SE., asc. SW. slope. |
| | Difference bet. measurements of 80.00 chs. by 2 sets of chainmen is 10 lks.; position of middle point, |
| | By 1st set, 79.95 chs., |
| | By 2nd set, 80.05 chs.; the mean of which is |
| 80.00 | Set a sandstone 20x3x3 ins. 15 ins. in ground for cor. of secs. 13, 18, 19 & 24, marked with 3 notches on N. & S. edges, and raise a mound of stone 4 ft. base 3 ft. high W. of cor. from which, |
| | An oak tree 12 ins. diam. brs. S. 86° E. 59 lks. dist., marked T. 7 N., R. 13 E., S. 19 B.T. No other trees |
| | Land, mts. available. |
| | Soil, stony, 3rd rate. |
| | Timber, oak, juniper, pine. |
| | Undergrowth, scrub oak, pine. |
| | Mts. land, exceptionally difficult to survey, 80.00 chs. |
| | North, bet. secs. 13 & 18. |
| | Over mts. land, asc. SW. slope, over stony ground, with great difficulty. |
| 5.00 | Top of ridge, brs. E. & W., desc. |
| 15.00 | Gulch 50 lks. wide, course East, asc. |
| 21.50 | Top of rise, slopes E., desc. |
| 24.00 | Wash 30 lks. wide, course SE. asc. |
| 31.00 | Top of divide, bet. Salome Creek and Spring Creek, brs. SSE. & NNW., thence along E. slope of same. |
| | Difference bet. measurements of 40.00 chs. by 2 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 sandstone 20x10x6 ins. 15 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. from which, |
| | An oak tree 6 ins. diam. brs. N. 16° E. 32 lks. dist., marked $\frac{1}{4}$ S. 18 B.T., |
| | An oak tree 10 ins. diam. brs. N. 14° W. 22 lks. dist., marked $\frac{1}{4}$ S. 13 B.T. |
| 50.50 | Wash 20 lks. wide, course E., asc. |
| 54.00 | Top of spur, brs. E. & W., desc. |
| 60.00 | Gulch 30 lks. wide, course NE., asc. steep SW. slope. |
| 67.18 | Top of slope, desc. |
| 69.00 | Gulch 30 lks. wide, course E., asc. |
| 75.00 | Top of spur, brs. E. & W., desc. E. slope. |

12 3rd Guide Meridian East, through Tps. 7 N. bet. Rs. 12 & 13 E.

Chains.

- Difference bet. measurements of 80.00 chs. by 2 sets 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 porphyry stone 18x8x6 ins. 12 ins. in ground for cor. of secs. 7, 12, 13 & 18, marked with 4 notches on S. & 2 notches on N. edges, from which,
 An oak tree 20 ins. diam. brs. N. 30° E. 36 lks. dist., marked T. 7 N., R. 13 E., S. 7 B.T.,
 An oak tree 15 ins. diam. brs. S. 61° E. 41 lks. dist., marked T. 7 N. R. 13 E., S. 13 B.T.,
 An oak tree 24 ins. diam. brs. S. 43° W. 60 lks. dist., marked T. 7 N., R. 12 E., S. 13 B.T.,
 An oak tree 20 ins. diam. brs. N. 10° W. 35 lks. dist., marked T. 7 N. R. 12 E., S. 12 B.T.
- Land, mts., broken.
 Soil, 3rd rate, stony.
 Timber, oak, pine, juniper.
 Undergrowth, scrub oak, pine.
 Mts. land or land heavily timbered or covered with dense undergrowth, and exceptionally difficult to survey, 80.00 chs.
- At this cor. at 11h 57m a.m., l.m.t., I set off 21° 53' N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 33° 57' N.
-
- North bet. secs. 7 & 12.
 Over mts. land, desc. along steep E. slope, with great difficulty, through dense scrub oak and buck brush.
- 4.00 Wash 20 lks. wide, course NE., asc.
 9.00 Top of rise, desc.
 17.00 Gulch 20 lks. wide, course NE., asc.
 23.00 Top, desc.
 30.40 Gulch 50 lks. wide, course SE. asc. steep SW. slope.
 Difference bet. measurements of 40.00 chs. by 2 sets of chainmen is 2 lks.; position of middle point,
 By 1st set, 40.01 chs.,
 By 2nd set, 39.99 chs.; the mean of which is
- 40.00 Set a sandstone 16x10x4 ins. on bedrock in mound of stone for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, from which,
 An oak tree 8 ins. diam. brs. S. 6° E. 30 lks. dist., marked $\frac{1}{4}$ S. 7 B.T.
 An oak tree 10 ins. diam. brs. S. 70° W. 105 lks. dist., marked $\frac{1}{4}$ S. 12 B.T.
- 41.50 Top of dividing ridge, brs. SE. & NW., elev. 5700, ft. desc. NW. slope.
 50.00 Gulch 100 lks. wide, course W. asc. steep SW. slope.
 62.00 Top of ridge, brs. NNE. & SSW., thence along W. edge of top.
 73.00 Desc. steep NW. slope. broken & stony.
 Difference bet. measurements of 80.00 chs. by 2 sets of chainmen is 6 lks.; position of middle point,
 By 1st set, 80.03 chs.,
 By 2nd set, 79.97 chs.; the mean of which is
- 80.00 Set a conglomerate stone 20x12x6 ins. on bed rock in mound of stone for cor. of secs. 1, 6, 7 & 12, marked with 5 notches on S. & 1 notch on N. edges, from which,
 An oak tree 6 ins. diam. brs. N. 41° E. 41 lks. dist., marked T. 7 N., R. 13 E. S. 6 B.T.,
 An oak tree 4 ins. diam. brs. S. 38° E. 41 lks. dist., marked T. 7 N. R. 13 E. S. 7 B.T.
 An oak tree 18 ins. diam. brs. S. 50° W. 75 lks. dist., marked T. 7. N. R. 12 E. S. 12 B.T.
 A pine tree 24 ins. diam. brs. N. 77° W. 200 lks. dist., marked T. 7 N. R. 12 E. S. 1 B.T.
- Land, mts. Soil, 3rd rate, stony.
 Timber, pine, oak, juniper. Undergrowth, scrub oak, pine.
 Mts. land or land heavily timbered or covered with dense undergrowth, exceptionally difficult to survey, 80.00 chs.

3rd Guide Meridian East, through Tps. 7 N., bet. Rs. 12 & 13 E. 13

Chains.

- North bet. secs. 1 & 6,
Over mts. land, desc. broken NW. slope, with great
difficulty, through dense scrub oak.
Difference bet. measurements of 40.00 chs. by 2 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 Set a porphyry stone 20x3x8 ins. 6 ins. in ground to bed-
rock, in mound of stone for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W.
face, from which,
An oak tree 10 ins. diam. brs. N. 80° E. 16 lks. dist.,
marked $\frac{1}{4}$ S. 6 B.T.
An oak tree 8 ins. diam. brs. S. 13° W. 22 lks. dist.,
marked $\frac{1}{4}$ S. 1 B.T.
- 45.00 Gulch 50 lks. wide, course NE., asc. steep SE. slope.
53.38 Top of slope, desc. NW. slope.
57.00 Gulch 20 lks. wide, course E. asc.
62.00 Top of spur, brs. E. & W., desc. NW. slope.
78.50 Gulch 50 lks. wide, course NE., asc. SE. slope.
Difference bet. measurements of 80.00 chs. by 2 sets of
chainmen is 4 lks.; position of middle point,
By 1st set, 80.02 chs.,
By 2nd set, 79.98 chs.; the mean of which is
- 80.00 Set a sandstone 30x10x10 ins. on bedrock in mound of
stone for cor. of Tps. 7 & 8 N., Rs. 12 & 13 E., marked,
N, on NE.,
13 E. on SE.,
7 N, on SW. and
12 E. on NW. faces, with 6 notches on N., S., E., & W.
edges, and raise a mound of stone 4 ft. base, 3 ft.
high S. of cor., from which,
An oak tree 10 ins. diam. brs. S. 49° E. 40 lks. dist,
marked T. 7 N., R. 13 E., S. 6 B.T.,
An oak tree 18 ins. diam. brs. S. 2° W. 60 lks. dist.,
marked T. 7 N., R. 12 E., S. 1 B.T.
No other bearings available. pits impracticable.
Land, mts., broken.
Soil, 3rd rate, stony.
Timber, pine, oak, juniper.
Undergrowth, scrub oak, pine, manzanita.
Mts. land or land covered with dense undergrowth or heavy
timber, and exceptionally difficult to survey,
80.00 chs.
May 31, 1910.

14 3rd Guide meridian East, through Tps. 8 N, bet. Rs. 12 & 13 E.

Chains.

June 1, 1910.

At 7h a.m., l.m.t., at the cor. of Tps. 7 & 8 N., Rs. 12 & 13 E., I set off $33^{\circ}59'$ N. on the lat. arc, and 22° N. on the decl. arc, and determine a true meridian with the solar, thence I run,

North, bet. secs. 31 & 36, Var. $14^{\circ}20'$ E.

Over mts. land, asc. SE. slope, through dense scrub oak and scattering pine, juniper, and oak timber, with great difficulty.

- 6.00 Top, thence, along broken E. slope.
 36.00 Glch 30 lks. wide, course NE. asc. steep.
 38.00 Top, thence along prec. E. slope.
 Difference bet. measurements of 40.00 chs. by 2 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 Point for $\frac{1}{4}$ sec. cor. falls on perishable ground,
 40.50 Set a porphyry stone 24x10x6 ins. 18 ins. in ground for witness cor. to $\frac{1}{4}$ sec. cor. marked W.C. $\frac{1}{4}$ on W. face, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor. No bearings available. pits impracticable.
 Desc. from cor.
 47.00 Buzzard Roost Canyon, 5 chs. wide, 200 ft. deep, course NNW., asc. prec.
 50.00 East rim of canyon, thence along edge of same.
 60.00 Mouth of canyon from East, 3 chs. wide, 150 ft. deep.
 70.00 Asc. steep NW. slope.
 78.00 Trail, brs. NW. & SE.
 Difference bet. measurements of 80.00 chs. by 2 sets of chainmen is 4 lks.; position of middle point,
 By 1st set, 79.98 chs.,
 By 2nd set, 80.02 chs.; the mean of which is
 80.00 Set a sandstone 20x3x8 ins., on bed-rock, in mound of stone for cor. of secs. 25, 30, 31 & 36, marked with 1 notch on S. & 5 notches on N. edges, and from which,
 An oak tree 12 ins. diam. brs. N. 65° E. 10 lks. dist., marked T. 8 N. R. 13 E. S. 30 B.T.,
 An oak tree 20 ins. diam. brs. S. 80° E. 4 lks. dist., marked T. 8 N. R. 13 E. S. 31 B.T.,
 An oak tree 12 ins. diam. brs. S. $77\frac{1}{2}^{\circ}$ W. 32 lks. dist., marked T. 8 N., R. 12 E. S. 36 B.T.,
 A pine tree 6 ins. diam. brs. N. 45° W. 66 lks. dist., marked T. 8 N., R. 12 E. S. 25 B.T.

Land, mts.

Soil, stony, 3rd rate.

Timber, oak, pine, juniper.

Undergrowth, scrub oak, manzanita, buck brush.

Mts. land heavily timbered or covered with dense undergrowth, exceptionally difficult to survey, 80.00 chs.

North, bet. secs. 25 & 30.

Over mts. land, desc. through dense scrub oak and pine, with great difficulty, very stony ground.

- 4.00 Gulch 2 chs. wide, course NW., asc. SW. slope.
 9.00 Top, thence along broken W. slope.
 16.66 Desc. steep NW. slope.
 18.50 Gulch 150 lks. wide, course SW., asc. SSW. slope.
 33.00 Line of contact of rock formation, leave sandstone, and porphyry, thence over volcanic stone.
 Difference bet. measurements of 40.00 chs. by 2 sets of chainmen is 2 lks.; position of middle point,
 By 1st set, 40.01 chs.,
 By 2nd set, 39.99 chs., the mean of which is
 40.00 Set a volcanic stone 24x10x8 ins. 18 ins. in ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and from which,

| | |
|---------|--|
| Chains. | <p>A juniper tree 20 ins. diam. brs. S. 17° E. 50 lks. dist., marked $\frac{1}{4}$ S. 30 B.T.</p> <p>An oak tree 6 ins. diam. brs. N. 56° W. 24 lks. dist., marked $\frac{1}{4}$ S. 25 B.T.</p> <p>45.00 Top of rise, thence along level, stony, barren mesa.</p> <p>71.00 S. Rim of canyon, brs. W. & E., desc. abrupt.</p> <p>75.00 Canyon, 7 chs. wide, 200 ft. deep, course W., near head, asc. prec.</p> <p>78.00 N. rim of canyon, brs. W. & E.</p> <p>Difference bet. measurements of 80.00 chs. by 2 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</p> <p>80.00 Set a volcanic stone 24x3x3 ins. on bed-rock in mound of stone for cor. of secs. 19, 24, 25 & 30, marked with 2 notches on S. & 4 notches on N. edges, and raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor., from which,</p> <p>A juniper tree 14 ins. diam. brs. S. 23° E. 156 lks. dist., marked T. 8 N. R. 13 E. S. 30 B.T.</p> <p>An oak tree 12 ins. diam. brs. S. 41° W. 103 lks. dist., marked T. 8 N. R. 12 E. S. 25 B.T.</p> <p>No other bearings available.</p> <p>Land, mts. level.</p> <p>Soil, 3rd rate, very stony.</p> <p>Timber, oak, juniper, pine.</p> <p>Mts. land or land heavily timbered covered with dense undergrowth or loose stones, and exceptionally difficult survey, 80.00 chs.</p> <p>At this cor. at 11h 57m a.m. 1.m.t., I set off 22° 11' N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 34° 1' N.</p> |
| 10.00 | <p>North bet. secs. 19 & 24, Var. 15° E.</p> <p>Over mts. land, along broken stony W. slope, through scattering oak, and juniper.</p> <p>Desc.</p> |
| 20.00 | <p>Head of draw, course NW., asc.</p> <p>Difference bet. measurements of 40.00 chs. by 2 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</p> |
| 40.00 | <p>Top of ridge, brs. NNW. & SSE.</p> <p>Set a volcanic stone 13x3x3 ins., on bed-rock in mound of stone for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.</p> <p>No bearings available. Pits impracticable. desc.</p> |
| 60.00 | <p>Draw 50 lks. wide, course, NW. asc.</p> |
| 70.00 | <p>Top of spur, slopes steeply to West, desc.</p> <p>Difference bet. measurements of 80.00 chs. by 2 sets of chainmen is 6 lks.; position of middle point, By 1st set, 79.97 chs., By 2nd set, 80.03 chs.; the mean of which is</p> |
| 80.00 | <p>Set a malapais stone 20x10x6 ins. 15 ins. in ground for cor. of secs. 13, 18, 19 & 24, marked with 3 notches on N. and S. edges, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. No bearings available.</p> <p>Pits impracticable.</p> <p>Land, mts.</p> <p>Soil, 3rd & 4th rate, very stony.</p> <p>Timber, scattering juniper and oak. No undergrowth.</p> <p>Mts. land covered with loose stones and exceptionally difficult to survey, 80.00 chs.</p> |

June 1, 1910.

Chains.

- June 2, 1910.
At 7h a.m., l.m.t., at the cor. of secs. 13, 18, 19 & 24,
I set off $22^{\circ} 8\frac{1}{2}'$ N. on the decl. arc, and $34^{\circ} 2'$ N. on
the lat. arc, and determine a true meridian with the
solar, thence I run,
North, bet. secs. 13 & 18.
Over mts. land, desc. grad. through scattering oak and
juniper, over loose stony ground, with great difficulty.
- 14.00 Bottom of slope, brs. E. & W., asc.
21.00 Top of knoll, brs. E. & W., desc.
35.00 Gulch 100 lks. wide, course NW., asc. steep, broken SW.
slope of ridge.
Difference bet. measurements of 40.00 chs. by 2 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 Set a porphyry stone $24 \times 12 \times 8$ ins. on bedrock in mound of
stone for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face, and raise a
mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
No bearings available. Pits impracticable.
- 70.00 Top of ridge, brs. NW. & SE., desc. steep, broken NE. slope.
Difference bet. measurements of 80.00 chs. by 2 sets 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 sandstone $18 \times 6 \times 6$ ins. 6 ins. in ground to bed-rock
in mound of stone for cor. of secs. 7, 12, 13 & 18,
marked with 4 notches on S. & 2 notches on N. edges, and
raise a mound of stone 3 ft. base 2 ft. high W. of cor.
from which,
A juniper tree 15 ins. diam. brs. S. $89\frac{1}{2}^{\circ}$ W. 70 lks. dist.,
marked T. 8 N., R. 12 E., S. 13 B.T.
No other bearings available. Pits impracticable.

- North, bet. secs. 7 & 12.
Over mts. land desc. steep, broken NE. slope, through
dense scrub oak and buck brush, with great difficulty:
- 36.00 Junction of 2 Gulches, from E. & SE., asc. steep.
Difference bet. measurements of 40.00 chs. by 2 sets of
chainmen is 4 lks.; position of middle point,
By 1st set, 39.98 chs.,
By 2nd set, 40.02 chs.; the mean of which is
- 40.00 Mark cross (x) on sandstone ledge, $4 \times 5 \times 3$ ft. above
ground with $\frac{1}{4}$ on W. of cross for $\frac{1}{4}$ sec. cor., and raise
a mound of stone 4 ft. base 3 ft. high W. of cor.
No bearings avail. Pits impracticable.
- 44.00 Top of spur, brs. SW. & NE., thence along broken rough
W. slope, desc.
- 68.00 Head of Gulch, course NW. asc.
71.50 Top of dividing ridge, brs. SW. & NE., bet. Buzzard Roost
and Spring Creeks, which join about $\frac{3}{4}$ mile NW.
Difference bet. measurements of 80.00 chs. by 2 sets 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 red sandstone $24 \times 10 \times 10$ ins. on bed-rock in mound of
stone for cor. of secs. 1, 6, 7 & 12, marked with 5 notches
on S. & 1 notch on N. edges, and raise a mound of stone
2 ft. base $1\frac{1}{2}$ ft. high W. of cor. from which,
An oak tree 6 ins. diam. brs. E. 13° E. 15 lks. dist.,
marked T. 8 N., R. 13 E., S. 7 B.T.
An oak tree 24 ins. diam. brs. N. $54\frac{1}{2}^{\circ}$ E. 40 lks. dist.,
marked T. 8 N., R. 13 E., S. 6 B.T.
An oak tree 8 ins. diam. brs. S. 65° W. 35 lks. dist.,
marked T. 8 N., R. 13 E. S. 12 B.T.
An oak tree 14 ins. diam. brs. N. 46° W. 35 lks. dist.,
marked T. 8 N., R. 13 E. S. 1 B.T.

Chains.

Land, mts., broken.
 Soil, 3rd rate, stony.
 Timber, oak, juniper, black walnut, sycamore.
 Undergrowth, scrub oak, buck brush.
 Mts. land, eceptioally difficult to survey, 80.00 chs.
 At this cor. at noon, I set off 22° 9½' N. on the decl.
 arc, and observe the sun on the meridian.
 The resulting lat. is 34° 3' N.

- North, bet. secs. 1 & 6,
 Over mts. land desc. steep, NW. slope, through, scrub o
 oak, with great difficulty.
- 16.00 Middle of Spring Creek, 2 chs. wide, course WSW.,
 running water, 15 lks. wide, 4 ins. deep, flows into
 Buzzard Roost Creek about 3 chs. W. asc. steep SE. slope.
- 25.50 Top of spur, brs. SW. & NE.,
- 35.00 Desc. steep NW. slope.
 Difference bet. measurements of 40.00 chs. by 2 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 Pt. for ¼ sec. cor. falls in wash, 20 lks. wide, course W.
- 41.00 Set a quartzite stone 20x10x3 ins. 15 ins. in ground for
 witness cor. to ¼ sec. cor., marked W.C. ¼ on W. face,
 from which,
 An oak tree 12 ins. diam. brs. N. 54° E. 35 lks. dist.,
 marked W.C. ¼ S. 6 B.T.,
 An oak tree 10 ins. diam. brs. N. 59° W. 30 lks. dist.,
 marked W. C. ¼ S. 1 B.T.
 asc. steep SE. slope.
- 43.00 Top of spur, brs. W. & E., desc. NW. slope.
- 55.50 Head of draw, Wourse W., asc. steep SW. slope.
- 62.50 Spur, brs. W. & E., desc. steep NE. slope.
- 75.00 Gulch 20 lks. wide, course W., running small stream of
 water. asc.
- 78.20 Intersect 2nd Standard Parallel South at point whence
 Std. cor. of Tps. 9 N., Rs. 12 & 13 E. brs. East, 22.07 chs.
 which is a quartzite stone 8x6x6 ins. above ground
 marked and witnessed as described by the Surveyor
 General. At point of intersection I
 Set a red sandstone 20x10x3 ins. 15 ins. in ground for
 closing cor. of Tps. 8 N., Rs. 12 & 13 E., marked
 CC.T. 8N., on S., with 6 grooves on E. & W. faces, and
 raise a mound of stone 4 ft. base 3 ft. high S. of cor.
 No bearings available. Pits impracticable.
 Land, mts., Soil, 3rd rate, stony.
 Timber, oak, juniper. Undergrowth, scrub oak, manzanita.
 Mts. land exceptionally difficult to survey, 78.20 chs.
 During the survey of this line, I destroyed all the corners
 established under contracts Nos. 119 and 147, as instructed.

— General Description. —

The 3rd Guide Meridian East, through Tps. 5, 6, 7 & 8 N.
 runs in general over a succession of rough mountain
 ridges and canyons, having a general Westerly trend.
 A great portion of the land is fair grazing and well
 timbered. Water is very scarce however in the dry
 season. No permanent settlements along this line.

June 2, 1910.

Jesse B. Wright
 U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

148
18

LIST OF NAMES.

BOOK 2247

A list of the names of the individuals employed by Jesse B. Wright,

....., 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

3rd Guide Meridian East, through Tps. 5, 6, 7 & 8 N., bet. Rs. 12 & 13 E.

showing the respective capacities in which they acted:

James M. Barney, Edgar M. Darnall,....., *Chainman.*

Chas. E. Bean, Ben. J. Kinsey,....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

Jose N. Lopez,....., *Axman.*

....., *Axman.*

Francisco Gutierrez,....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Jesse B. Wright,

....., United States Deputy Surveyor, in surveying all

those parts or portions of the 3rd Guide Meridian East,

through Tps. 5, 6, 7 & 8 N., bet. Rs. 12 & 13 E.

..... of the Gila & Salt

River Base & meridian, Territory of Arizona....., which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for Arizona.

James M. Barney, Edgar M. Darnall,....., *Chainman.*

Chas. E. Bean, Ben. J. Kinsey,....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

Jose N. Lopez,....., *Axman.*

....., *Axman.*

Francisco Gutierrez,....., *Flagman.*

Subscribed and sworn to before me this Fifth

day of August, 1900



J. B. Evans
Notary Public
Roosevelt Arizona
My Commission expires Jan 25, 1913

149 (17)
BOOK 2247

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Jesse B. Wright, 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 second day of October, 1909, 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 Third Guide Meridian East, through Tps. 5, 6, 7 & 8 N., Bet. Rs. 12 & 13 E.

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

Jesse B. Wright
United States Deputy Surveyor.

Subscribed by said Jesse B. Wright, and sworn to before me
this 12th day of August, 1909

W. H. Kitchey
U. S. Commissioner



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix Ariz. May 26, 1909/10

The foregoing field notes of the survey of the Third Guide Meridian East, through Ranges 5, 6, 7, and 8 N. Gila and Salt River Meridian, Arizona

executed by Jesse B. Wright U.S. Dep. Sur. under his contract No. 160, dated Oct. 2 - 1910, 190, 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.